

5470-5725MHz:  
ANT1+ANT2

| Test mode      | Test Channel (MHz) | PSD [dBm/MHz] ANT 1 | PSD [dBm/MHz] ANT 2 | PSD [dBm/MHz] Total | Limit (dBm) | Result |
|----------------|--------------------|---------------------|---------------------|---------------------|-------------|--------|
| 802.11a        | 5500               | 1.248               | 1.267               | /                   | 11          | Pass   |
|                | 5580               | 2.612               | 2.285               | /                   | 11          | Pass   |
|                | 5700               | 2.002               | 2.565               | /                   | 11          | Pass   |
| 802.11n(HT20)  | 5500               | 0.127               | 0.639               | 3.401               | 11          | Pass   |
|                | 5580               | 1.641               | 2.603               | 5.159               | 11          | Pass   |
|                | 5700               | 1.828               | 2.443               | 5.157               | 11          | Pass   |
| 802.11n(HT40)  | 5510               | -2.546              | -2.366              | 0.555               | 11          | Pass   |
|                | 5670               | -1.414              | -1.653              | 1.478               | 11          | Pass   |
| 802.11ac(VH20) | 5530               | -3.854              | -50.67              | -3.854              | 11          | Pass   |
|                | 5500               | 0.39                | 0.852               | 3.637               | 11          | Pass   |
|                | 5580               | 1.533               | 1.948               | 4.756               | 11          | Pass   |
| 802.11ac(VH40) | 5700               | 1.453               | 2.014               | 4.753               | 11          | Pass   |
|                | 5510               | -2.388              | -2.293              | 0.670               | 11          | Pass   |
| 802.11ac(VH80) | 5670               | -1.249              | -1.368              | 1.702               | 11          | Pass   |

5725-5850MHz:  
ANT1+ANT2

| Test mode      | Test Channel (MHz) | PSD [dBm/MHz] ANT 1 | PSD [dBm/MHz] ANT 2 | PSD [dBm/MHz] Total | Limit (dBm) | Result |
|----------------|--------------------|---------------------|---------------------|---------------------|-------------|--------|
| 802.11a        | 5745               | -1.603              | -2.711              | /                   | 30          | Pass   |
|                | 5785               | -2.206              | -3.569              | /                   | 30          | Pass   |
|                | 5825               | -2.629              | -2.678              | /                   | 30          | Pass   |
| 802.11n(HT20)  | 5745               | -3.807              | -3.069              | -0.412              | 30          | Pass   |
|                | 5785               | -2.992              | -4.105              | -0.503              | 30          | Pass   |
|                | 5825               | -2.941              | -3.699              | -0.293              | 30          | Pass   |
| 802.11n(HT40)  | 5755               | -6.112              | -4.836              | -2.417              | 30          | Pass   |
|                | 5795               | -6.836              | -6.742              | -3.778              | 30          | Pass   |
| 802.11ac(VH20) | 5745               | -7.473              | -7.892              | -4.667              | 30          | Pass   |
|                | 5785               | -2.759              | -2.43               | 0.419               | 30          | Pass   |
|                | 5825               | -3.01               | -4.046              | -0.487              | 30          | Pass   |
| 802.11ac(VH40) | 5755               | -3.269              | -3.038              | -0.142              | 30          | Pass   |
|                | 5795               | -6.11               | -4.141              | -2.005              | 30          | Pass   |
| 802.11ac(VH80) | 5775               | -7.066              | -6.58               | -3.806              | 30          | Pass   |

