

## 2. Maximum Conducted Output Power

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

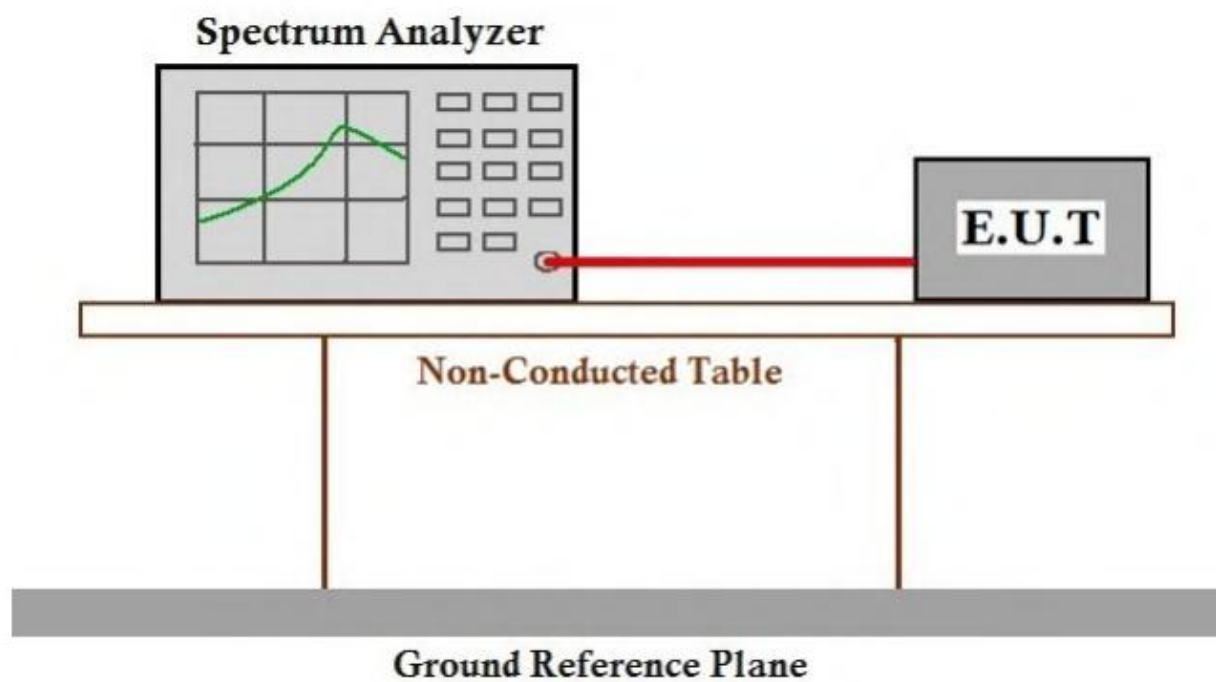
| Frequency band(MHz) | Limit                                                                                                                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5150-5250           | $\leq 1\text{W}(30\text{dBm})$ for master device                                                                                                                                                                                        |
|                     | $\leq 250\text{mW}(24\text{dBm})$ for client device                                                                                                                                                                                     |
| 5250-5350           | $\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$                                                                                                                                                        |
| 5470-5725           | $\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$                                                                                                                                                        |
| 5725-5850           | $\leq 1\text{W}(30\text{dBm})$                                                                                                                                                                                                          |
| Remark:             | <p>* Where B is the 26dB emission bandwidth in MHz.</p> <p>The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.</p> |

## Test Procedure:

**Method SA-2** (trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- (1) Set RBW = 1 MHz.
- (2) Set VBW  $\geq$  3 MHz.
- (3) Detector = power average
- (4) Sweep time = auto.
- (5) Add duty cycle to the measured average power.

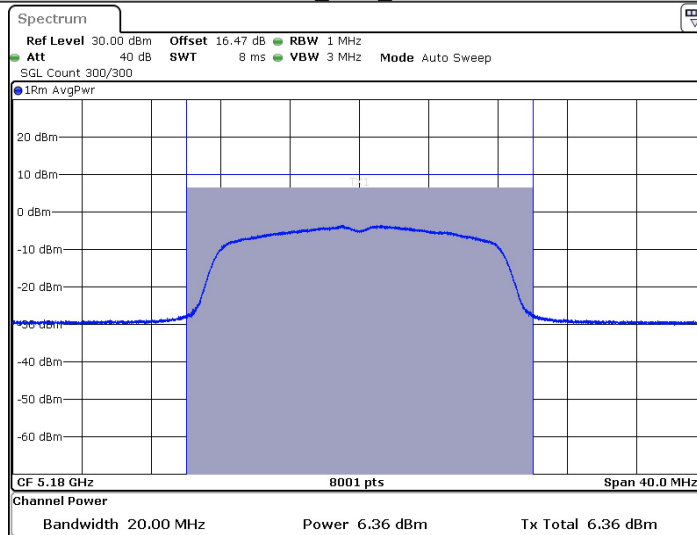
## Test Setup Diagram



Measurement Data

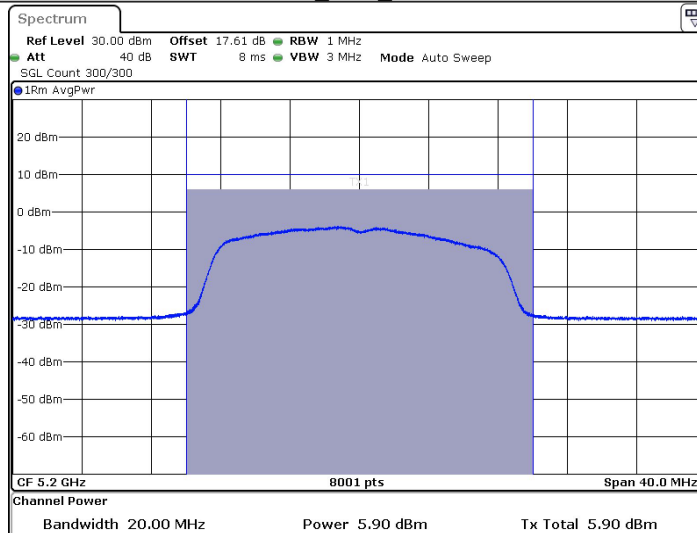
| Test Mode | Antenna | Freq(MHz) | Channel Power<br>[dBm] | DC Factor<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|-----------|---------|-----------|------------------------|--------------------|-----------------|----------------|---------|
| 11A       | Ant1    | 5180      | 5.52                   | 0.84               | <b>6.36</b>     | ≤23.98         | PASS    |
|           |         | 5200      | 3.92                   | 1.98               | 5.90            | ≤23.98         | PASS    |
|           |         | 5240      | 3.02                   | 0.66               | 3.68            | ≤23.98         | PASS    |
|           |         | 5745      | 0.03                   | 0.98               | 1.01            | ≤30.00         | PASS    |
|           |         | 5785      | 2.62                   | 0.61               | 3.23            | ≤30.00         | PASS    |
|           |         | 5825      | -1.75                  | 0.63               | -1.12           | ≤30.00         | PASS    |
| 11N20SISO | Ant1    | 5180      | 4.06                   | 1.75               | 5.81            | ≤23.98         | PASS    |
|           |         | 5200      | 4.08                   | 0.65               | 4.73            | ≤23.98         | PASS    |
|           |         | 5240      | 2.21                   | 1.86               | 4.07            | ≤23.98         | PASS    |
|           |         | 5745      | 1.52                   | 1.92               | 3.44            | ≤30.00         | PASS    |
|           |         | 5785      | 3.41                   | 0.71               | 4.12            | ≤30.00         | PASS    |
|           |         | 5825      | -1.47                  | 0.62               | -0.85           | ≤30.00         | PASS    |

