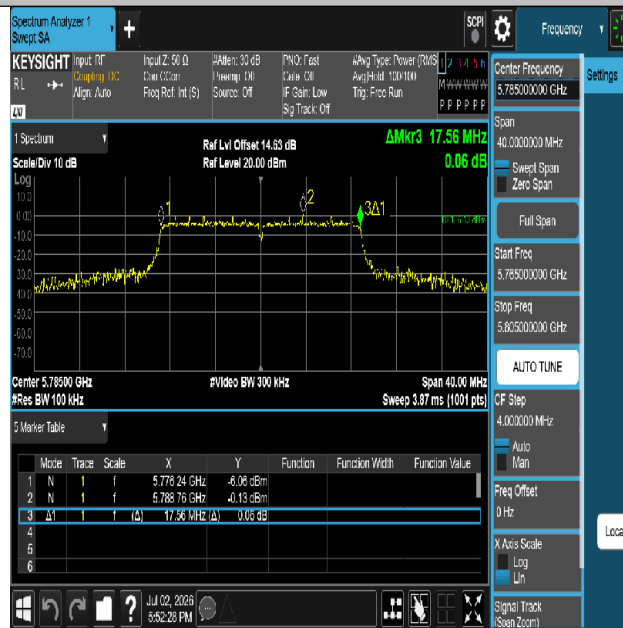
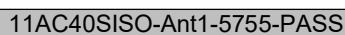
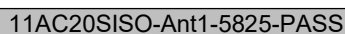
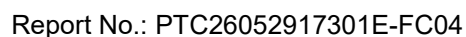




11AC20SISO-Ant1-5745-PASS



11AC20SISO-Ant1-5785-PASS





11AC40SISO-Ant1-5795-PASS



11AC80SISO-Ant1-5775-PASS

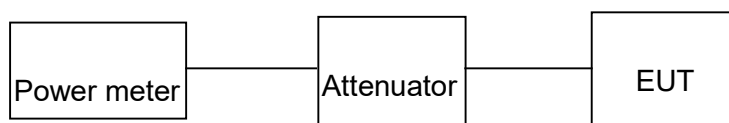


## 8 Maximum Conducted Output Power

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement | : FCC CFR47 Part 15 Section 15.407(a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Test Method      | : ANSI C63.10-2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Test Limit       | : For 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, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. |

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, 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, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

### 8.1 Test Setup



### 8.2 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, The use Power Meter 1. Place the EUT on a bench and set it in transmitting mode. 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to a Power meter.

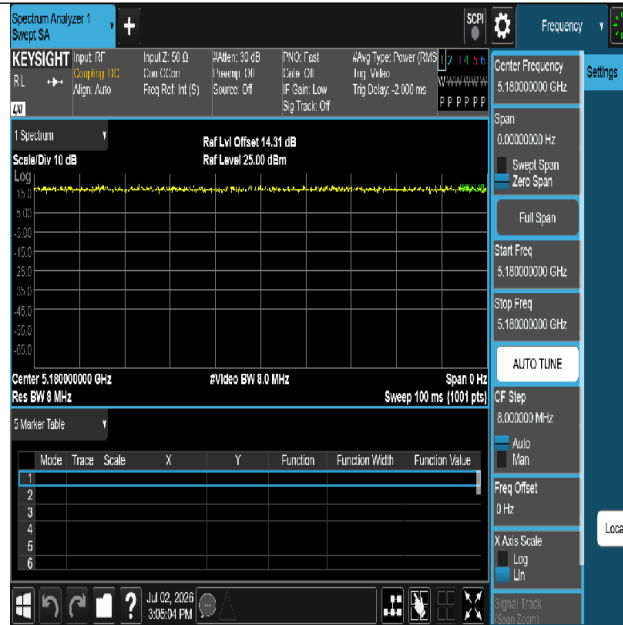


### 8.3 Test Result

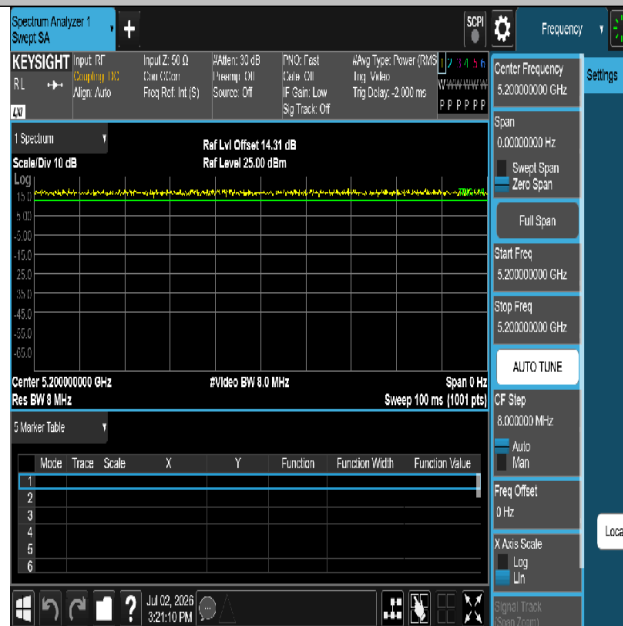
| Test Mode  | Antenna | Frequency[MHz] | Set Power | Channel Power [dBm] | Duty Cycle [%] | DC Factor [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|------------|---------|----------------|-----------|---------------------|----------------|-----------------|--------------|-------------|---------|
| 11A        | Ant1    | 5180           | ---       | 11.88               | 100.00         | 0.00            | 11.88        | ≤23.98      | PASS    |
| 11A        | Ant1    | 5200           | ---       | 11.70               | 100.00         | 0.00            | 11.70        | ≤23.98      | PASS    |
| 11A        | Ant1    | 5240           | ---       | 11.27               | 100.00         | 0.00            | 11.27        | ≤23.98      | PASS    |
| 11A        | Ant1    | 5745           | ---       | 11.02               | 100.00         | 0.00            | 11.02        | ≤30.00      | PASS    |
| 11A        | Ant1    | 5785           | ---       | 11.41               | 100.00         | 0.00            | 11.41        | ≤30.00      | PASS    |
| 11A        | Ant1    | 5825           | ---       | 11.20               | 100.00         | 0.00            | 11.20        | ≤30.00      | PASS    |
| 11N20SISO  | Ant1    | 5180           | ---       | 12.46               | 100.00         | 0.00            | 12.46        | ≤23.98      | PASS    |
| 11N20SISO  | Ant1    | 5200           | ---       | 12.02               | 100.00         | 0.00            | 12.02        | ≤23.98      | PASS    |
| 11N20SISO  | Ant1    | 5240           | ---       | 11.59               | 100.00         | 0.00            | 11.59        | ≤23.98      | PASS    |
| 11N20SISO  | Ant1    | 5745           | ---       | 11.33               | 100.00         | 0.00            | 11.33        | ≤30.00      | PASS    |
| 11N20SISO  | Ant1    | 5785           | ---       | 11.83               | 100.00         | 0.00            | 11.83        | ≤30.00      | PASS    |
| 11N20SISO  | Ant1    | 5825           | ---       | 11.58               | 100.00         | 0.00            | 11.58        | ≤30.00      | PASS    |
| 11N40SISO  | Ant1    | 5190           | ---       | 9.38                | 100.00         | 0.00            | 9.38         | ≤23.98      | PASS    |
| 11N40SISO  | Ant1    | 5230           | ---       | 9.44                | 100.00         | 0.00            | 9.44         | ≤23.98      | PASS    |
| 11N40SISO  | Ant1    | 5755           | ---       | 9.08                | 100.00         | 0.00            | 9.08         | ≤30.00      | PASS    |
| 11N40SISO  | Ant1    | 5795           | ---       | 8.94                | 100.00         | 0.00            | 8.94         | ≤30.00      | PASS    |
| 11AC20SISO | Ant1    | 5180           | ---       | 12.28               | 100.00         | 0.00            | 12.28        | ≤23.98      | PASS    |
| 11AC20SISO | Ant1    | 5200           | ---       | 11.90               | 100.00         | 0.00            | 11.90        | ≤23.98      | PASS    |
| 11AC20SISO | Ant1    | 5240           | ---       | 11.78               | 100.00         | 0.00            | 11.78        | ≤23.98      | PASS    |
| 11AC20SISO | Ant1    | 5745           | ---       | 11.35               | 100.00         | 0.00            | 11.35        | ≤30.00      | PASS    |
| 11AC20SISO | Ant1    | 5785           | ---       | 11.81               | 100.00         | 0.00            | 11.81        | ≤30.00      | PASS    |
| 11AC20SISO | Ant1    | 5825           | ---       | 11.53               | 100.00         | 0.00            | 11.53        | ≤30.00      | PASS    |
| 11AC40SISO | Ant1    | 5190           | ---       | 9.51                | 100.00         | 0.00            | 9.51         | ≤23.98      | PASS    |
| 11AC40SISO | Ant1    | 5230           | ---       | 9.42                | 100.00         | 0.00            | 9.42         | ≤23.98      | PASS    |
| 11AC40SISO | Ant1    | 5755           | ---       | 9.29                | 100.00         | 0.00            | 9.29         | ≤30.00      | PASS    |
| 11AC40SISO | Ant1    | 5795           | ---       | 9.17                | 100.00         | 0.00            | 9.17         | ≤30.00      | PASS    |
| 11AC80SISO | Ant1    | 5210           | ---       | 9.38                | 100.00         | 0.00            | 9.38         | ≤23.98      | PASS    |
| 11AC80SISO | Ant1    | 5775           | ---       | 8.84                | 100.00         | 0.00            | 8.84         | ≤30.00      | PASS    |