**Test Graph:**  
5150-5250MHz  
ANT1







802.11ac(VH80)-5210



802.11n(HT20)-5180



802.11n(HT20)-5200



802.11n(HT20)-5240



802.11n(HT40)-5190



802.11n(HT40)-5230



ANT2

802.11a-5180



802.11a-5200



802.11a-5240



802.11ac(VH20)-5180



802.11ac(VH20)-5200

802.11ac(VH20)-5240





802.11ac(VH40)-5190



802.11ac(VH40)-5230



802.11ac(VH80)-5210



802.11n(HT20)-5180



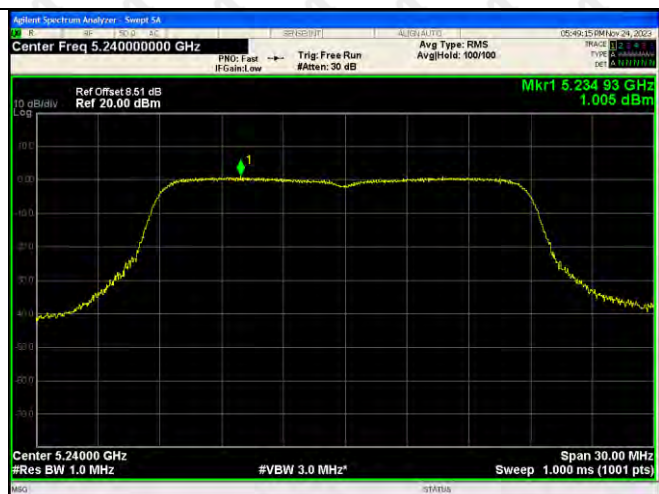
802.11n(HT20)-5200



802.11n(HT20)-5240



802.11n(HT40)-5190

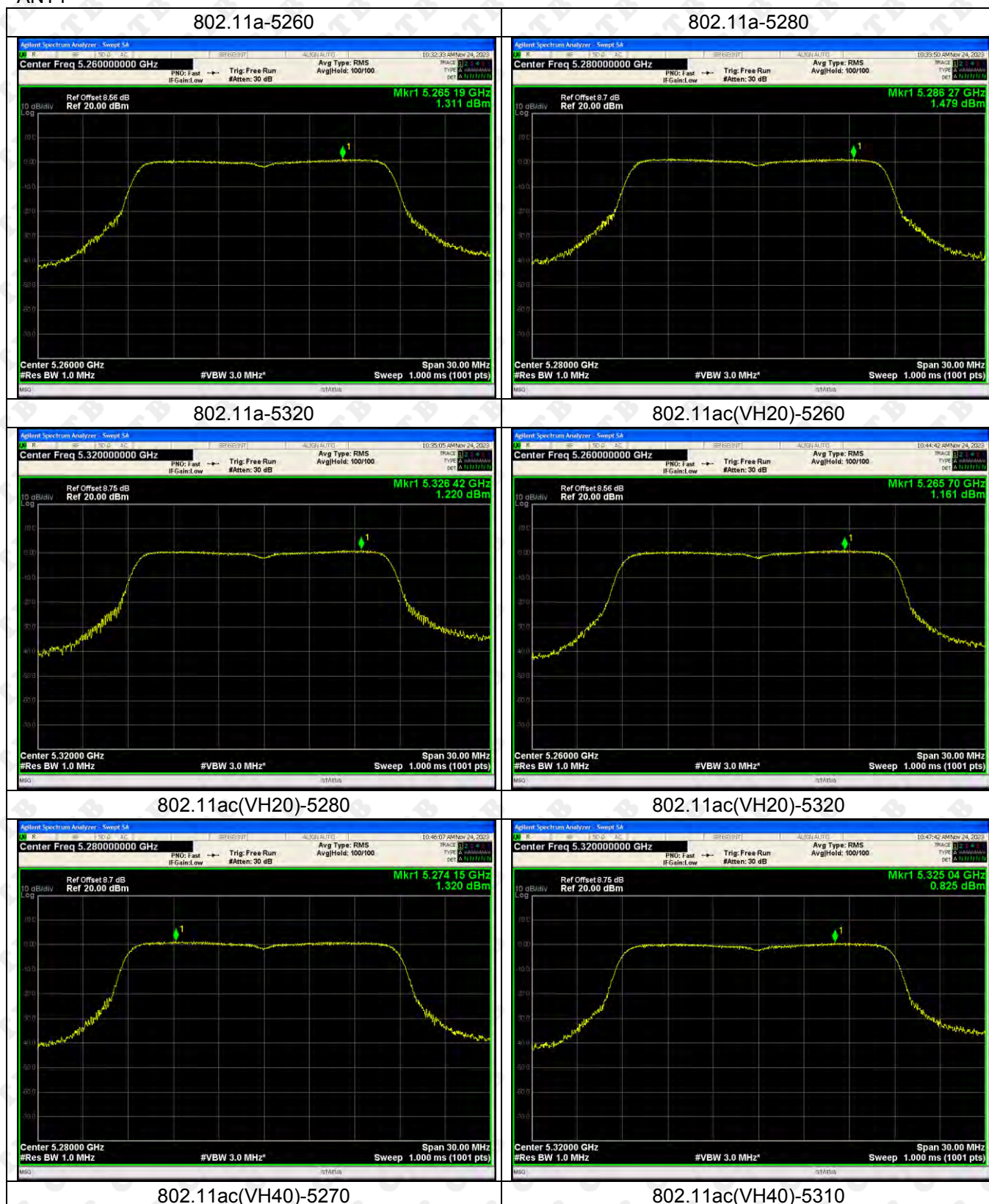


802.11n(HT40)-5230





5250-5350MHz  
ANT1





802.11ac(VH80)-5290



802.11n(HT20)-5260



802.11n(HT20)-5280



802.11n(HT20)-5320



802.11n(HT40)-5270



802.11n(HT40)-5310





ANT2