11A\_Ant1\_5180



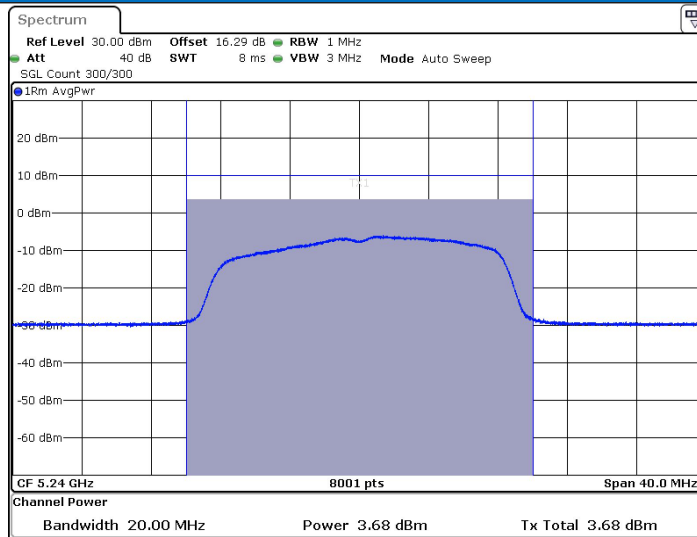
Date: 31.DEC.2024 20:20:07

11A\_Ant1\_5200



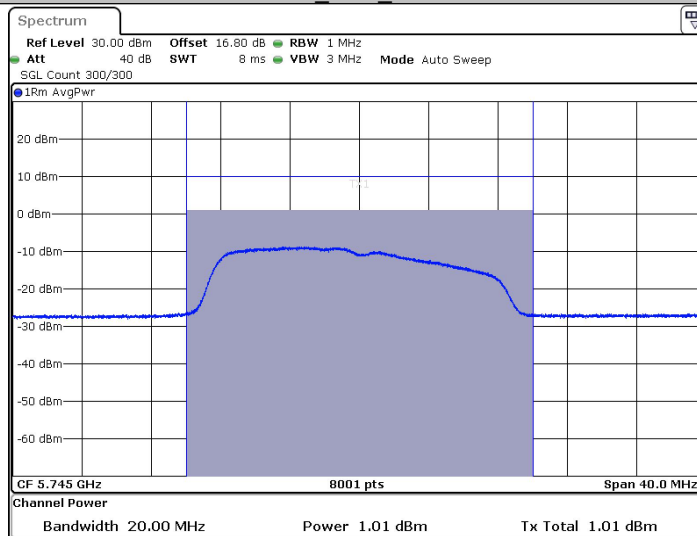
Date: 31.DEC.2024 20:22:42

11A\_Ant1\_5240



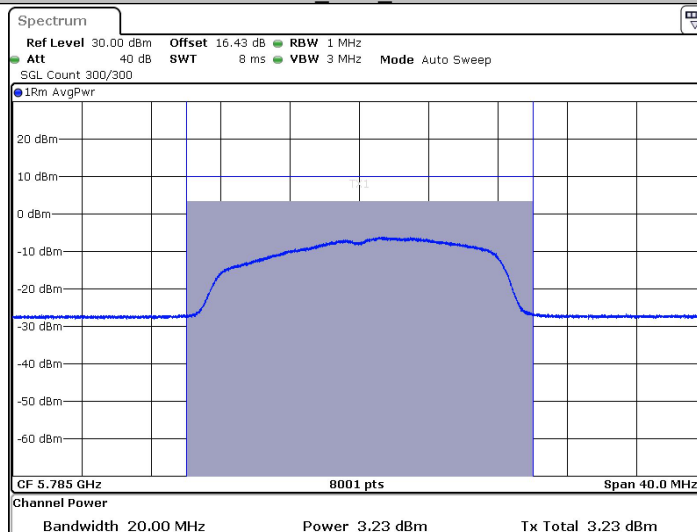
Date: 31.DEC.2024 20:27:00

### 11A\_Ant1\_5745



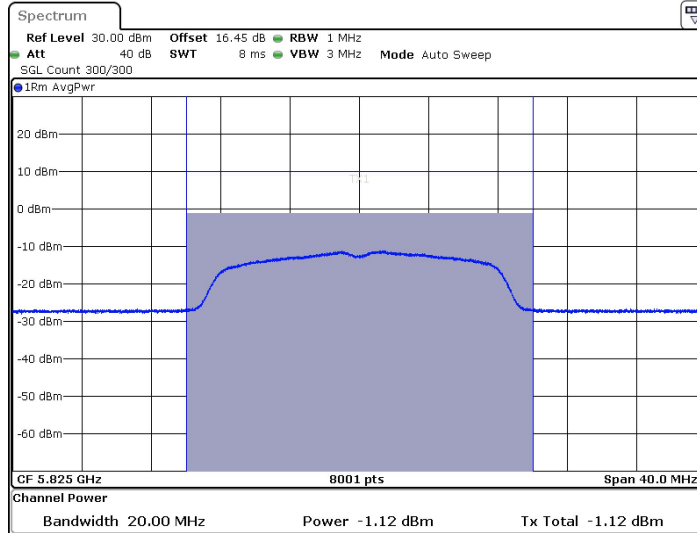
Date: 31.DEC.2024 20:29:06

### 11A\_Ant1\_5785

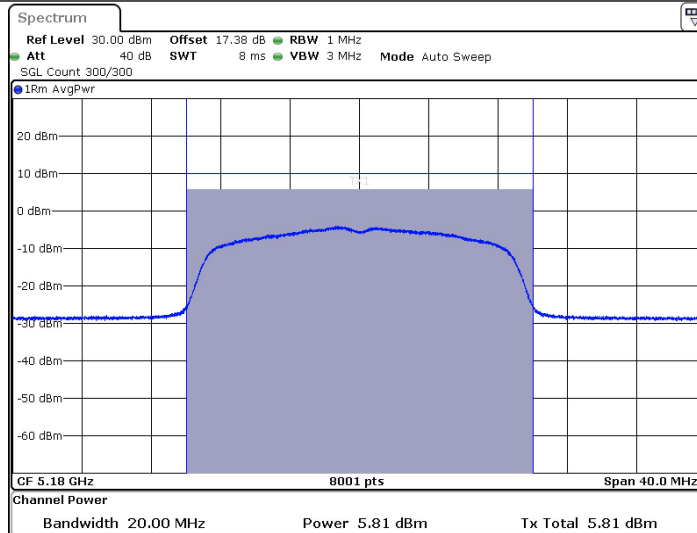


Date: 31.DEC.2024 20:30:59

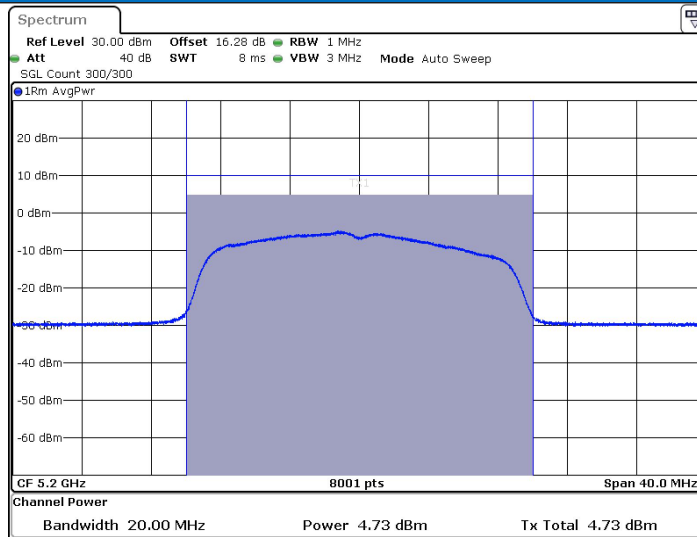
11A\_Ant1\_5825



11N20SISO\_Ant1\_5180

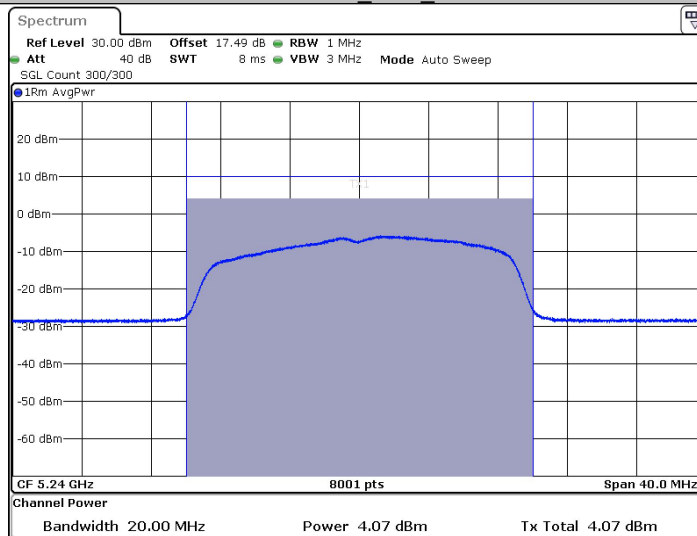


11N20SISO\_Ant1\_5200



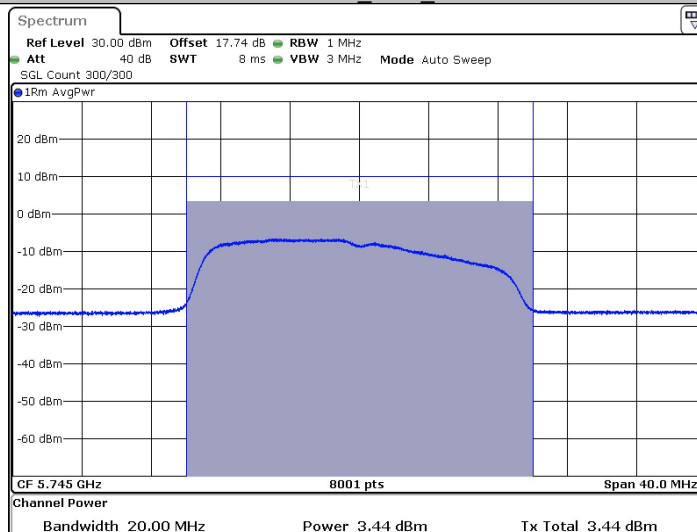
Date: 31.DEC.2024 20:37:27

### 11N20SISO\_Ant1\_5240



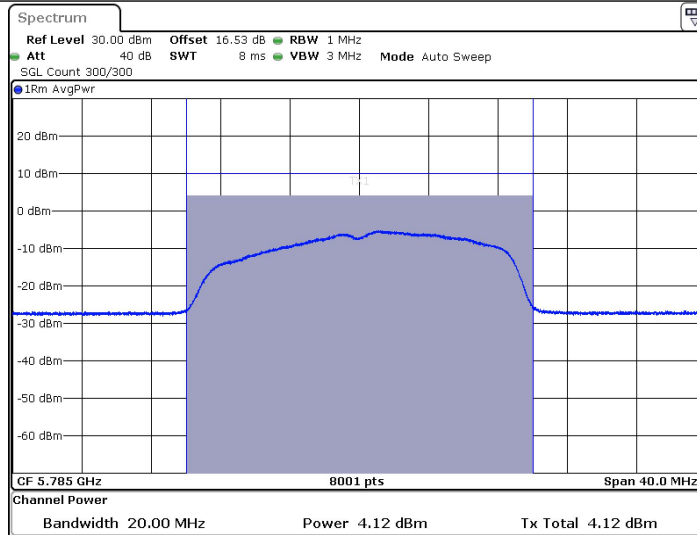
Date: 31.DEC.2024 20:42:43

### 11N20SISO\_Ant1\_5745



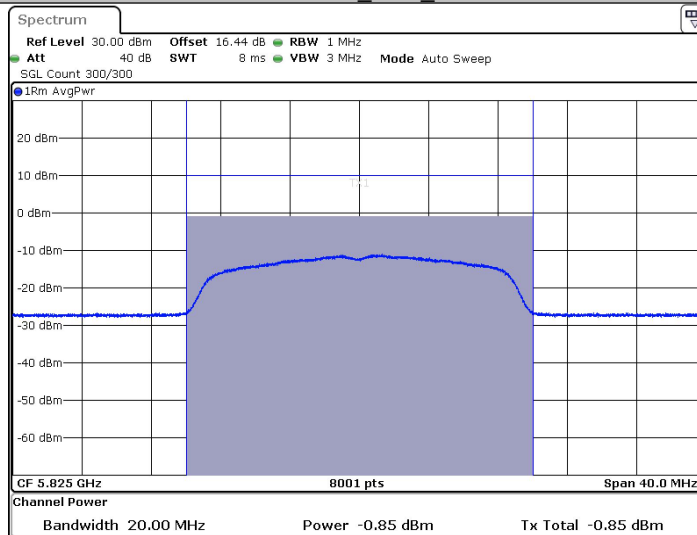
Date: 31.DEC.2024 20:45:33

11N20SISO\_Ant1\_5785



Date: 31 DEC 2024 20:48:34

11N20SISO\_Ant1\_5825



Date: 31 DEC 2024 20:52:20

## Appendix C): Maximum Power Spectral Density

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II F

### Test Procedure:

#### For 5150-5725MHz:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 1MHz.
4. Set the VBW  $\geq 3 \times$  RBW. Detector = Peak. Trace mode = max hold.