**Duty Cycle**

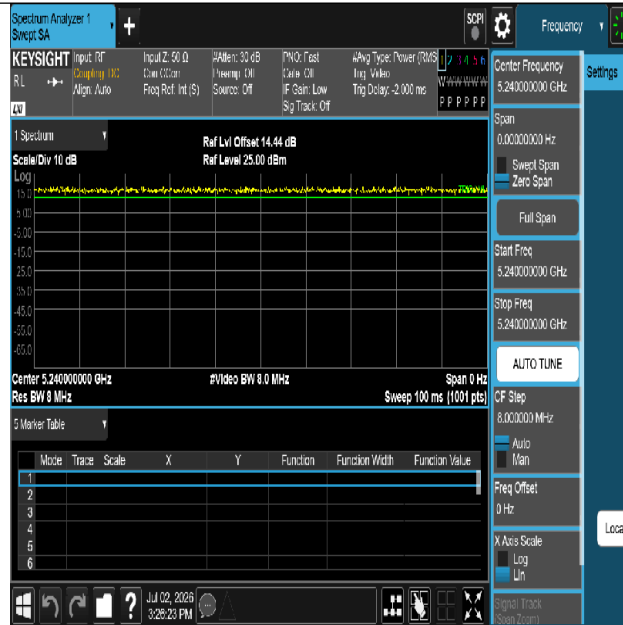
| TestMode   | Antenna | Frequency[MHz] | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Dc Factor [%] | 1/T  |
|------------|---------|----------------|----------------------------|--------------------------|----------------|---------------|------|
| 11A        | Ant1    | 5180           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11A        | Ant1    | 5200           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11A        | Ant1    | 5240           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11A        | Ant1    | 5745           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11A        | Ant1    | 5785           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11A        | Ant1    | 5825           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N20SISO  | Ant1    | 5180           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N20SISO  | Ant1    | 5200           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N20SISO  | Ant1    | 5240           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N20SISO  | Ant1    | 5745           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N20SISO  | Ant1    | 5785           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N20SISO  | Ant1    | 5825           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N40SISO  | Ant1    | 5190           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N40SISO  | Ant1    | 5230           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N40SISO  | Ant1    | 5755           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11N40SISO  | Ant1    | 5795           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC20SISO | Ant1    | 5180           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC20SISO | Ant1    | 5200           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC20SISO | Ant1    | 5240           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC20SISO | Ant1    | 5745           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC20SISO | Ant1    | 5785           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC20SISO | Ant1    | 5825           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC40SISO | Ant1    | 5190           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC40SISO | Ant1    | 5230           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC40SISO | Ant1    | 5755           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC40SISO | Ant1    | 5795           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC80SISO | Ant1    | 5210           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |
| 11AC80SISO | Ant1    | 5775           | 100.00                     | 100.00                   | 100.00         | 0.00          | 0.01 |



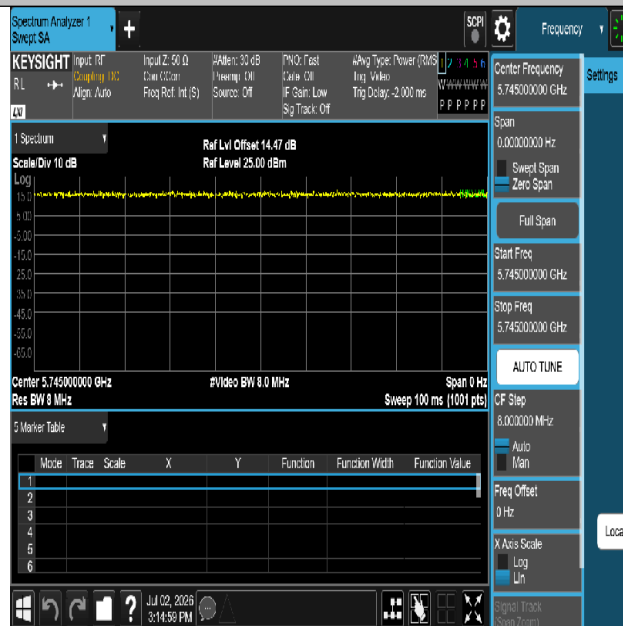
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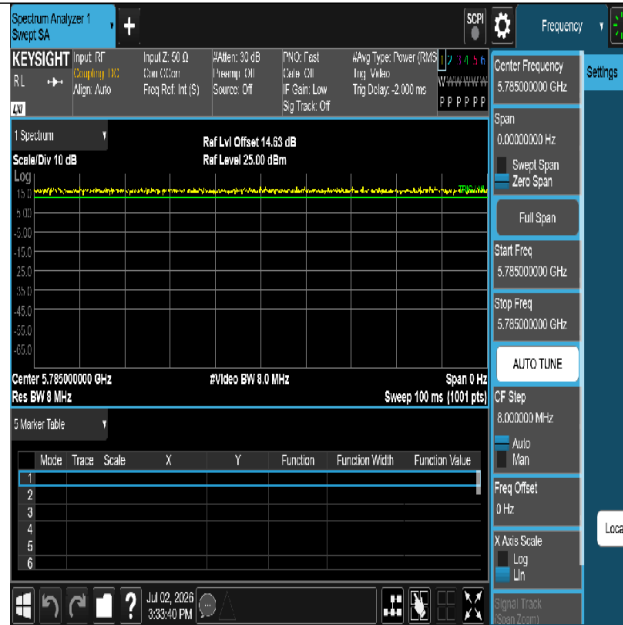
NTNV-11A-Ant1-5200