802.11a-5260



802.11a-5280



802.11a-5320



802.11ac(VH20)-5260



802.11ac(VH20)-5280

802.11ac(VH20)-5320



802.11ac(VH40)-5270



802.11ac(VH40)-5310



802.11ac(VH80)-5290



802.11n(HT20)-5260



802.11n(HT20)-5280

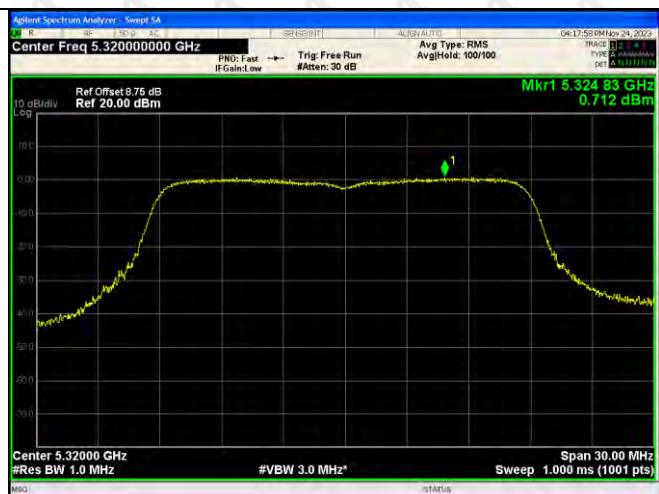


802.11n(HT20)-5320





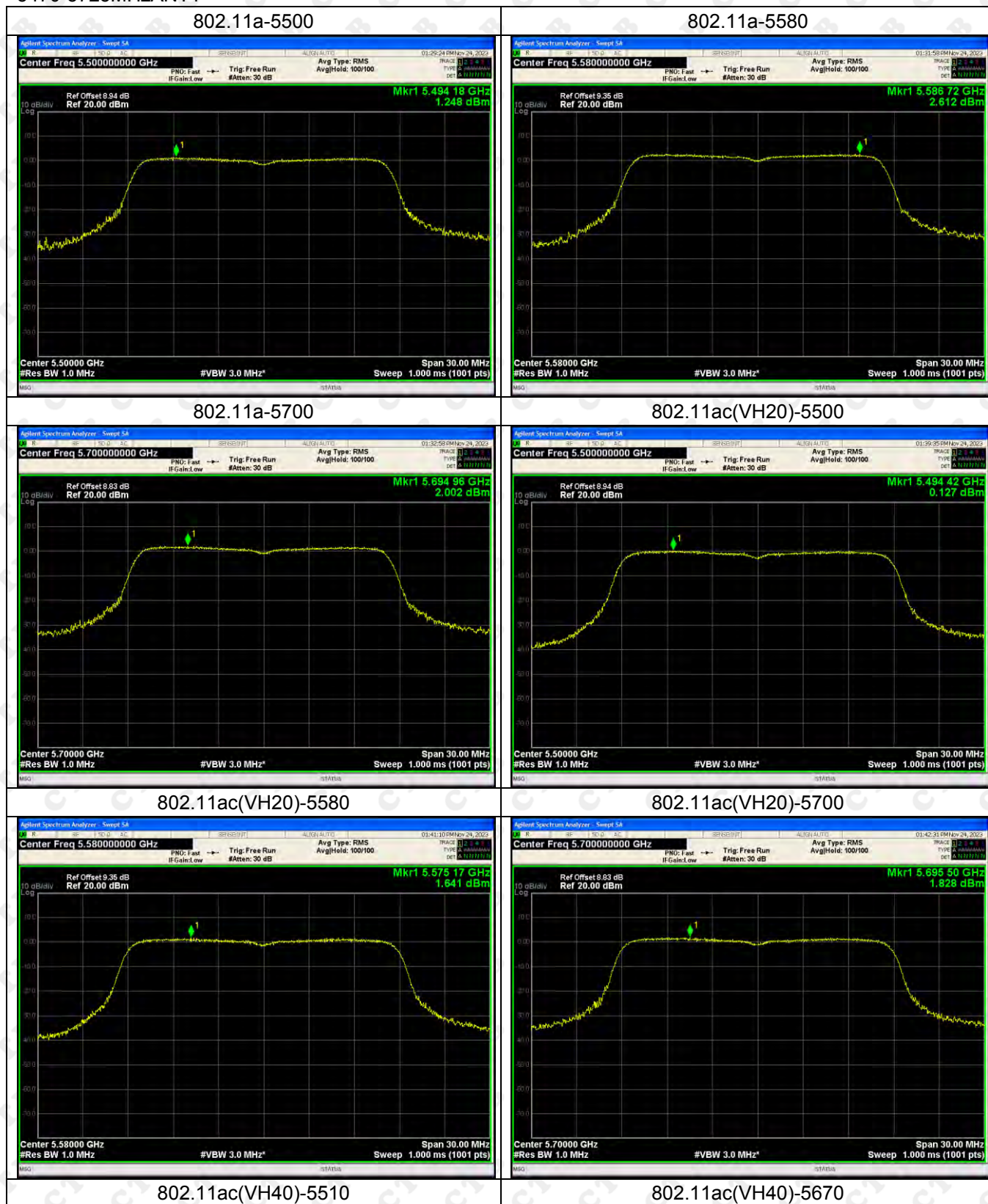
802.11n(HT40)-5270



802.11n(HT40)-5310