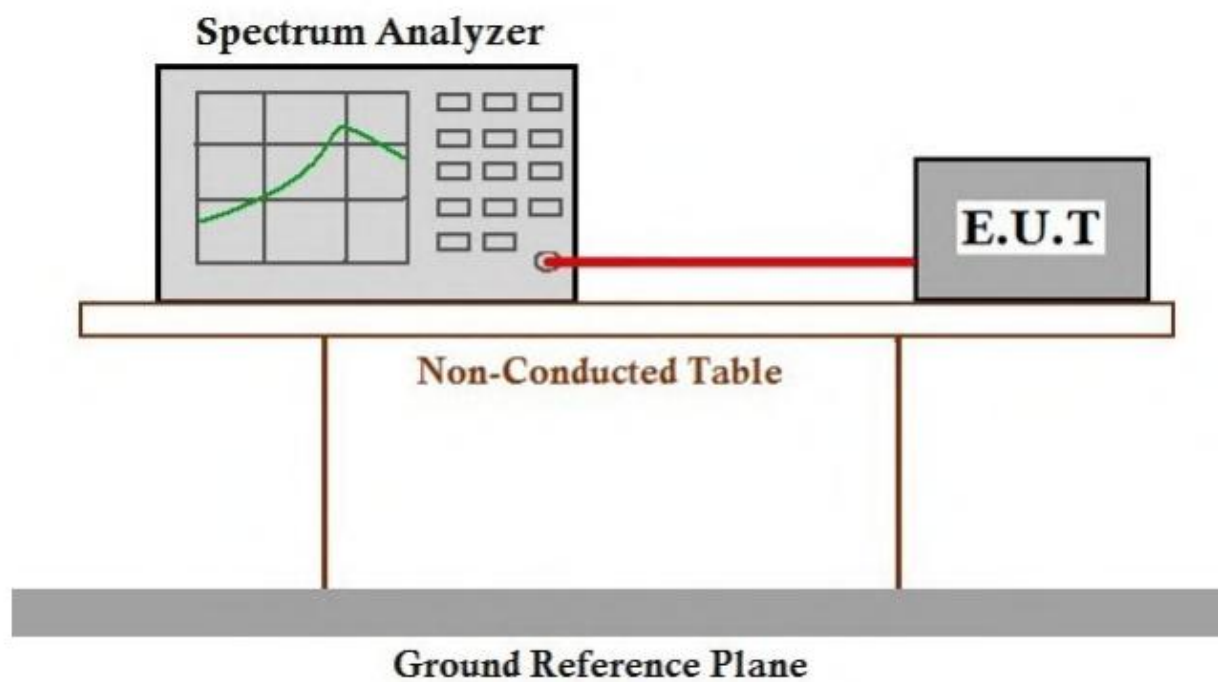
#### For 5725-5850MHz:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
2. Set the EUT Work on operation frequency individually.
3. Set RBW = 500KHz.
4. Set the VBW  $\geq 3 \times$  RBW. Detector = Peak. Trace mode = max hold.

Limit:

| Frequency band(MHz) | Limit                                                                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5150-5250           | $\leq 17\text{dBm}$ in 1MHz for master device                                                                                                            |
|                     | $\leq 11\text{dBm}$ in 1MHz for client device                                                                                                            |
| 5250-5350           | $\leq 11\text{dBm}$ in 1MHz for client device                                                                                                            |
| 5470-5725           | $\leq 11\text{dBm}$ in 1MHz for client device                                                                                                            |
| 5725-5850           | $\leq 30\text{dBm}$ in 500 kHz                                                                                                                           |
| Remark:             | The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. |

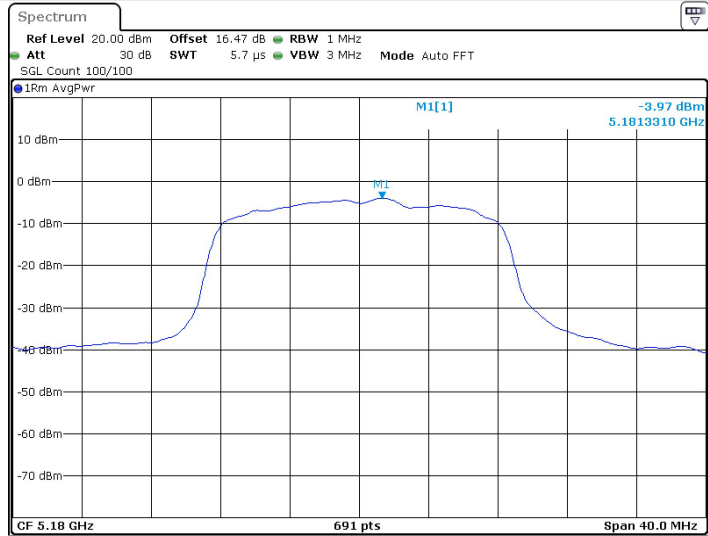
### Test Setup Diagram



Result Table

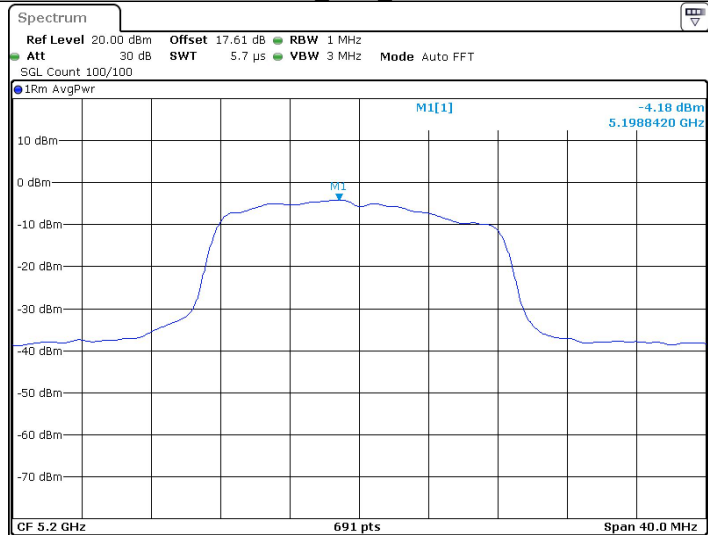
| TestMode  | Freq(MHz) | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|-----------|-----------|------------------|----------------|---------|
| 11A       | 5180      | -3.97            | ≤11.00         | PASS    |
|           | 5200      | -4.18            | ≤11.00         | PASS    |
|           | 5240      | -6.25            | ≤11.00         | PASS    |
|           | 5745      | -11.58           | ≤30.00         | PASS    |
|           | 5785      | -8.20            | ≤30.00         | PASS    |
|           | 5825      | -13.83           | ≤30.00         | PASS    |
| 11N20SISO | 5180      | -3.11            | ≤11.00         | PASS    |
|           | 5200      | -5.72            | ≤11.00         | PASS    |
|           | 5240      | -6.08            | ≤11.00         | PASS    |
|           | 5745      | -9.17            | ≤30.00         | PASS    |
|           | 5785      | -7.97            | ≤30.00         | PASS    |
|           | 5825      | -13.97           | ≤30.00         | PASS    |