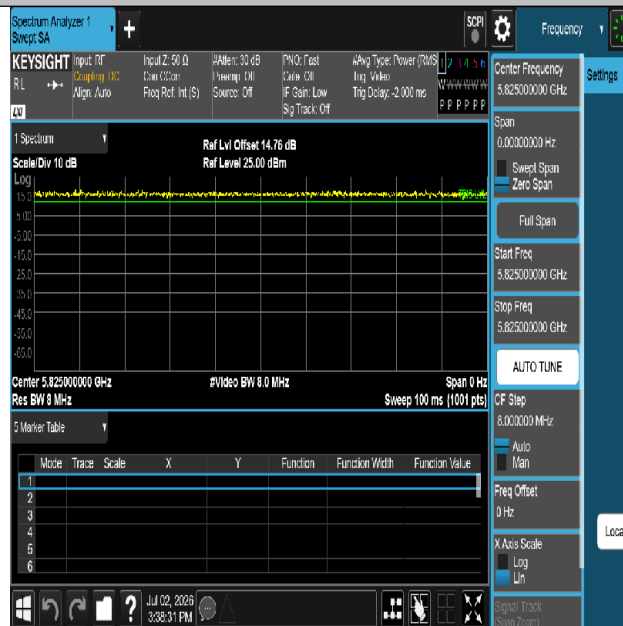
NTNV-11A-Ant1-5240



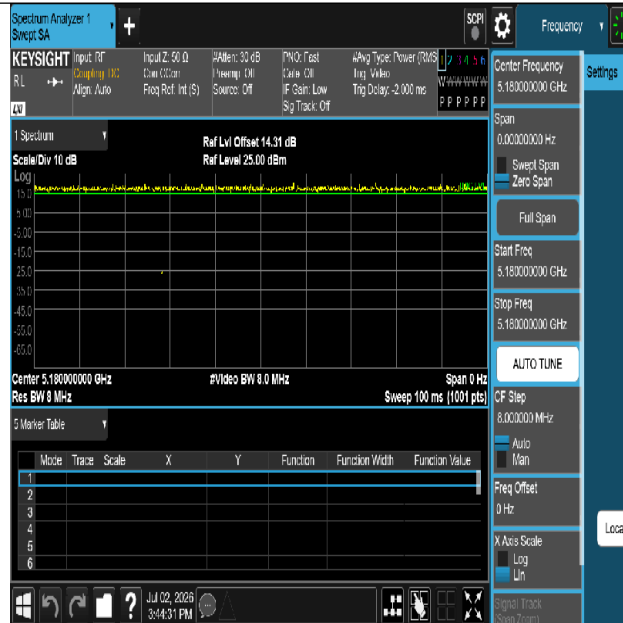
NTNV-11A-Ant1-5745



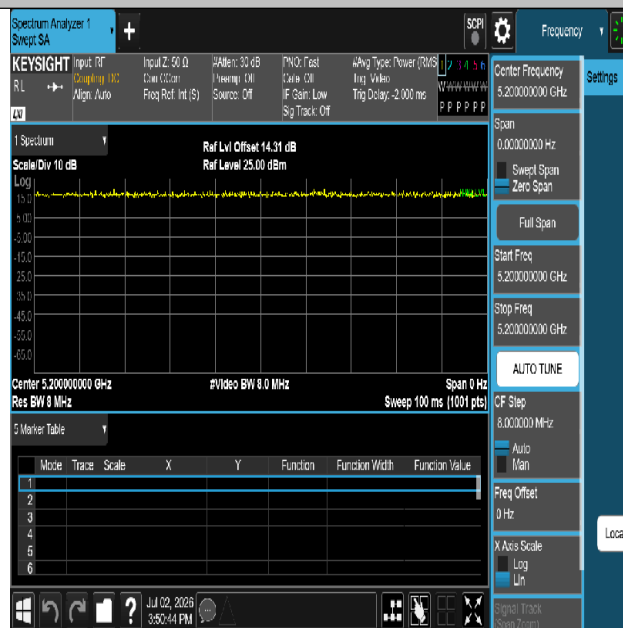
NTNV-11A-Ant1-5785



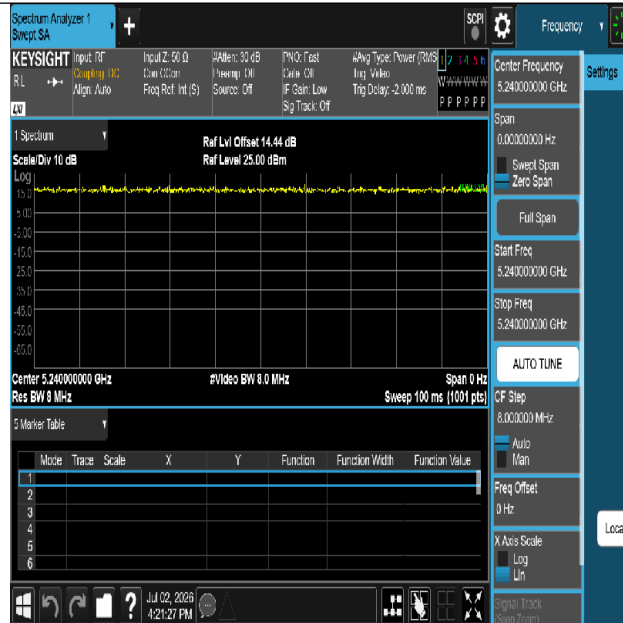
NTNV-11A-Ant1-5825



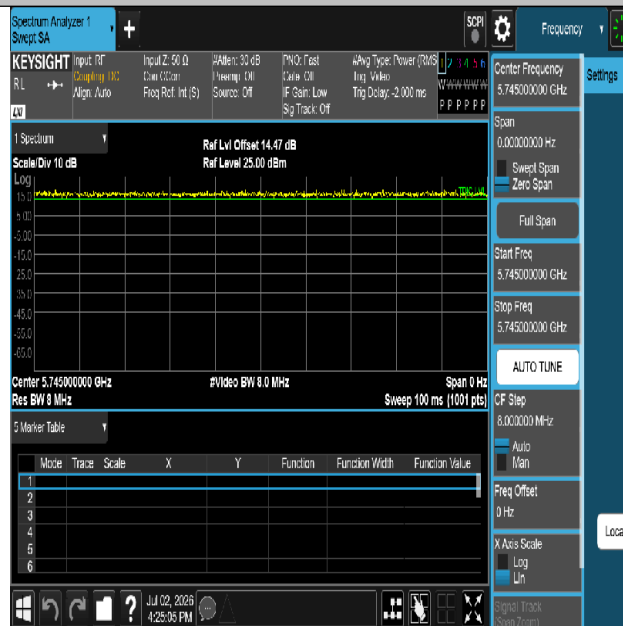
NTNV-11N20SISO-Ant1-5180



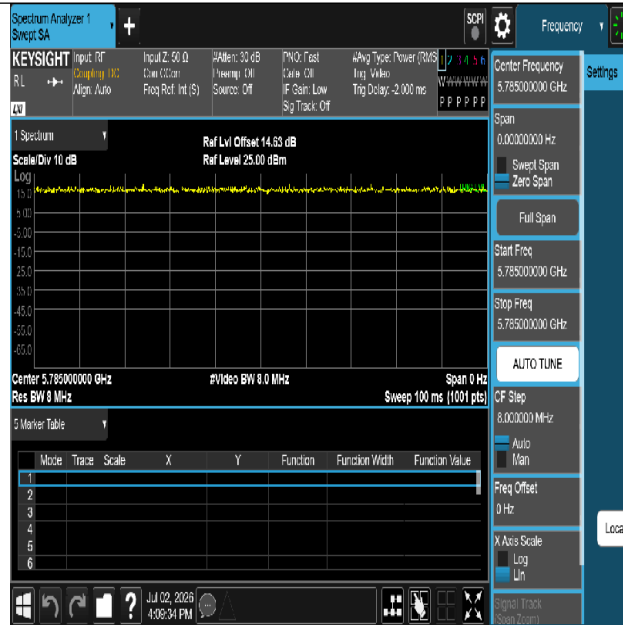
NTNV-11N20SISO-Ant1-5200



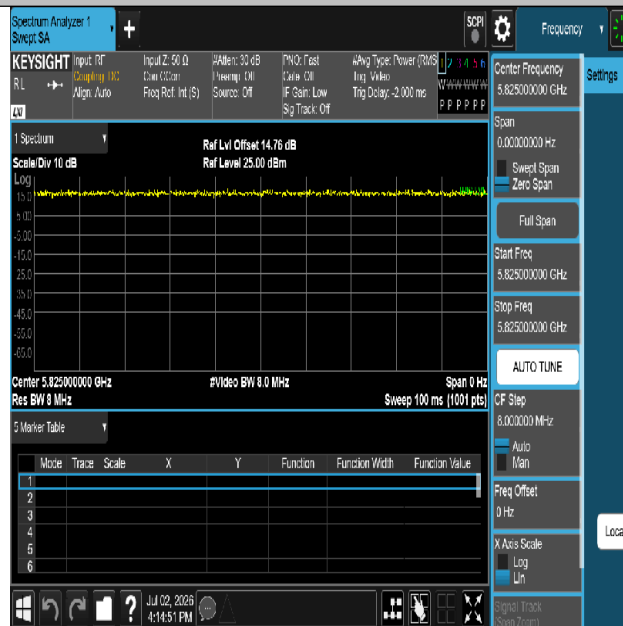
NTNV-11N20SISO-Ant1-5240



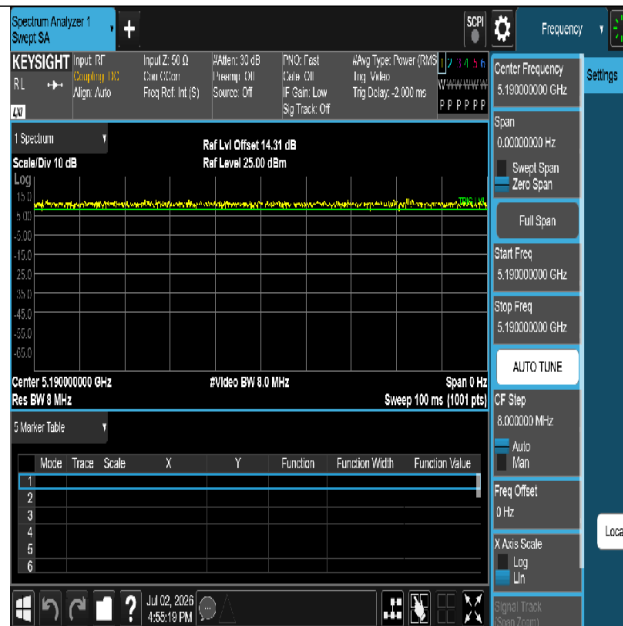
NTNV-11N20SISO-Ant1-5745



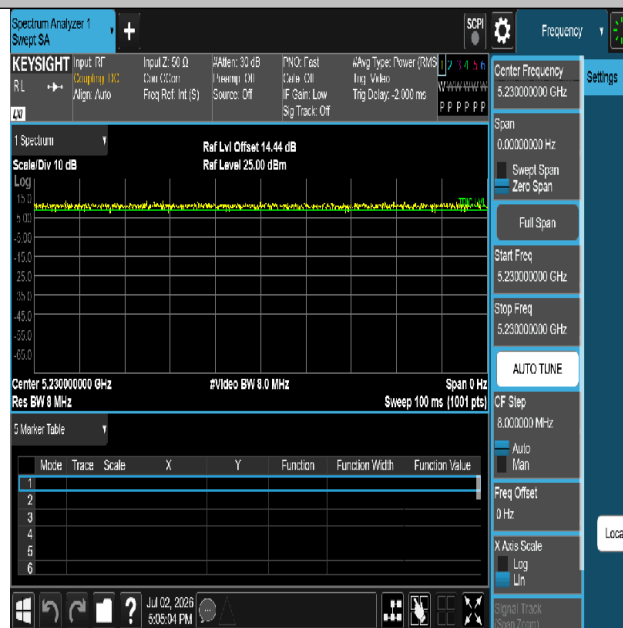
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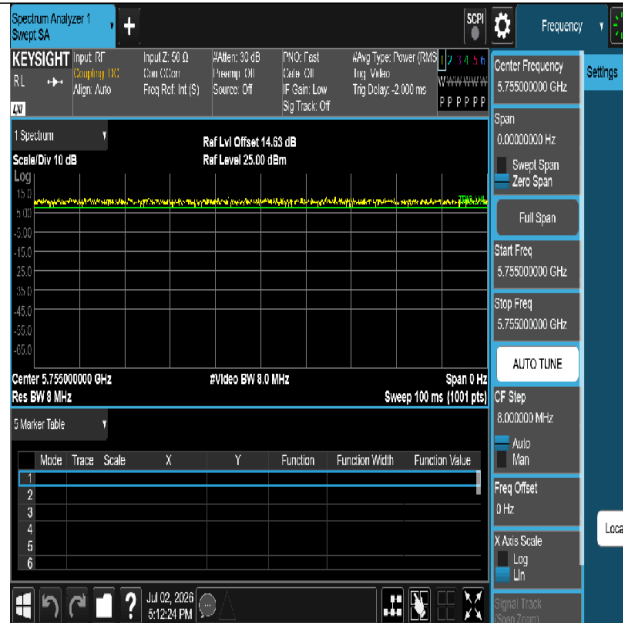
NTNV-11N20SISO-Ant1-5825



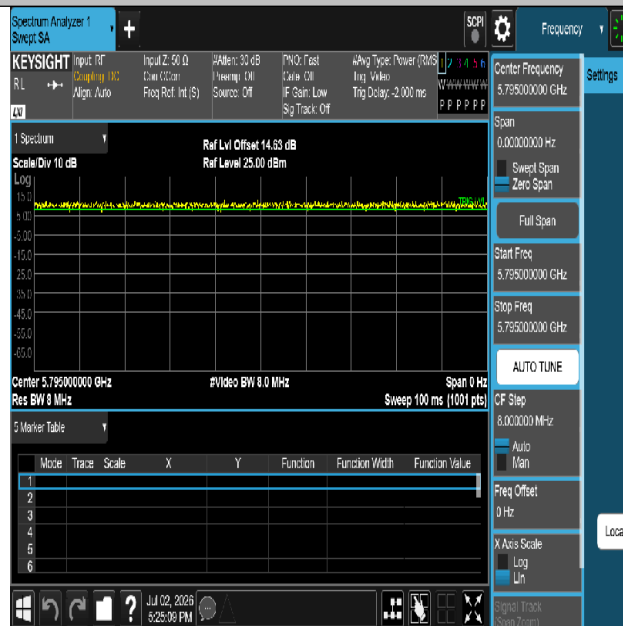
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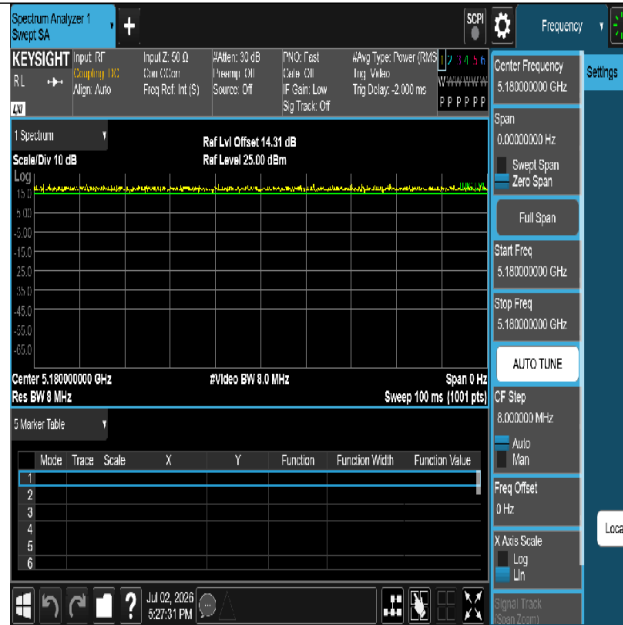
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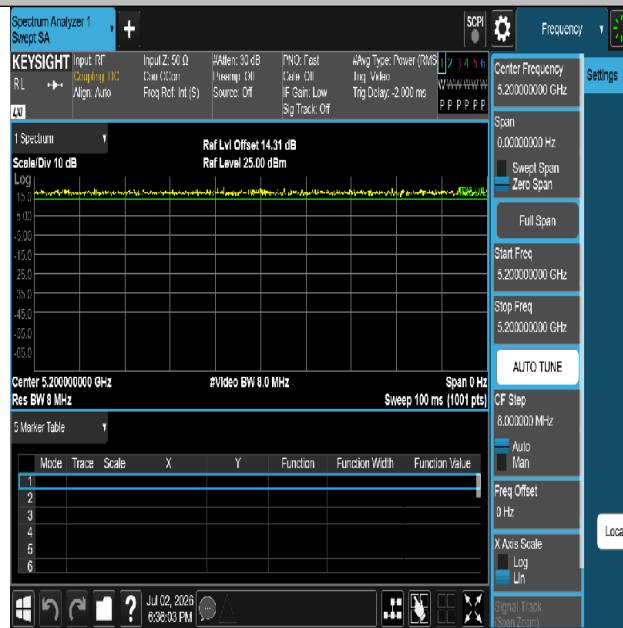
NTNV-11N40SISO-Ant1-5755