11A\_Ant1\_5180



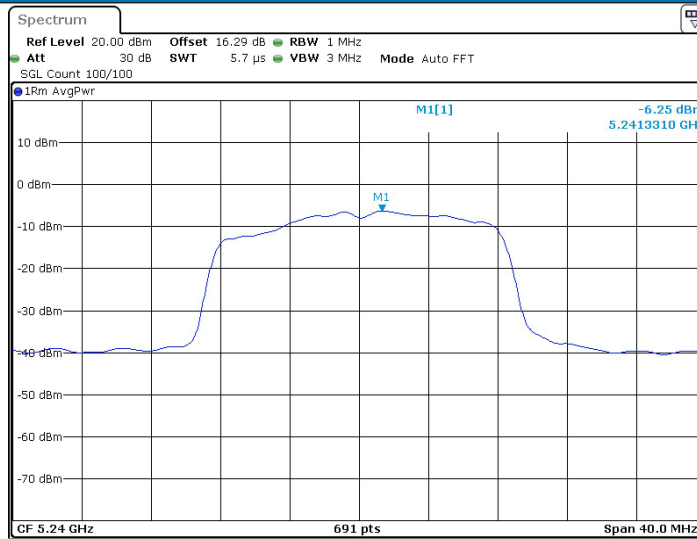
Date: 31.DEC.2024 20:20:13

11A\_Ant1\_5200



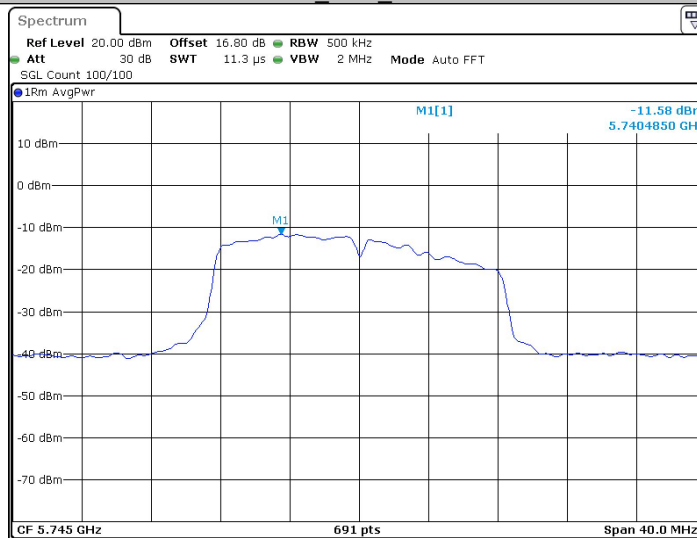
Date: 31.DEC.2024 20:22:48

11A\_Ant1\_5240



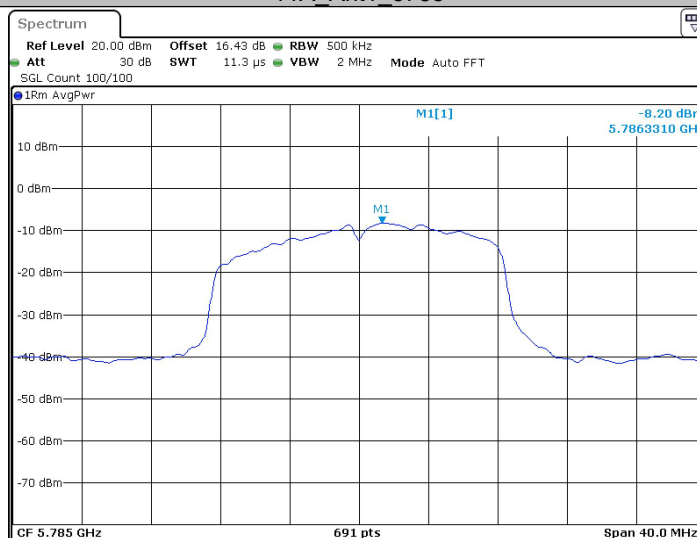
Date: 31.DEC.2024 20:27:06

### 11A\_Ant1\_5745



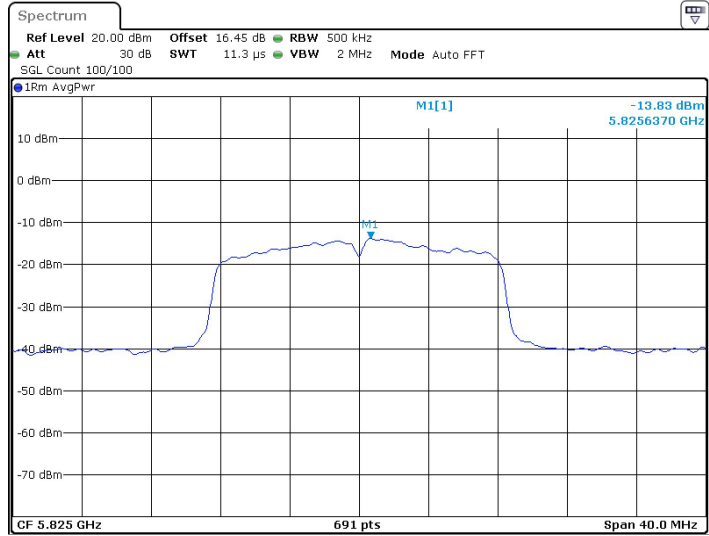
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### 11A\_Ant1\_5785



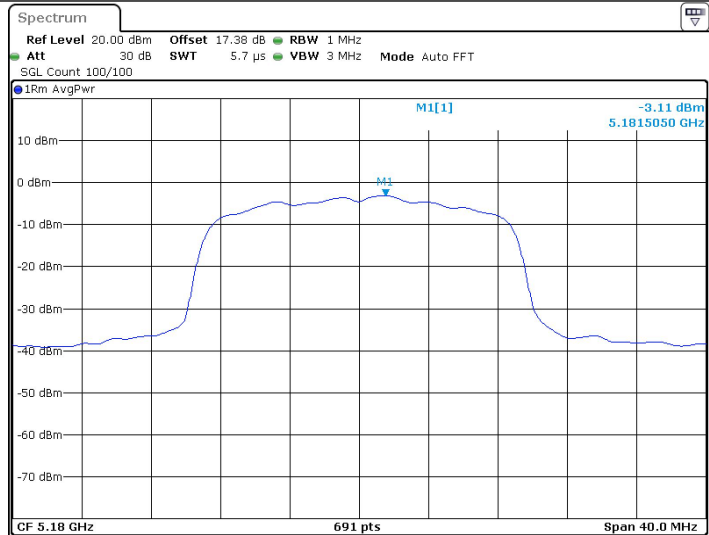
Date: 31.DEC.2024 20:31:06

11A\_Ant1\_5825



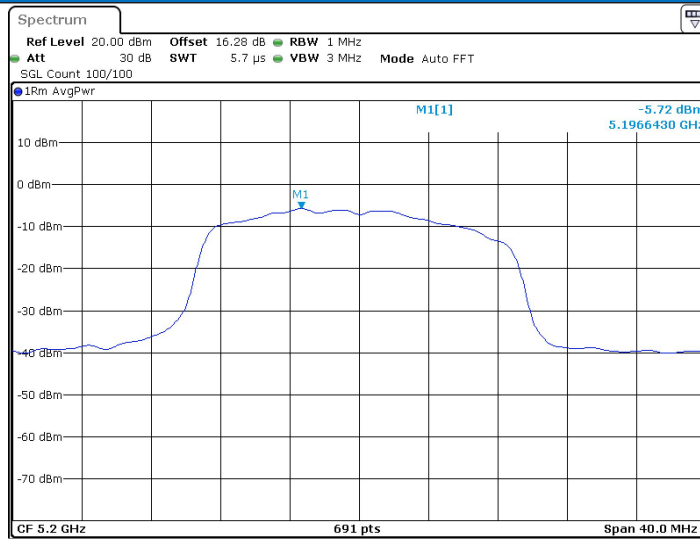
Date: 31 DEC 2024 20:32:21

11N20SISO\_Ant1\_5180



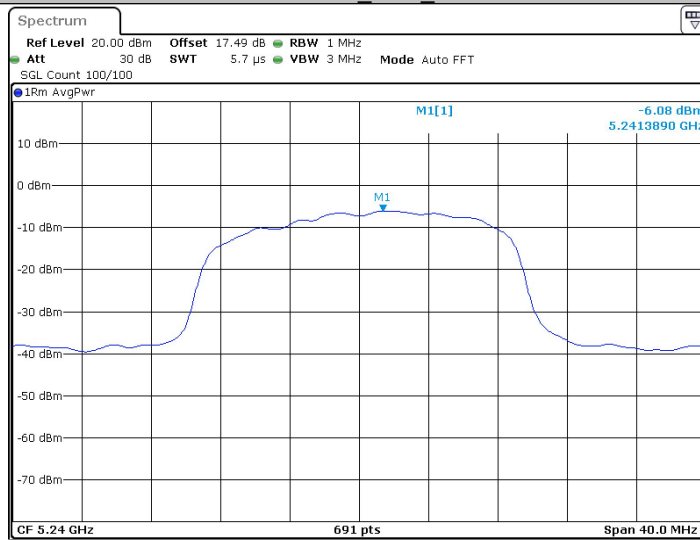
Date: 31 DEC 2024 20:34:26

11N20SISO\_Ant1\_5200



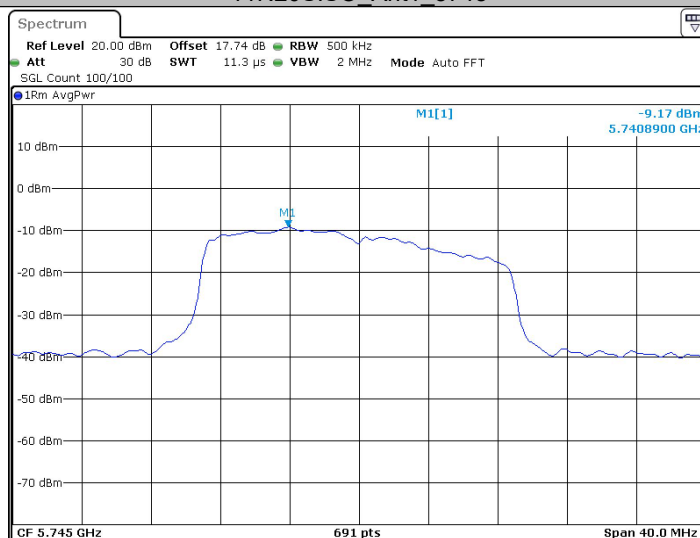
Date: 31.DEC.2024 20:37:33

11N20SISO\_Ant1\_5240



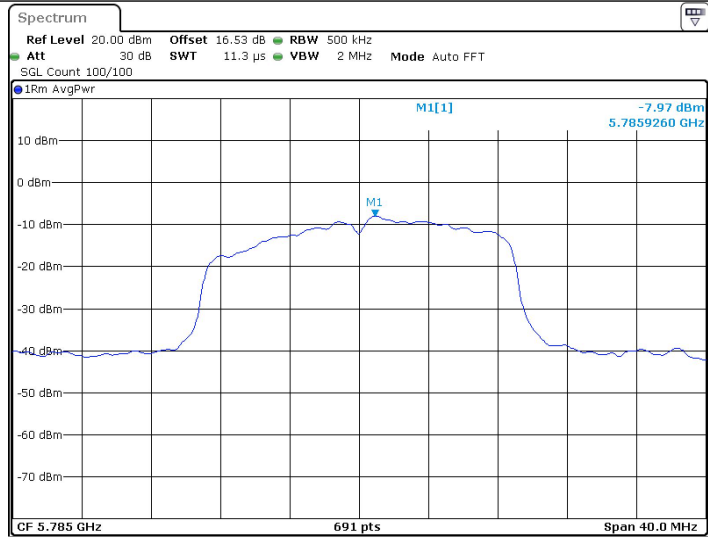
Date: 31.DEC.2024 20:42:49

11N20SISO\_Ant1\_5745



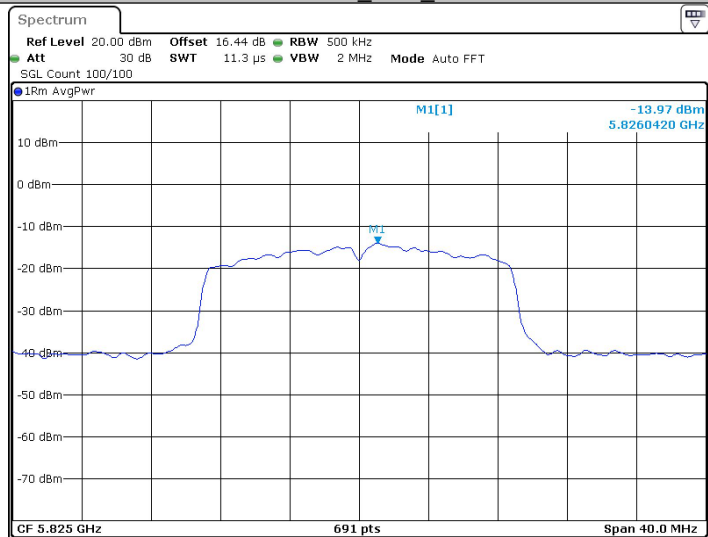
Date: 31.DEC.2024 20:45:39

11N20SISO\_Ant1\_5785



Date: 31 DEC 2024 20:48:40

11N20SISO\_Ant1\_5825



Date: 31 DEC 2024 20:52:25

## Appendix D): Band Edge Measurements

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

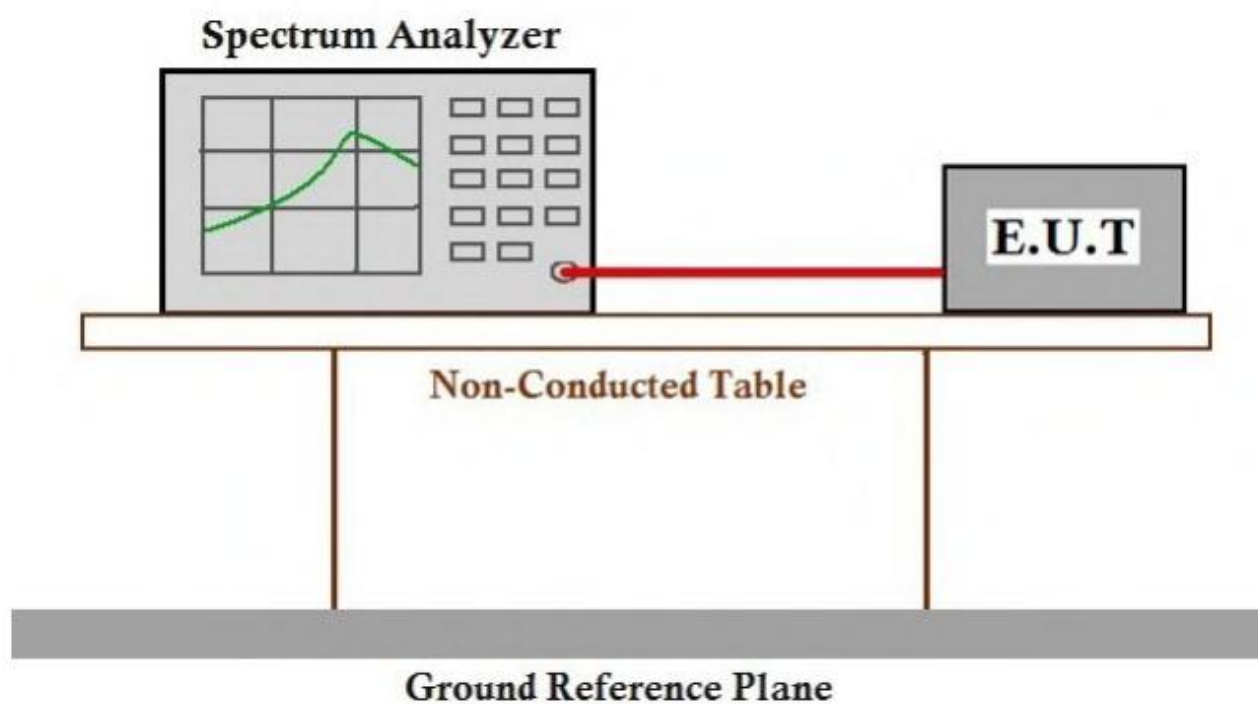
### Test Procedure:

1. The EUT operates at transmitting mode. The operate channel is tested to verify the largest transmission and spurious emissions power at the continuous transmission mode.
2. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
  - (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz ; VBW=1/on time(1KHz) / Sweep=AUTO

### Limit:

|                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 (68.2dBuV/m).                                                                                                                                                                                                                                                                                                                                                                                  |
| 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 (68.2dBuV/m).                                                                                                                                                                                                                                                                                                                                                                                  |
| 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 (68.2dBuV/m).                                                                                                                                                                                                                                                                                                                                                                                 |
| For transmitters operating in the 5.725-5.85 GHz band: | (i) All emissions shall be limited to a level of -27 dBm/MHz (68.2dBuV/m) at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz (105.2dBuV/m) 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 (110.8dBuV/m) 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 (122.2dBuV/m) at the band edge. |