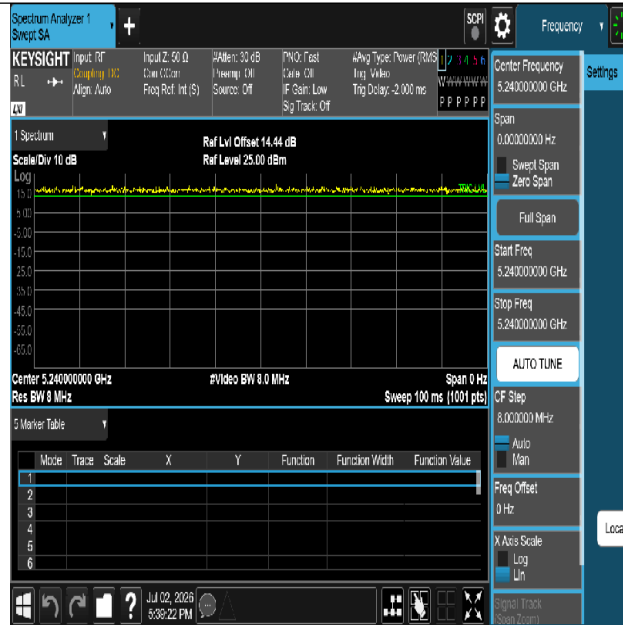
NTNV-11N40SISO-Ant1-5795



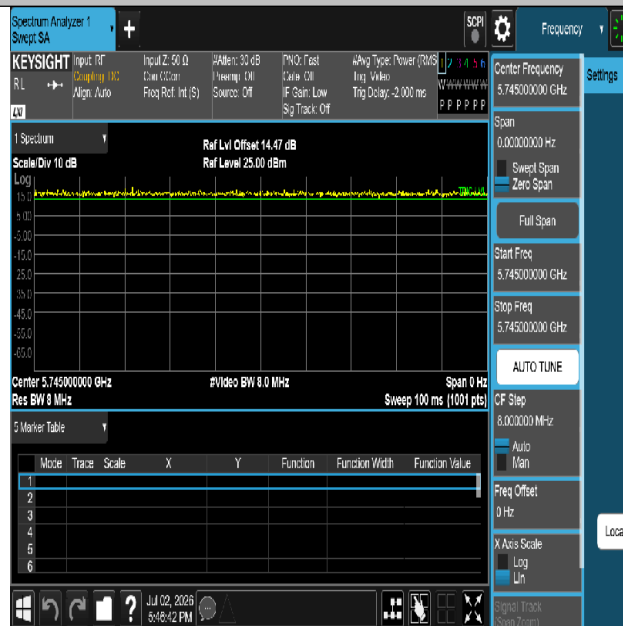
NTNV-11AC20SISO-Ant1-5180



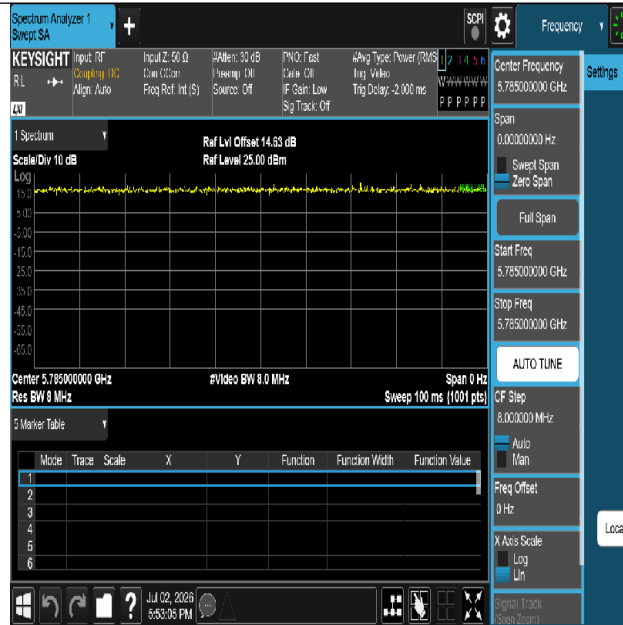
NTNV-11AC20SISO-Ant1-5200



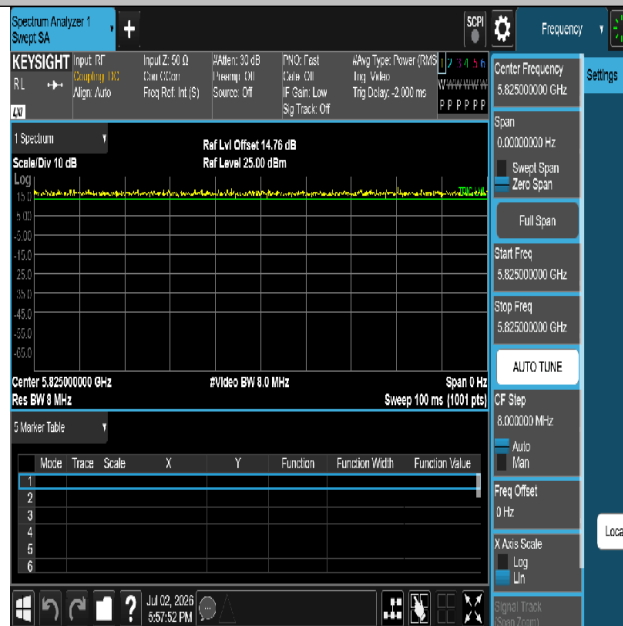
NTNV-11AC20SISO-Ant1-5240



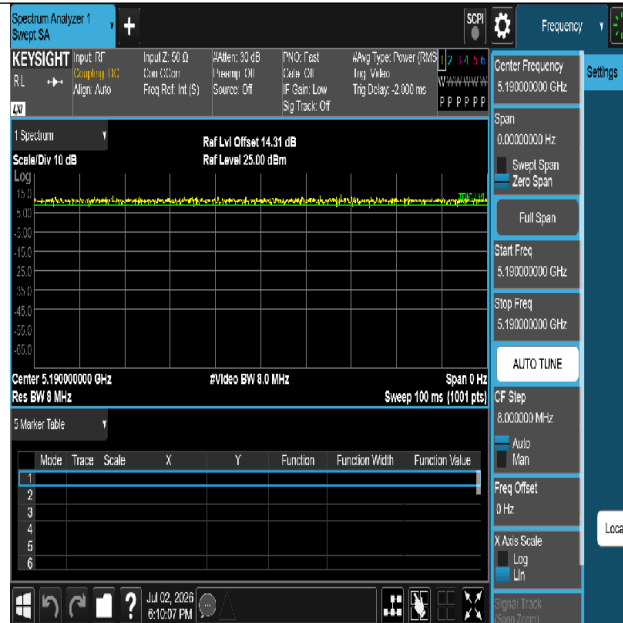
NTNV-11AC20SISO-Ant1-5745



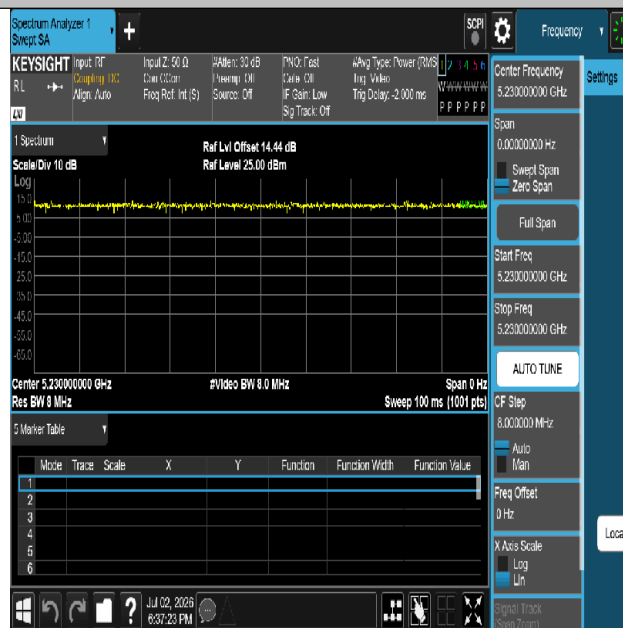
NTNV-11AC20SISO-Ant1-5785



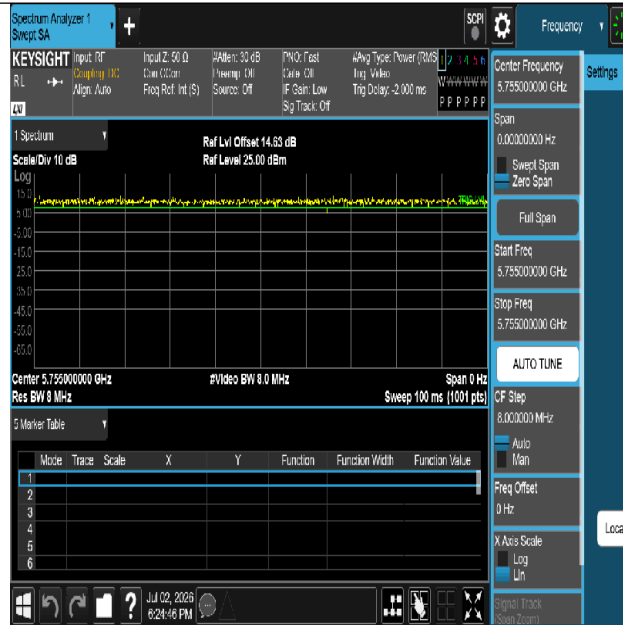
NTNV-11AC20SISO-Ant1-5825



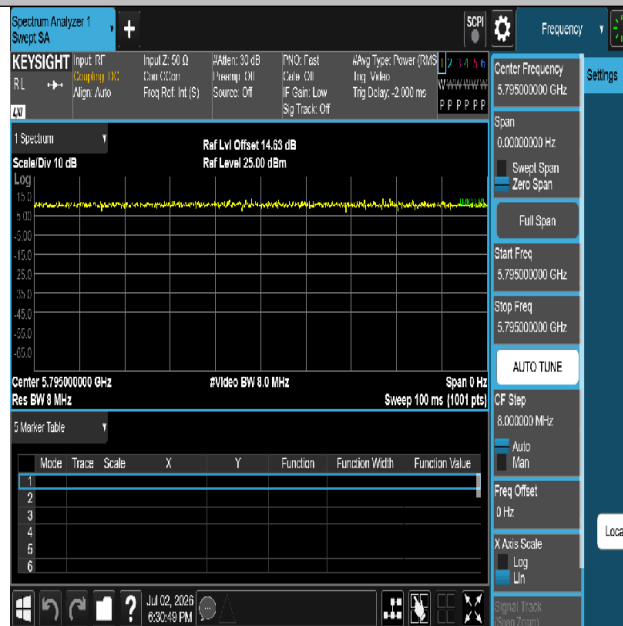
NTNV-11AC40SISO-Ant1-5190



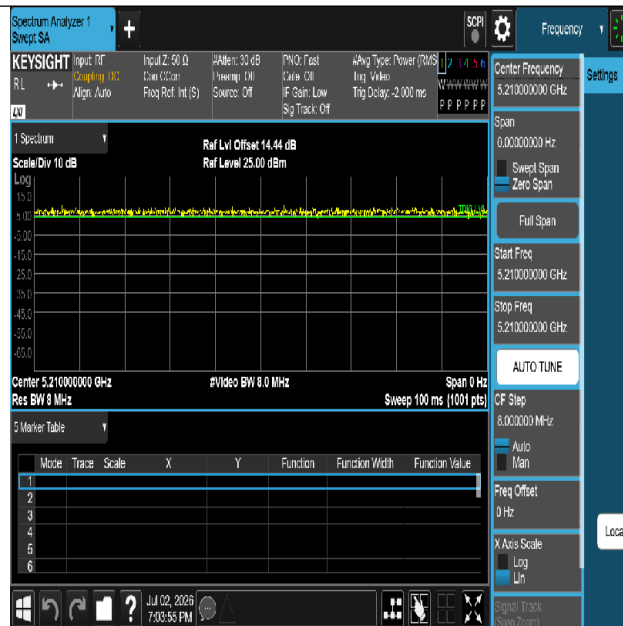
NTNV-11AC40SISO-Ant1-5230



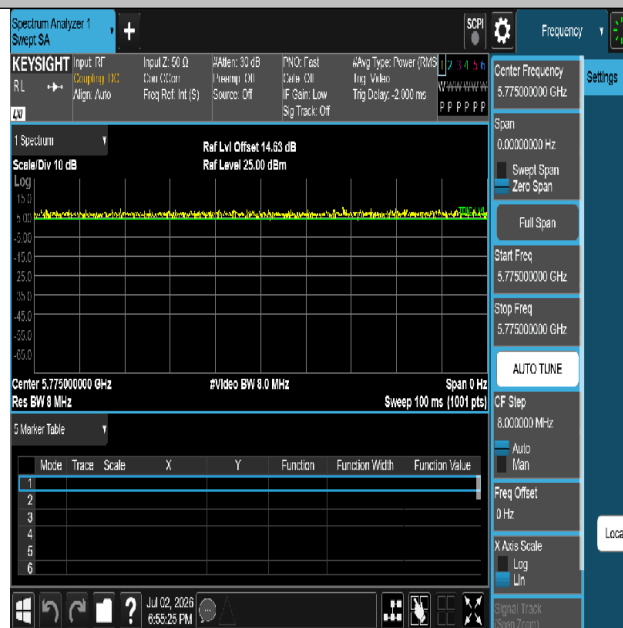
NTNV-11AC40SISO-Ant1-5755



NTNV-11AC40SISO-Ant1-5795



NTNV-11AC80SISO-Ant1-5210



NTNV-11AC80SISO-Ant1-5775



## 9 Power Spectral density

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement | : FCC CFR47 Part 15 Section 15.407(a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Test Method      | : ANSI C63.10-2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Test Limit       | <p>: For 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, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi..</p> <p>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, the maximum power spectral density shall not exceed 30 dBm in any 500-kHzband. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations</p> |

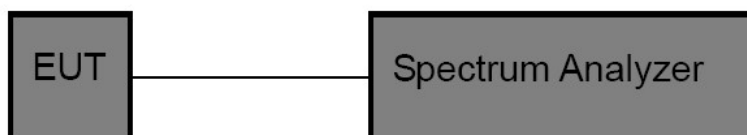


## 9.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 and ANSI 63.10: 2013 Sec 10.3.7. For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set the RBW to 1 MHz.
- b) Set the VBW to be at least 1 MHz (a VBW of 3 MHz is desirable).
- c) Set the frequency span to examine the spectrum across a convenient frequency segment (e.g., 600 MHz).
- d) Select the power averaging (rms) detector.
- e) Set the sweep time so that there is no more than a 1 ms integration period over each measurement bin.
- f) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

## 9.2 Test Setup





### 9.3 Test Result

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations / data rates and antenna ports.

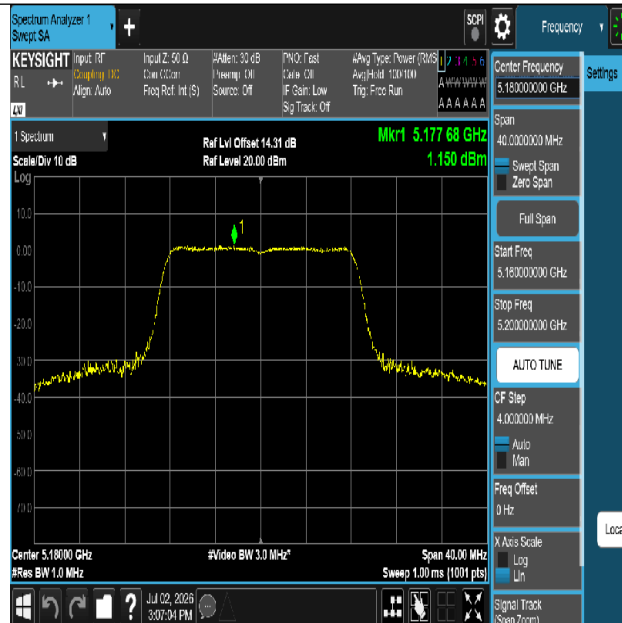
Following channel was selected for the final test as listed below

| TestMode   | Antenna | Frequency [MHz] | Raw Data [dBm/MHz] | DC Factor | RBW Factor | Result [dBm/MHz] | Limit [dBm/MHz] | Verdict |
|------------|---------|-----------------|--------------------|-----------|------------|------------------|-----------------|---------|
| 11A        | Ant1    | 5180            | 1.15               | 0.00      | 0.00       | 1.15             | ≤11.00          | PASS    |
| 11A        | Ant1    | 5200            | 0.63               | 0.00      | 0.00       | 0.63             | ≤11.00          | PASS    |
| 11A        | Ant1    | 5240            | 0.52               | 0.00      | 0.00       | 0.52             | ≤11.00          | PASS    |
| 11A        | Ant1    | 5745            | -4.93              | 0.00      | 2.22       | -2.71            | ≤30.00          | PASS    |
| 11A        | Ant1    | 5785            | -4.83              | 0.00      | 2.22       | -2.61            | ≤30.00          | PASS    |
| 11A        | Ant1    | 5825            | -5.18              | 0.00      | 2.22       | -2.96            | ≤30.00          | PASS    |