## Test Setup Diagram



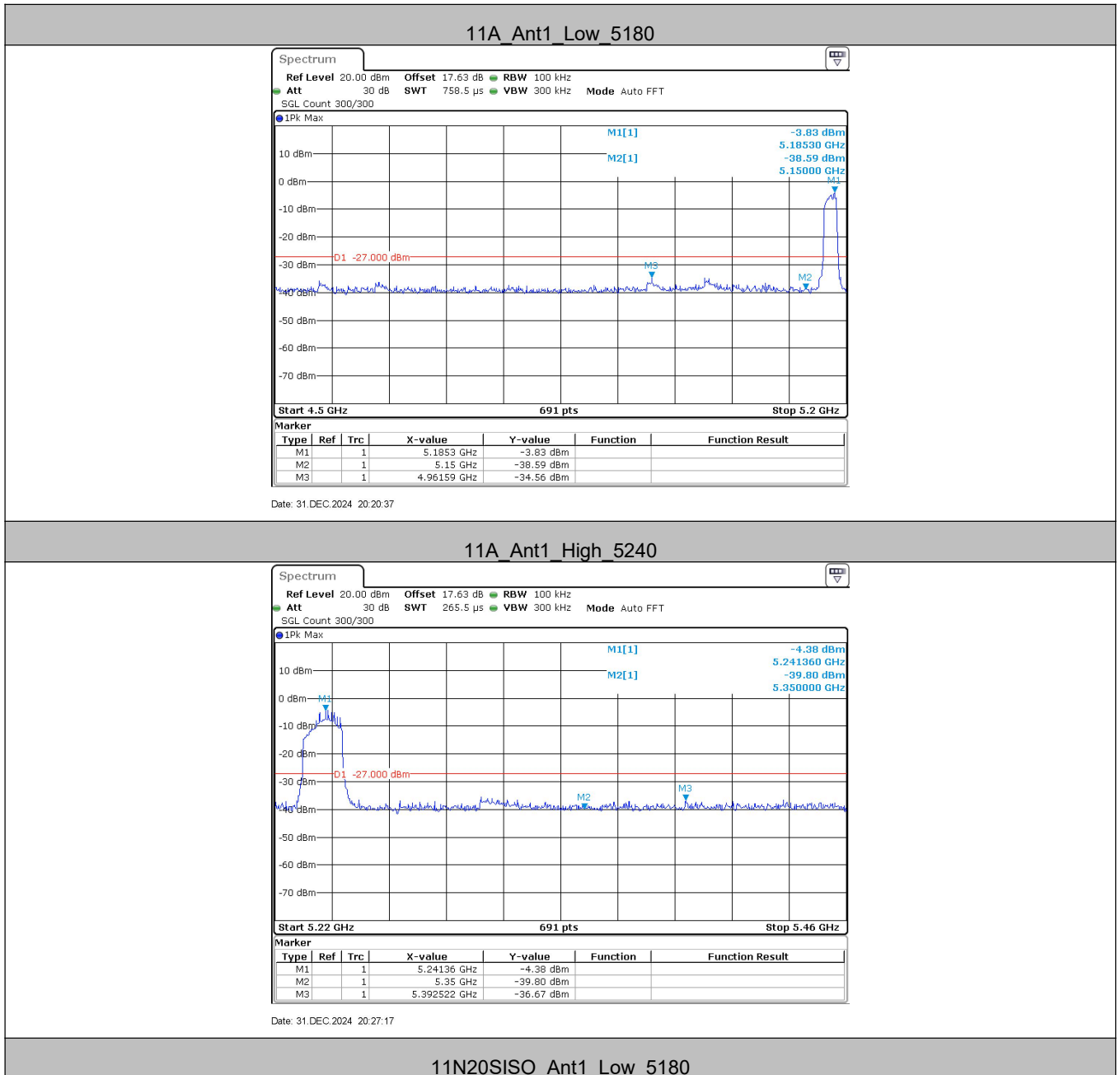
### 7.1.1 Test Result B1

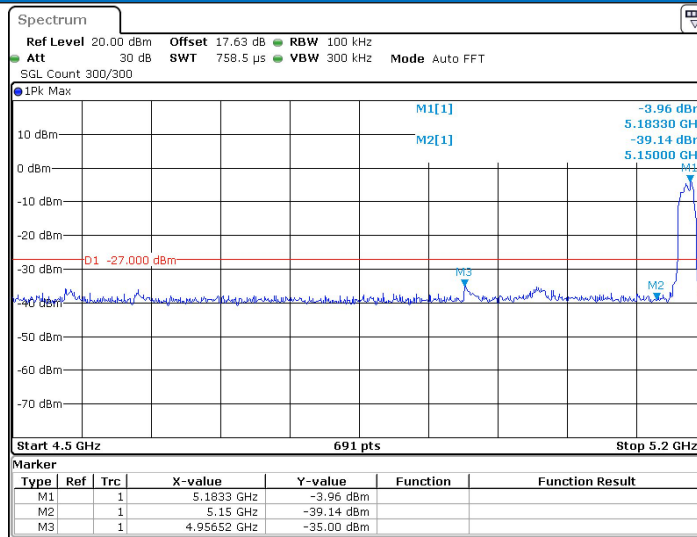
| TestMode  | ChName | Freq(MHz) | Result[dBm] | Limit[dBm] | Verdict |
|-----------|--------|-----------|-------------|------------|---------|
| 11A       | Low    | 5180      | -34.56      | $\leq -27$ | PASS    |
|           | High   | 5240      | -36.67      | $\leq -27$ | PASS    |
| 11N20SISO | Low    | 5180      | -35         | $\leq -27$ | PASS    |
|           | High   | 5240      | -36.75      | $\leq -27$ | PASS    |

### 7.1.2 Test Result B4

| TestMode  | ChName | Freq(MHz) | FreqRange<br>[MHz] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|-----------|--------|-----------|--------------------|-----------------|----------------|---------|
| 11A       | Low    | 5745      | 5650~5700          | -38.08          | $\leq -26.88$  | PASS    |
|           |        |           | 5700~5720          | -36.68          | $\leq 10.51$   | PASS    |
|           |        |           | 5720~5725          | -36.74          | $\leq 16.36$   | PASS    |
|           |        |           | 5760~5650          | -36.98          | $\leq -27$     | PASS    |
|           | High   | 5825      | 5850~5855          | -36.92          | $\leq 15.65$   | PASS    |
|           |        |           | 5855~5875          | -34.7           | $\leq 10.73$   | PASS    |
|           |        |           | 5875~5925          | -36.44          | $\leq -26.73$  | PASS    |
|           |        |           | 5925~5935          | -35.68          | $\leq -27$     | PASS    |
| 11N20SISO | Low    | 5745      | 5650~5700          | -38.2           | $\leq -26.88$  | PASS    |
|           |        |           | 5700~5720          | -36.86          | $\leq 10.70$   | PASS    |
|           |        |           | 5720~5725          | -36.72          | $\leq 17.50$   | PASS    |
|           |        |           | 5760~5650          | -36.78          | $\leq -27$     | PASS    |
|           | High   | 5825      | 5850~5855          | -37.26          | $\leq 15.65$   | PASS    |
|           |        |           | 5855~5875          | -35.62          | $\leq 10.46$   | PASS    |
|           |        |           | 5875~5925          | -36.91          | $\leq -26.87$  | PASS    |
|           |        |           | 5925~5935          | -35.16          | $\leq -27$     | PASS    |