| 11N20SISO  | Ant1    | 5180            | 1.18               | 0.00      | 0.00       | 1.18             | ≤11.00          | PASS    |
| 11N20SISO  | Ant1    | 5200            | 0.81               | 0.00      | 0.00       | 0.81             | ≤11.00          | PASS    |
| 11N20SISO  | Ant1    | 5240            | 0.32               | 0.00      | 0.00       | 0.32             | ≤11.00          | PASS    |
| 11N20SISO  | Ant1    | 5745            | -4.43              | 0.00      | 2.22       | -2.21            | ≤30.00          | PASS    |
| 11N20SISO  | Ant1    | 5785            | -4.63              | 0.00      | 2.22       | -2.41            | ≤30.00          | PASS    |
| 11N20SISO  | Ant1    | 5825            | -4.8               | 0.00      | 2.22       | -2.58            | ≤30.00          | PASS    |
| 11N40SISO  | Ant1    | 5190            | -4.55              | 0.00      | 0.00       | -4.55            | ≤11.00          | PASS    |
| 11N40SISO  | Ant1    | 5230            | -4.38              | 0.00      | 0.00       | -4.38            | ≤11.00          | PASS    |
| 11N40SISO  | Ant1    | 5755            | -10.23             | 0.00      | 2.22       | -8.01            | ≤30.00          | PASS    |
| 11N40SISO  | Ant1    | 5795            | -8.21              | 0         | 2.22       | -5.99            | ≤30.00          | PASS    |
| 11AC20SISO | Ant1    | 5180            | 1.07               | 0.00      | 0.00       | 1.07             | ≤11.00          | PASS    |
| 11AC20SISO | Ant1    | 5200            | 0.65               | 0.00      | 0.00       | 0.65             | ≤11.00          | PASS    |
| 11AC20SISO | Ant1    | 5240            | 0.88               | 0.00      | 0.00       | 0.88             | ≤11.00          | PASS    |
| 11AC20SISO | Ant1    | 5745            | -5.05              | 0.00      | 2.22       | -2.83            | ≤30.00          | PASS    |
| 11AC20SISO | Ant1    | 5785            | -4.79              | 0.00      | 2.22       | -2.57            | ≤30.00          | PASS    |
| 11AC20SISO | Ant1    | 5825            | -5.06              | 0.00      | 2.22       | -2.84            | ≤30.00          | PASS    |
| 11AC40SISO | Ant1    | 5190            | -4.32              | 0.00      | 0.00       | -4.32            | ≤11.00          | PASS    |
| 11AC40SISO | Ant1    | 5230            | -4.49              | 0.00      | 0.00       | -4.49            | ≤11.00          | PASS    |
| 11AC40SISO | Ant1    | 5755            | -9.74              | 0.00      | 2.22       | -7.52            | ≤30.00          | PASS    |
| 11AC40SISO | Ant1    | 5795            | -10.57             | 0.00      | 2.22       | -8.35            | ≤30.00          | PASS    |
| 11AC80SISO | Ant1    | 5210            | -7.69              | 0.00      | 0.00       | -7.69            | ≤11.00          | PASS    |
| 11AC80SISO | Ant1    | 5775            | -13.37             | 0.00      | 2.22       | -11.15           | ≤30.00          | PASS    |

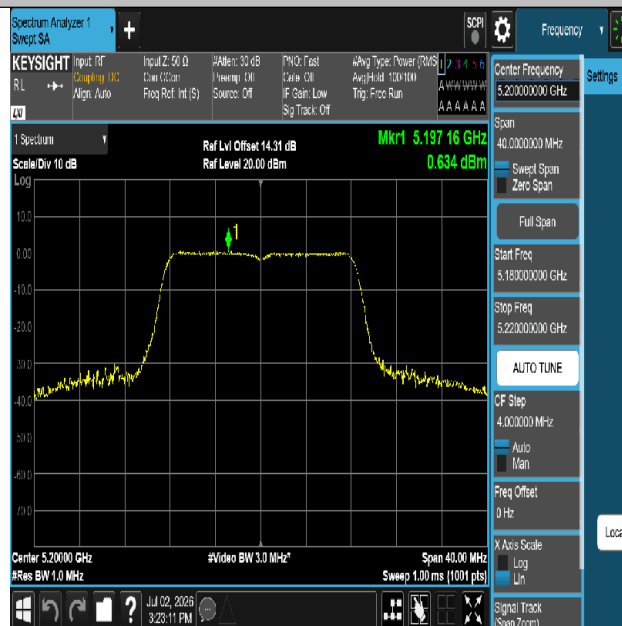
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. in the band 5.725–5.85 GHz the test RBW select 300KHz,so the measured result corrected by Result+10 log (500 kHz/300kHz).

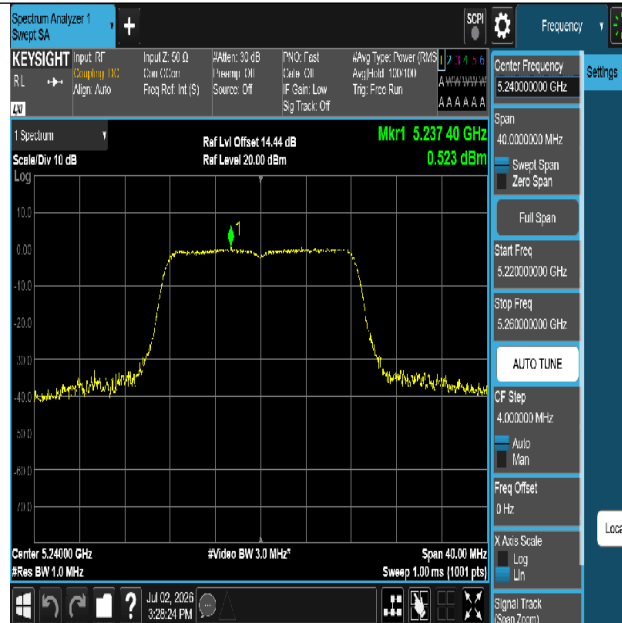
## Test Graphs:



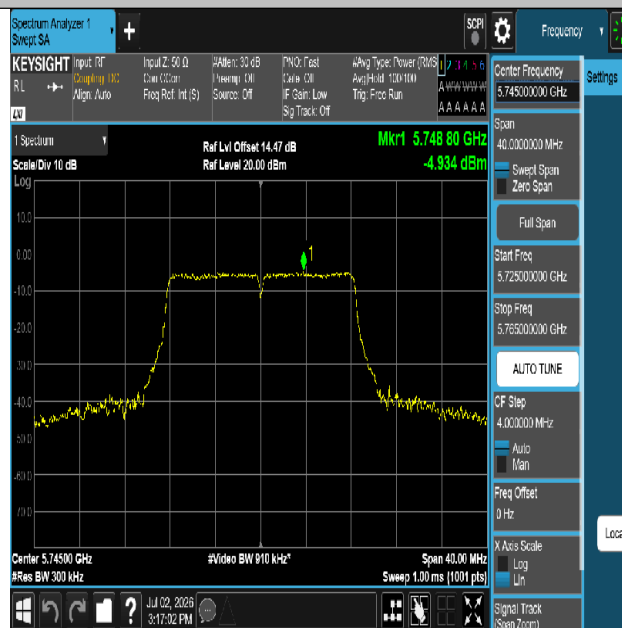
11A-Ant1-5180-PASS



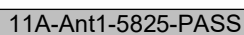
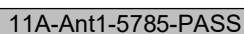
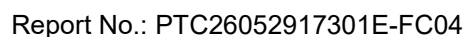
11A-Ant1-5200-PASS



11A-Ant1-5240-PASS

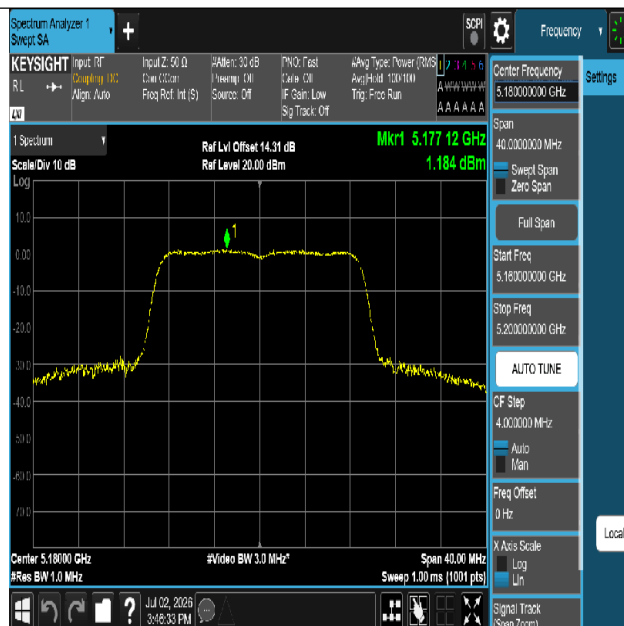


11A-Ant1-5745-PASS

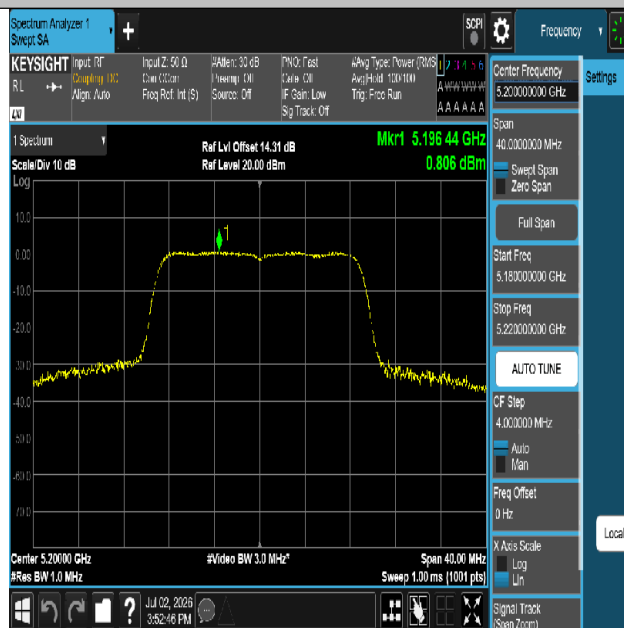




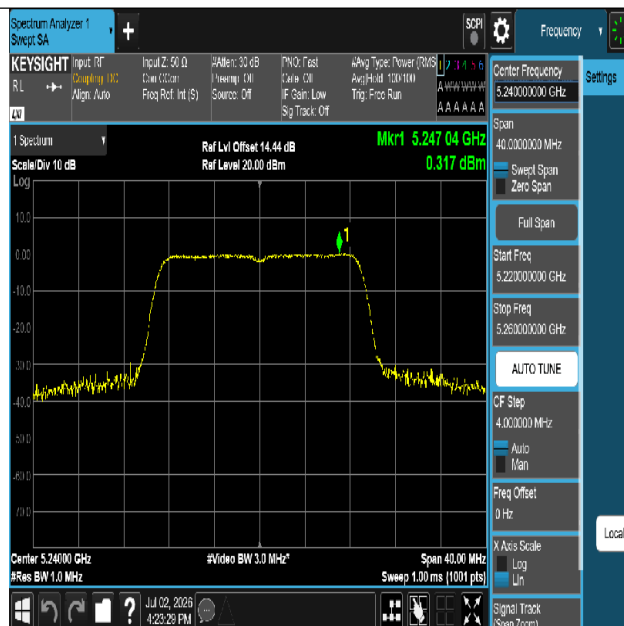
Report No.: PTC26052917301E-FC04



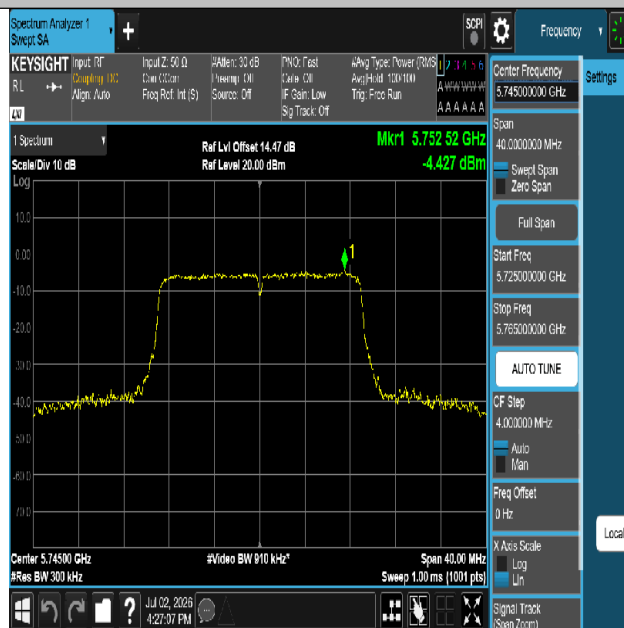
11N20SISO-Ant1-5180-PASS



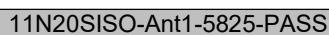
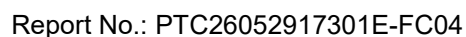
11N20SISO-Ant1-5200-PASS

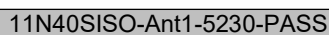
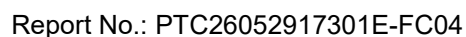


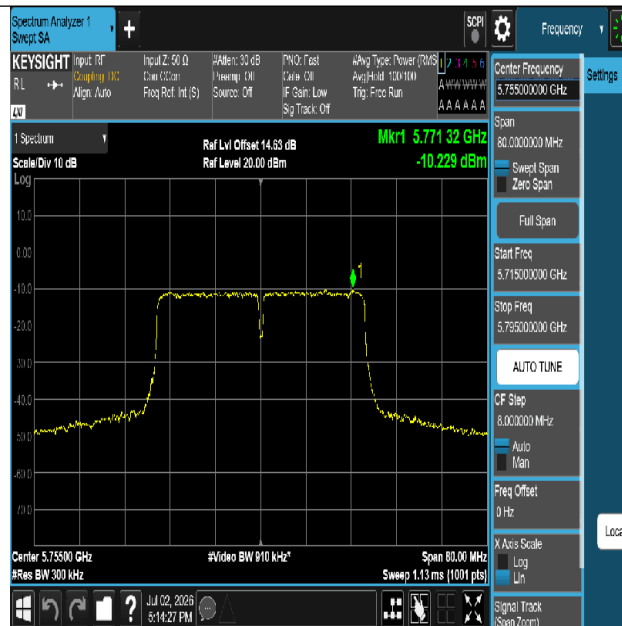
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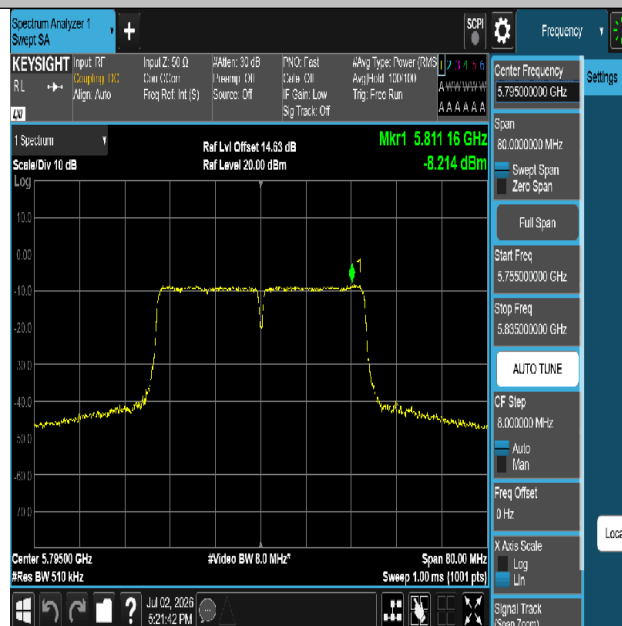
11N20SISO-Ant1-5745-PASS