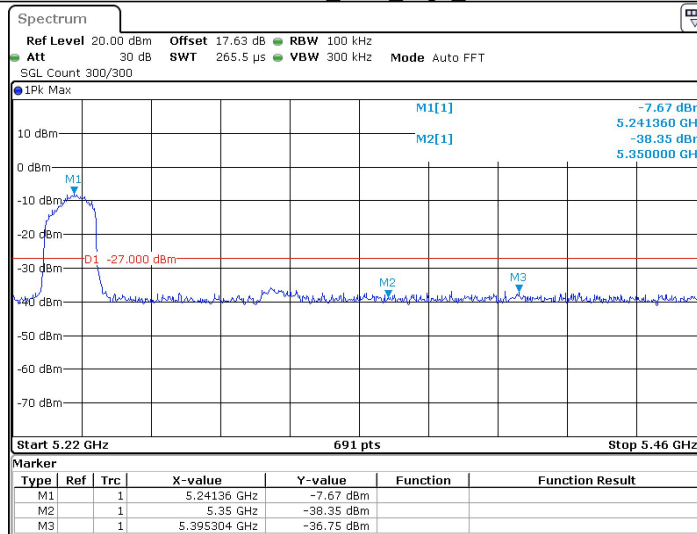
### 7.1.3 Test Graphs B1





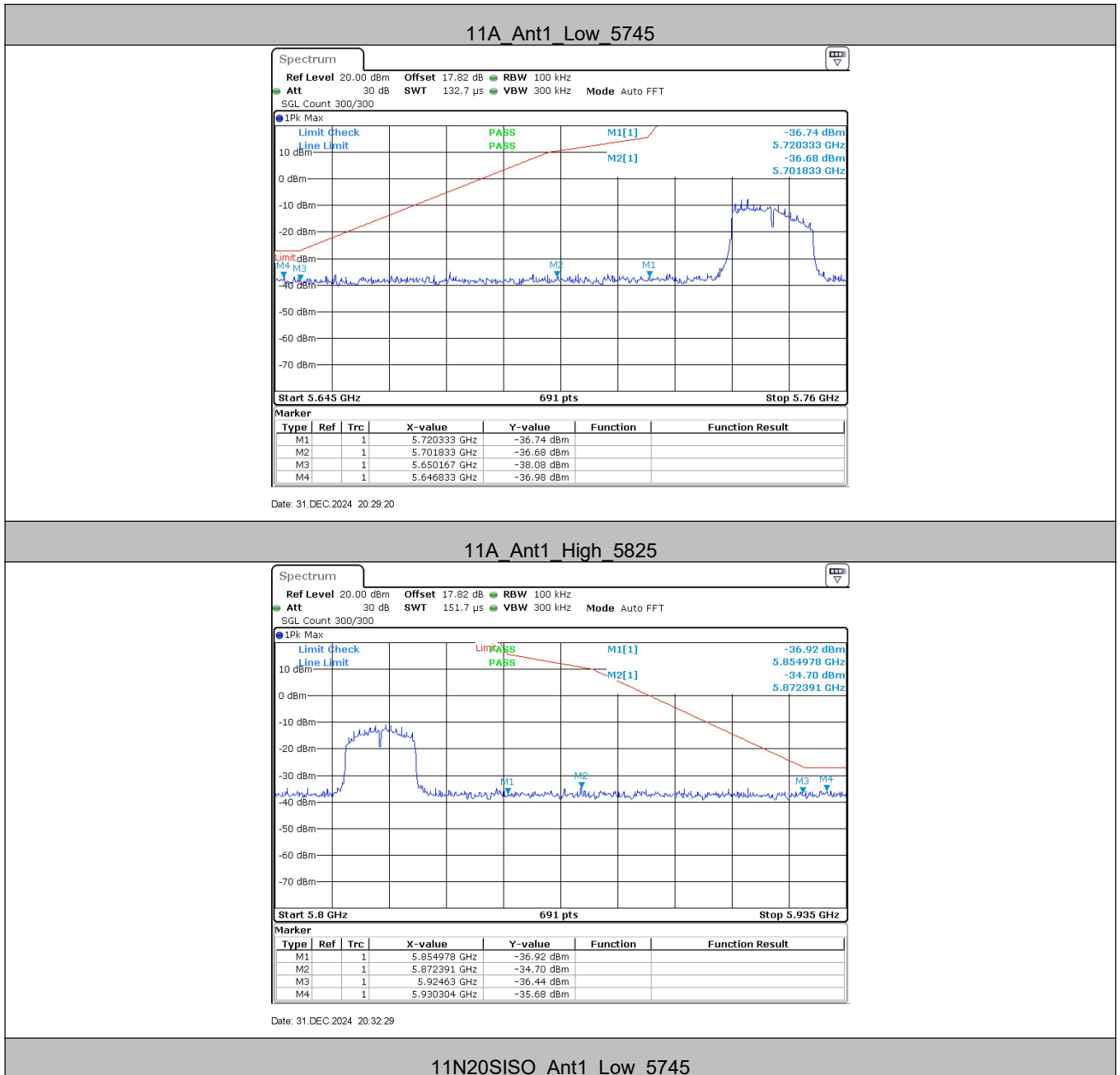
Date: 31.DEC.2024 20:34:50

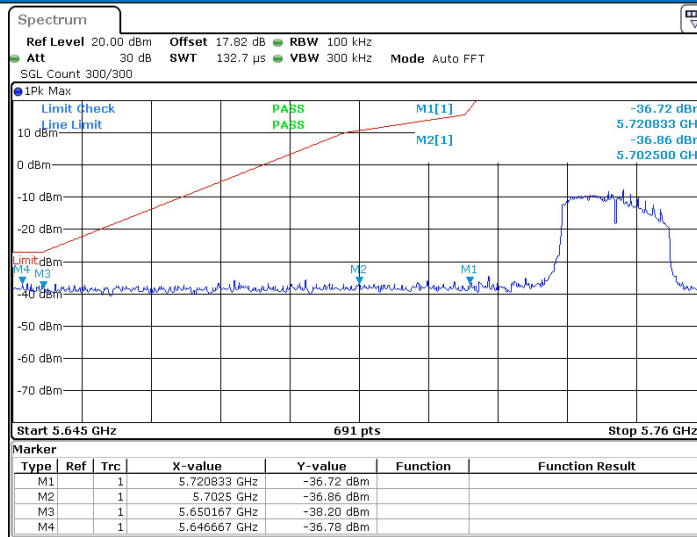
11N20SISO\_Ant1\_High\_5240



Date: 31.DEC.2024 20:43:00

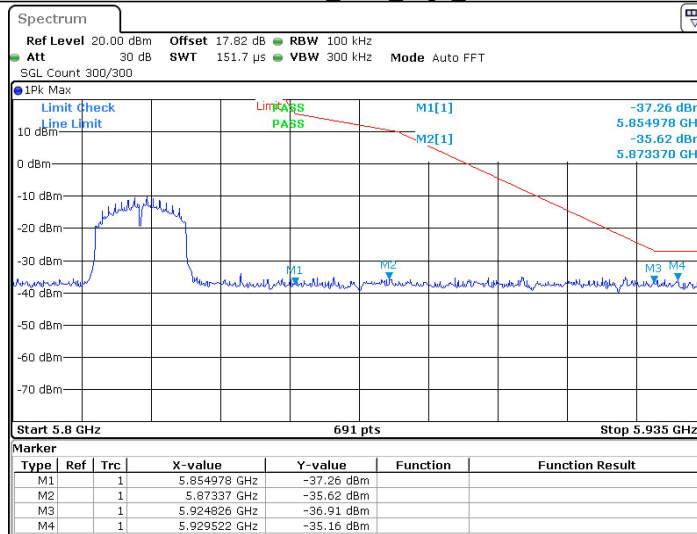
### 7.1.4 Test Graphs B4





Date: 31.DEC.2024 20:45:47

### 11N20SISO\_Ant1\_High\_5825



Date: 31.DEC.2024 20:52:34

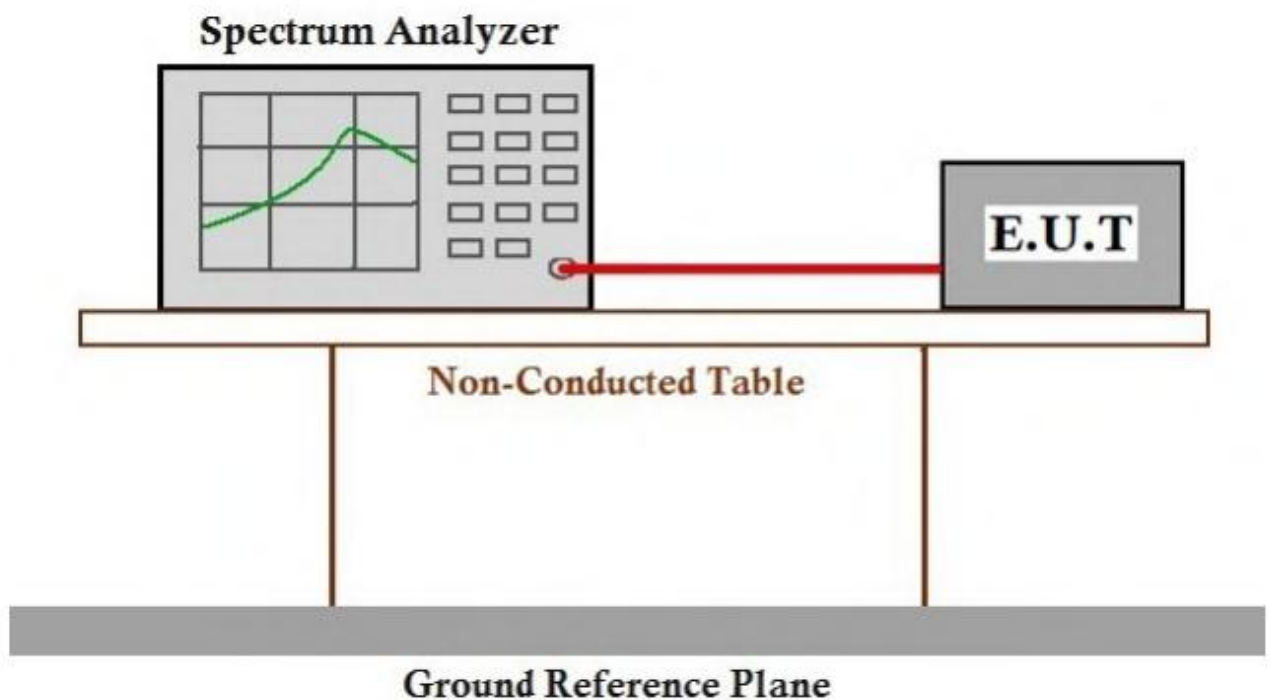
## Appendix E): Frequency Stability

Test Requirement 47 CFR Part 15, Subpart C 15.407 (g)

Test Method: ANSI C63.10 (2013) Section 6.8

Limit: The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

### Test Setup Diagram



## Measurement Data

| Frequency Stability Versus Temp. |         |                    |                 |
|----------------------------------|---------|--------------------|-----------------|
| Operating Frequency: 5240 MHz    |         |                    |                 |
| Temp                             | Voltage | Measured Frequency | Frequency Drift |
| (°C)                             |         | (MHz)              | (ppm)           |
| 50                               | VN      | 5240.03            | 5.72519         |
| 40                               |         | 5240.02            | 3.81679         |
| 30                               |         | 5240.01            | 1.90840         |
| 20                               |         | 5240.02            | 3.81679         |
| 10                               |         | 5240.02            | 3.81679         |
| 0                                |         | 5240.01            | 1.90840         |
| -10                              |         | 5240.02            | 3.81679         |
| -20                              |         | 5240.03            | 5.72519         |

| Frequency Stability Versus Temp. |         |                    |                 |
|----------------------------------|---------|--------------------|-----------------|
| Operating Frequency: 5825 MHz    |         |                    |                 |
| Temp.                            | Voltage | Measured Frequency | Frequency Drift |
|                                  |         | (MHz)              | (ppm)           |
| TN                               | VL      | 5825.00            | 0.00000         |
|                                  | VN      | 5825.03            | 5.15021         |
|                                  | VH      | 5825.02            | 3.43347         |

Note: All the modulation and channels had been tested, but only the worst data recorded in the report.

## Appendix F): Antenna Requirement

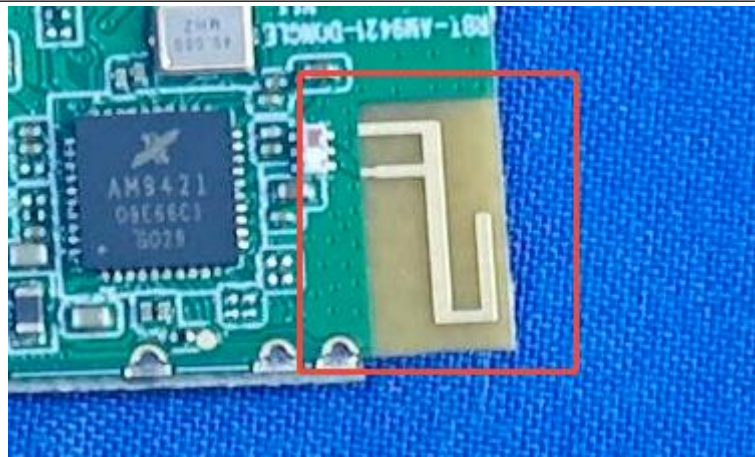
### 15.203 requirement:

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

### 15.407(a)(1) (2) requirement:

The conducted output power limit specified in paragraph (a) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (a) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power and the peak power spectral density shall be reduced by the by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### EUT Antenna:



The antenna is PCB antenna with ipex connector. The best case gain of the 5G WiFi antenna is 1.76dBi@5GHz: Wi-Fi: U-NII-1, 2.03dBi@5GHz: Wi-Fi: U-NII-3

## Appendix G): Operation in the absence of information to the transmit

### 15.407(c) requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

### Operation in the absence of information to the transmit

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare )

## Appendix H): AC Power Line Conducted Emission

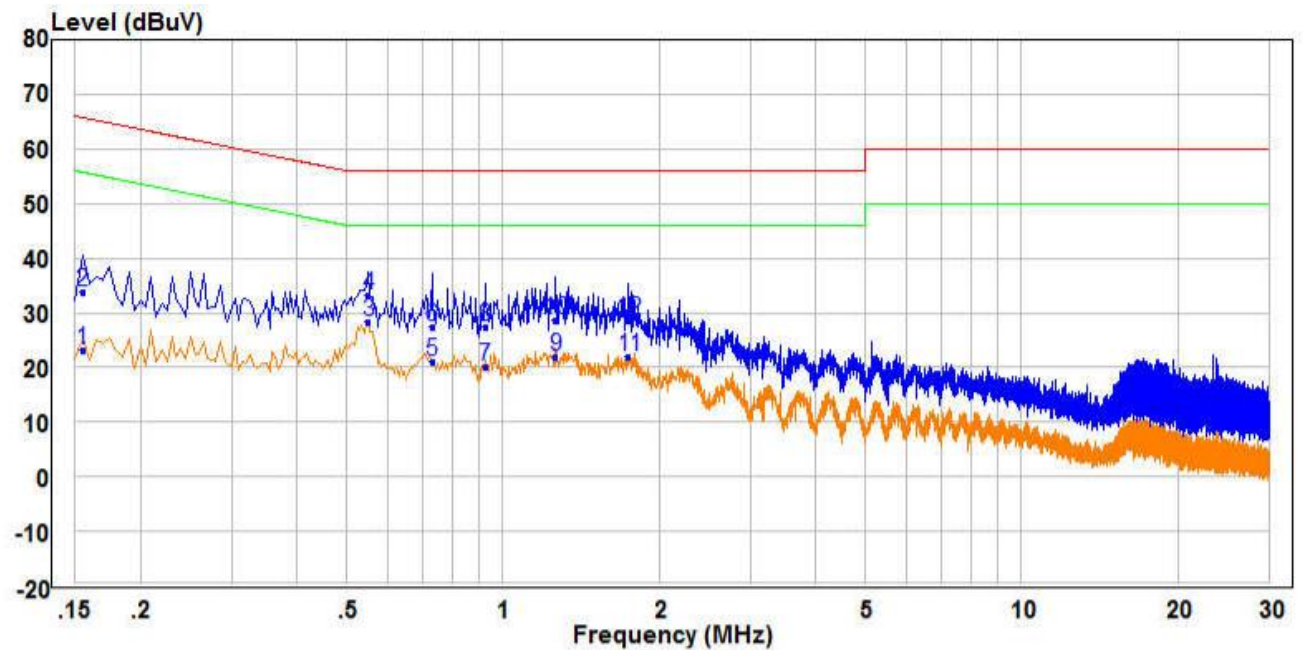
| Test Procedure:       | <p>Test frequency range :150KHz-30MHz</p> <ol style="list-style-type: none"> <li>1)The mains terminal disturbance voltage test was conducted in a shielded room.</li> <li>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a <math>50\Omega/50\mu\text{H} + 5\Omega</math> linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.</li> <li>3)The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,</li> <li>4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.</li> <li>5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.</li> </ol> |           |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------------------|--------------------|--|------------|---------|----------|-----------|-----------|-------|----|----|------|----|----|
| Limit:                | <table border="1"> <thead> <tr> <th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dB<math>\mu</math>V)</th></tr> <tr> <th>Quasi-peak</th><th>Average</th></tr> </thead> <tbody> <tr> <td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr> <tr> <td>0.5-5</td><td>56</td><td>46</td></tr> <tr> <td>5-30</td><td>60</td><td>50</td></tr> </tbody> </table> <p>* The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.<br/>NOTE : The lower limit is applicable at the transition frequency</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |           | Frequency range (MHz) | Limit (dB $\mu$ V) |  | Quasi-peak | Average | 0.15-0.5 | 66 to 56* | 56 to 46* | 0.5-5 | 56 | 46 | 5-30 | 60 | 50 |
| Frequency range (MHz) | Limit (dB $\mu$ V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
|                       | Quasi-peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Average   |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
| 0.15-0.5              | 66 to 56*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 56 to 46* |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
| 0.5-5                 | 56                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 46        |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |
| 5-30                  | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 50        |                       |                    |  |            |         |          |           |           |       |    |    |      |    |    |

### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

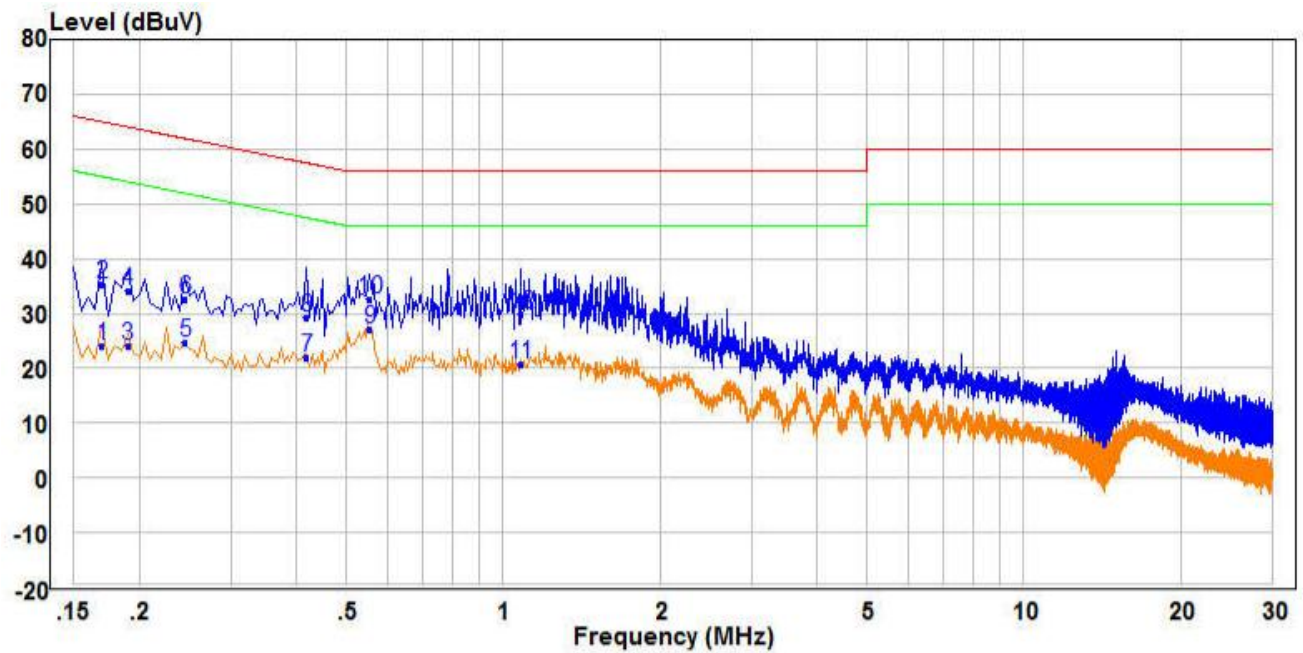
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live line:



|      | Freq  | Read Level | Factor | Level | Limit | Over   | Remark  | Pol/Phase |
|------|-------|------------|--------|-------|-------|--------|---------|-----------|
|      | MHz   | dBuV       | dB     | dBuV  | dBuV  | dB     |         |           |
| 1    | 0.155 | 13.34      | 9.69   | 23.03 | 55.73 | -32.70 | Average | Line      |
| 2    | 0.155 | 23.98      | 9.69   | 33.67 | 65.73 | -32.06 | QP      | Line      |
| 3 PP | 0.550 | 18.47      | 9.75   | 28.22 | 46.00 | -17.78 | Average | Line      |
| 4 QP | 0.550 | 23.52      | 9.75   | 33.27 | 56.00 | -22.73 | QP      | Line      |
| 5    | 0.730 | 11.02      | 9.88   | 20.90 | 46.00 | -25.10 | Average | Line      |
| 6    | 0.730 | 17.64      | 9.88   | 27.52 | 56.00 | -28.48 | QP      | Line      |
| 7    | 0.925 | 10.42      | 9.75   | 20.17 | 46.00 | -25.83 | Average | Line      |
| 8    | 0.925 | 17.54      | 9.75   | 27.29 | 56.00 | -28.71 | QP      | Line      |
| 9    | 1.265 | 11.62      | 10.35  | 21.97 | 46.00 | -24.03 | Average | Line      |
| 10   | 1.265 | 18.36      | 10.35  | 28.71 | 56.00 | -27.29 | QP      | Line      |
| 11   | 1.750 | 10.76      | 11.27  | 22.03 | 46.00 | -23.97 | Average | Line      |
| 12   | 1.750 | 17.44      | 11.27  | 28.71 | 56.00 | -27.29 | QP      | Line      |

Neutral line:



|       | Freq  | Read  |        | Limit | Over  |                |           |
|-------|-------|-------|--------|-------|-------|----------------|-----------|
|       | MHz   | Level | Factor | Line  | Limit | Remark         | Pol/Phase |
|       | MHz   | dBuV  | dB     | dBuV  | dB    |                |           |
| 1     | 0.170 | 14.40 | 9.66   | 24.06 | 54.96 | -30.90 Average | Neutral   |
| 2     | 0.170 | 25.53 | 9.66   | 35.19 | 64.96 | -29.77 QP      | Neutral   |
| 3     | 0.190 | 14.34 | 9.62   | 23.96 | 54.04 | -30.08 Average | Neutral   |
| 4     | 0.190 | 24.47 | 9.62   | 34.09 | 64.04 | -29.95 QP      | Neutral   |
| 5     | 0.245 | 15.01 | 9.54   | 24.55 | 51.92 | -27.37 Average | Neutral   |
| 6     | 0.245 | 23.11 | 9.54   | 32.65 | 61.92 | -29.27 QP      | Neutral   |
| 7     | 0.420 | 12.39 | 9.62   | 22.01 | 47.45 | -25.44 Average | Neutral   |
| 8     | 0.420 | 19.59 | 9.62   | 29.21 | 57.45 | -28.24 QP      | Neutral   |
| 9 PP  | 0.555 | 17.40 | 9.76   | 27.16 | 46.00 | -18.84 Average | Neutral   |
| 10 QP | 0.555 | 22.93 | 9.76   | 32.69 | 56.00 | -23.31 QP      | Neutral   |
| 11    | 1.080 | 11.06 | 9.70   | 20.76 | 46.00 | -25.24 Average | Neutral   |
| 12    | 1.080 | 20.13 | 9.70   | 29.83 | 56.00 | -26.17 QP      | Neutral   |

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. The 6Mbps of rate of 802.11A\_5240 is the worst case, only the worst data recorded in the report.

## Appendix I): Restricted bands around fundamental frequency (Radiated Emission)

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                     |        |                  |            |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------|------------------|------------|
| Receiver Setup: | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Detector            | RBW    | VBW              | Remark     |
|                 | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quasi-peak          | 120kHz | 300kHz           | Quasi-peak |
|                 | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Peak                | 1MHz   | 3MHz             | Peak       |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Peak                | 1MHz   | 10Hz             | Average    |
| Test Procedure: | <p><b>Below 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</li> </ol> <p><b>Above 1GHz test procedure as below:</b></p> <ol style="list-style-type: none"> <li>Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber and change form table 0.8 metre to 1.5 metre( Above 18GHz the distance is 1 meter and table is 1.5 metre).</li> <li>Test the EUT in the lowest channel , the Highest channel</li> <li>The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.</li> <li>Repeat above procedures until all frequencies measured was complete.</li> </ol> |                     |        |                  |            |
| Limit:          | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Limit (dBμV/m @3cm) |        | Remark           |            |
|                 | 30MHz-88MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 40.0                |        | Quasi-peak Value |            |
|                 | 88MHz-216MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 43.5                |        | Quasi-peak Value |            |
|                 | 216MHz-960MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 46.0                |        | Quasi-peak Value |            |
|                 | 960MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 54.0                |        | Quasi-peak Value |            |
|                 | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 54.0                |        | Average Value    |            |
|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 74.0                |        | Peak Value       |            |