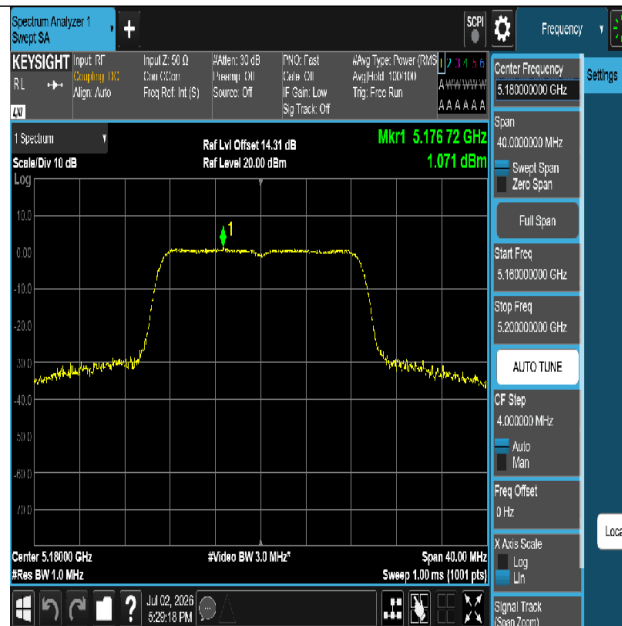




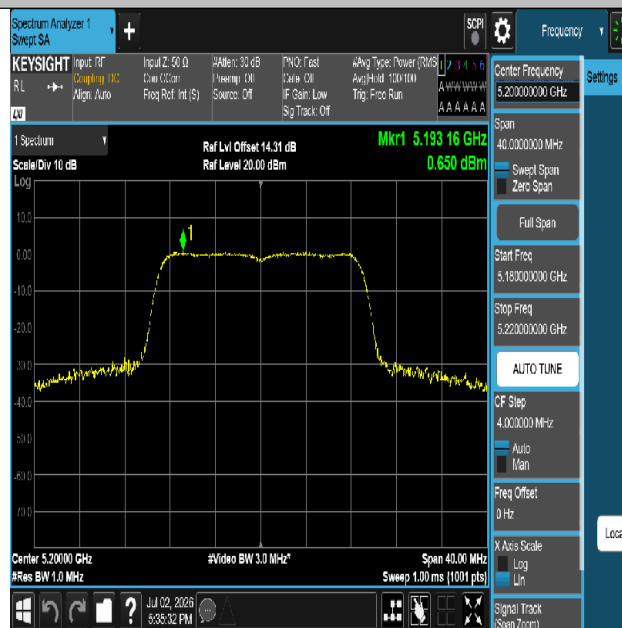
11N40SISO-Ant1-5755-PASS



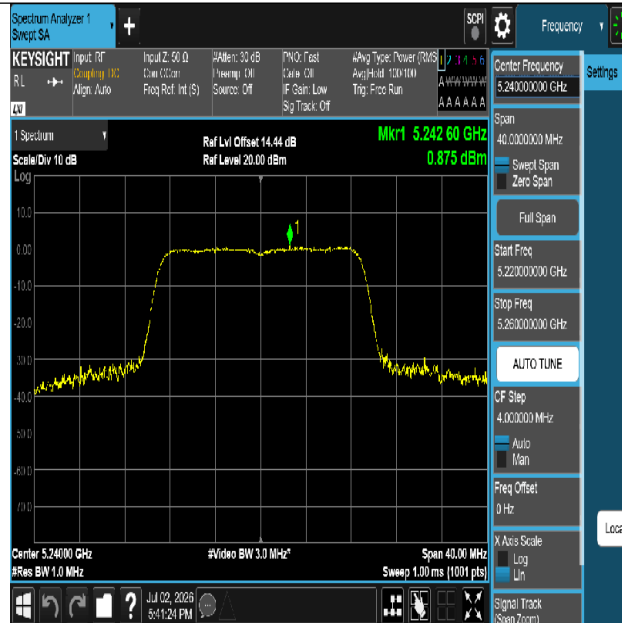
11N40SISO-Ant1-5795-PASS



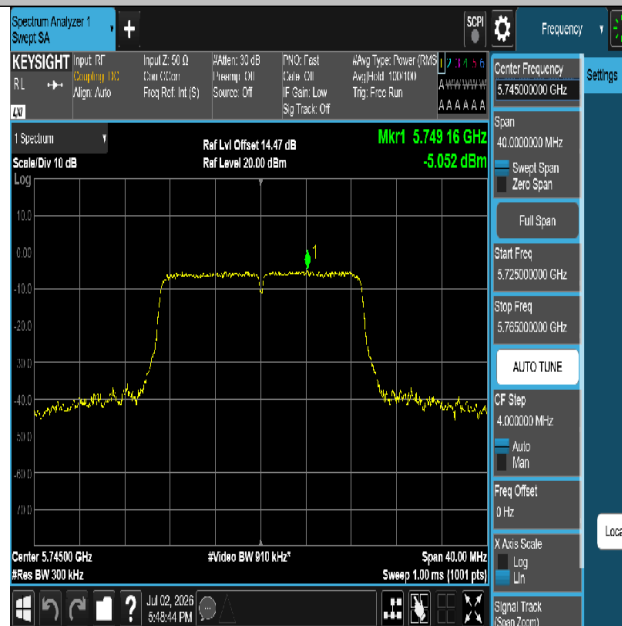
11AC20SISO-Ant1-5180-PASS



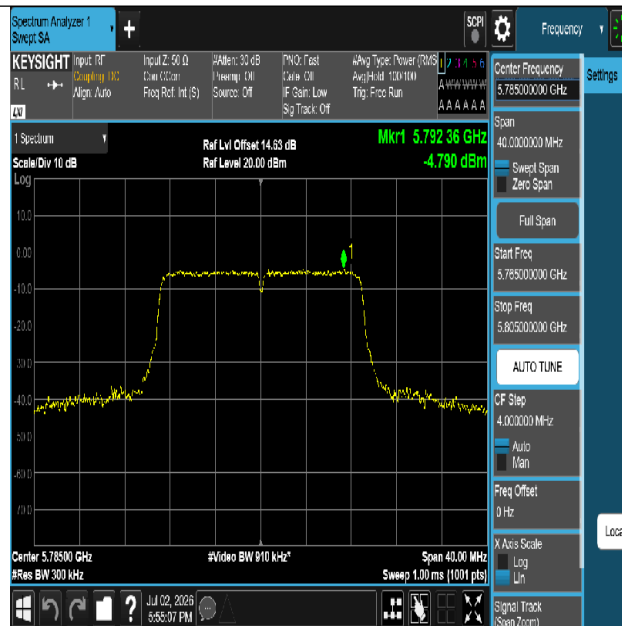
11AC20SISO-Ant1-5200-PASS



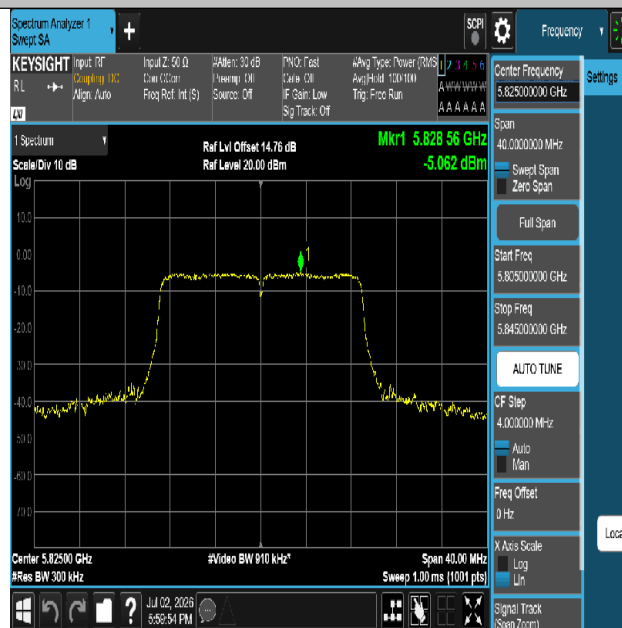
11AC20SISO-Ant1-5240-PASS



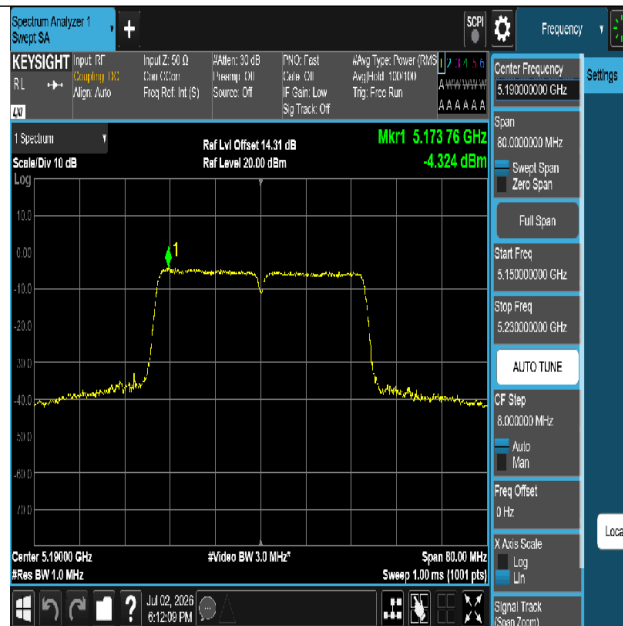
11AC20SISO-Ant1-5745-PASS



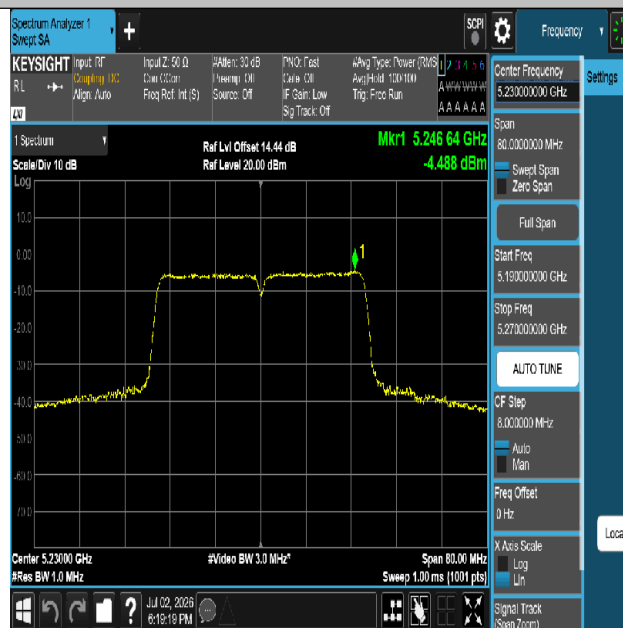
11AC20SISO-Ant1-5785-PASS



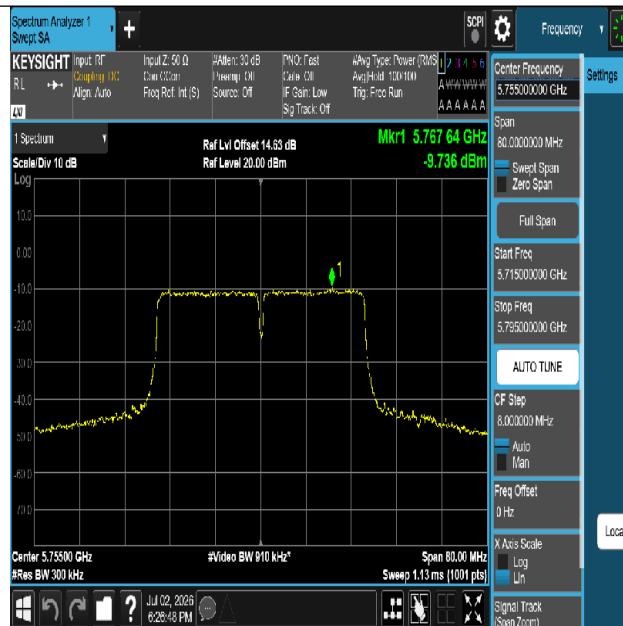
11AC20SISO-Ant1-5825-PASS



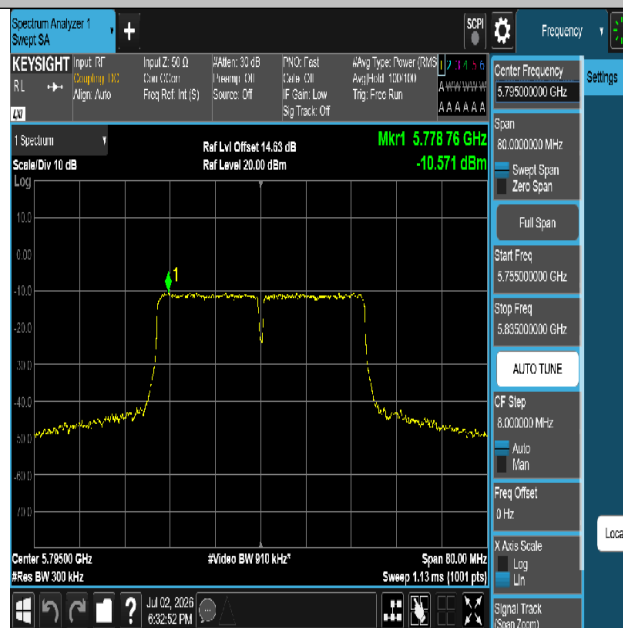
11AC40SISO-Ant1-5190-PASS



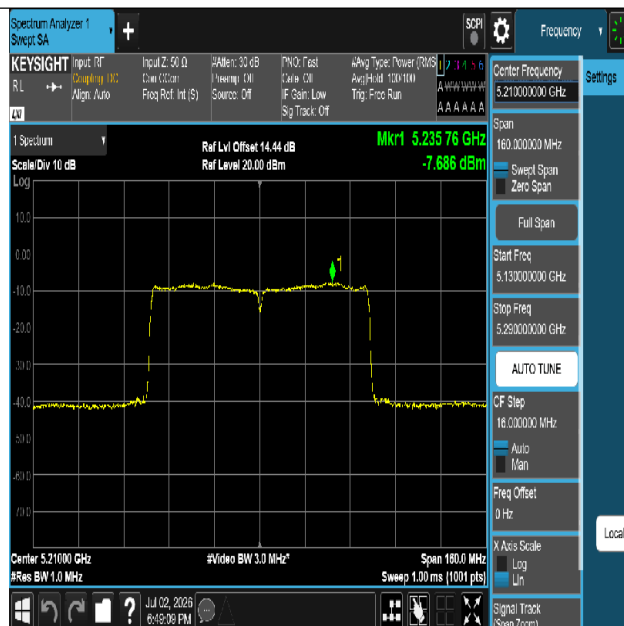
11AC40SISO-Ant1-5230-PASS



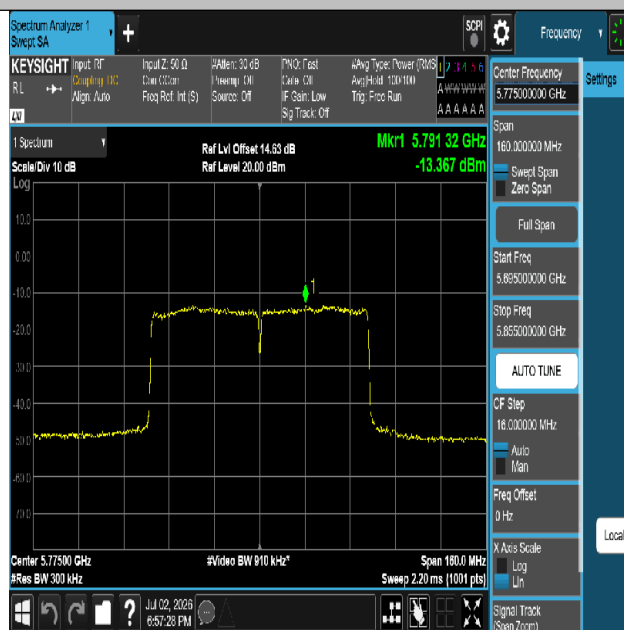
11AC40SISO-Ant1-5755-PASS



11AC40SISO-Ant1-5795-PASS



11AC80SISO-Ant1-5210-PASS



11AC80SISO-Ant1-5775-PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.



#### **9.4 Antenna Requirement**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### **9.5 Result**

The EUT'S antenna, permanent attached antenna, are FPC Antennas. The antennas's gain are 2.27 dBi and meet the requirement.



## 10 Frequency Stability

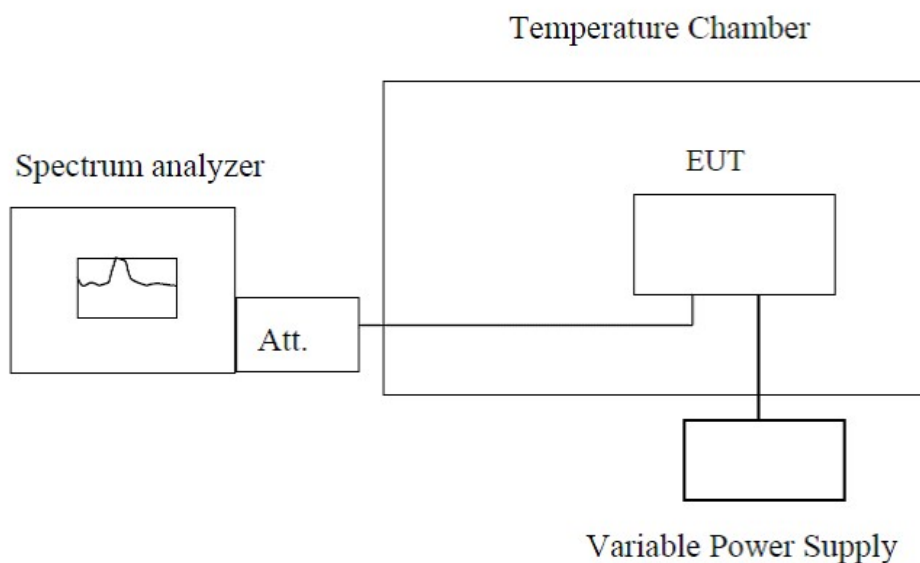
Test Requirement : FCC Part15 E Section 15.407 (g)

Test Limit  
Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

### 10.1 Test Procedure

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

### 10.2 Test Setup





### 10.3 Test Result

All the modulation modes were tested and only the data of the worst mode ( 802.11a ) was recorded in the following table.

Nominal voltage: 3.8V;

Nominal Temperature: 25°C

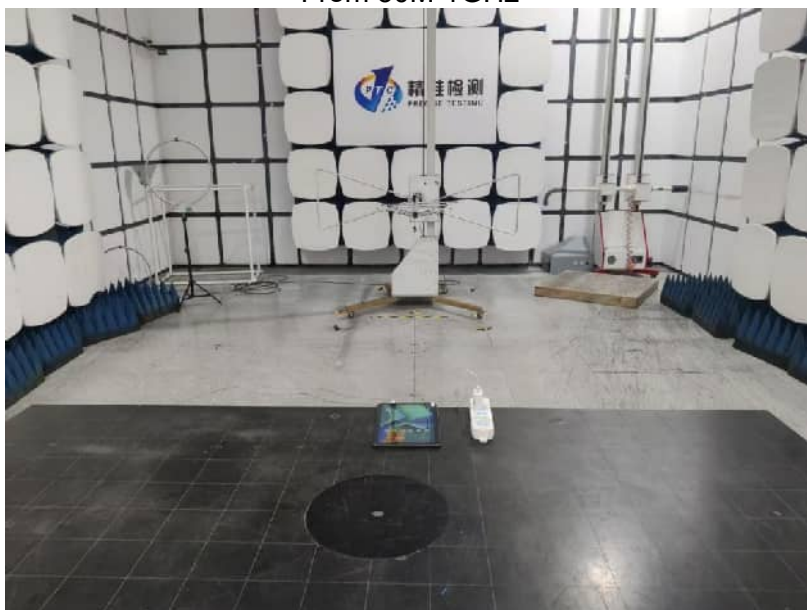
| Test Mode | Antenna | Frequency [MHz] | Voltage [Vdc] | Temperature (°C) | Measured Frequency [MHz] | Limit range [MHz] | Verdict |
|-----------|---------|-----------------|---------------|------------------|--------------------------|-------------------|---------|
| 11A       | Ant1    | 5180            | 3.23          | 25               | 5180.0002                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 4.37          | 25               | 5179.9986                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | -30              | 5179.9984                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | -20              | 5180.0030                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | -10              | 5180.0010                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | 0                | 5179.9975                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | 10               | 5179.9977                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | 20               | 5180.0011                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | 30               | 5180.0023                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | 40               | 5180.0032                | 5150-5250         | PASS    |
| 11A       | Ant1    | 5180            | 3.8           | 50               | 5179.9998                | 5150-5250         | PASS    |

## 11 Test Setup

Conducted Emissions



Radiated Emissions  
From 30M-1GHz



Above 1GHz





## 12 EUT PHOTOS

please reference file "EUT photos"

**\*\*\*\*\*THE END REPORT\*\*\*\*\***