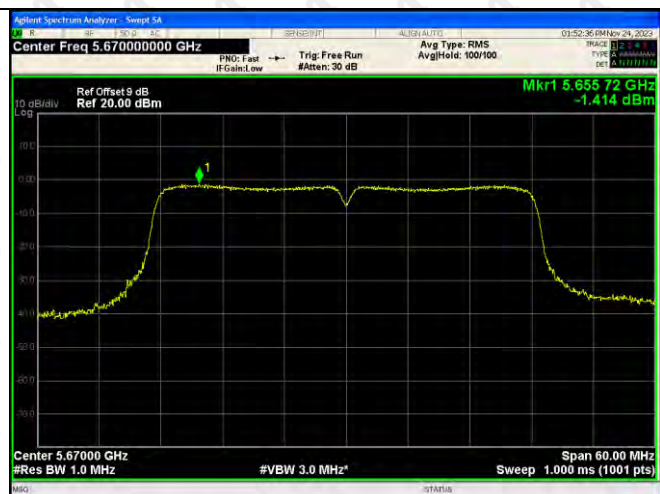
## 5470-5725MHzANT1







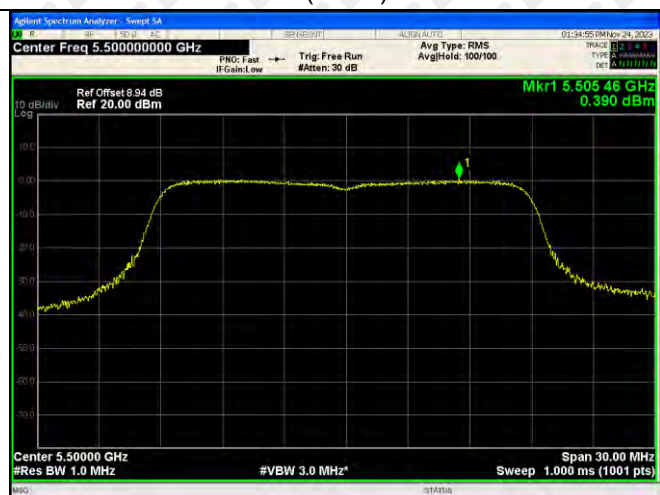
802.11ac(VH80)-5530



802.11n(HT20)-5500



802.11n(HT20)-5580



802.11n(HT20)-5700



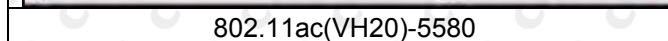
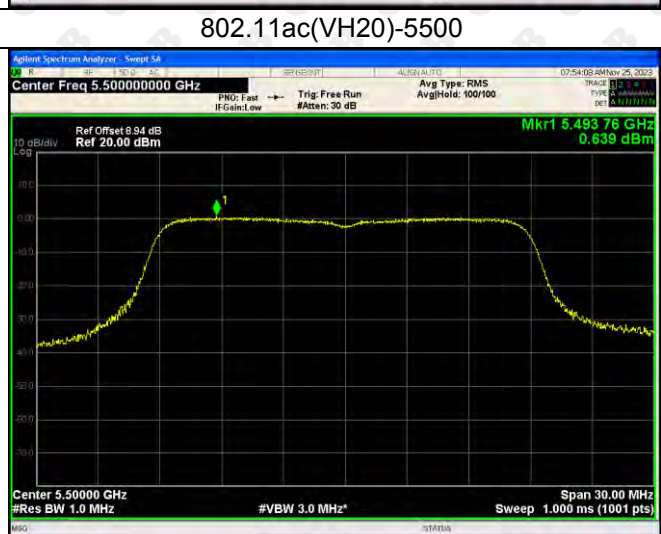
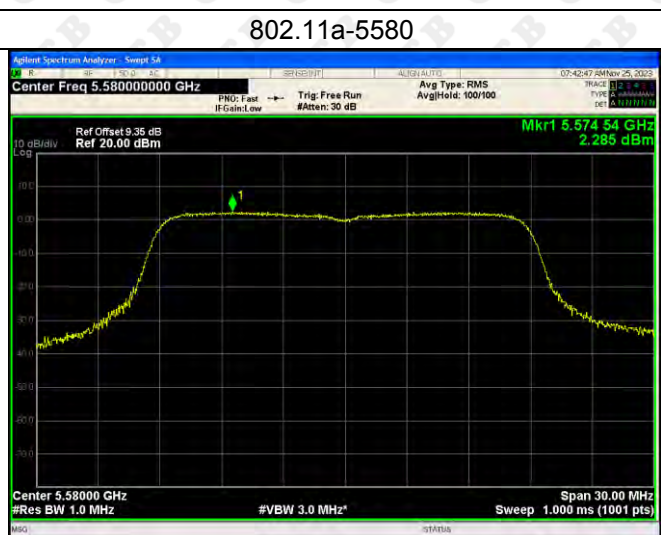
802.11n(HT40)-5510



802.11n(HT40)-5670



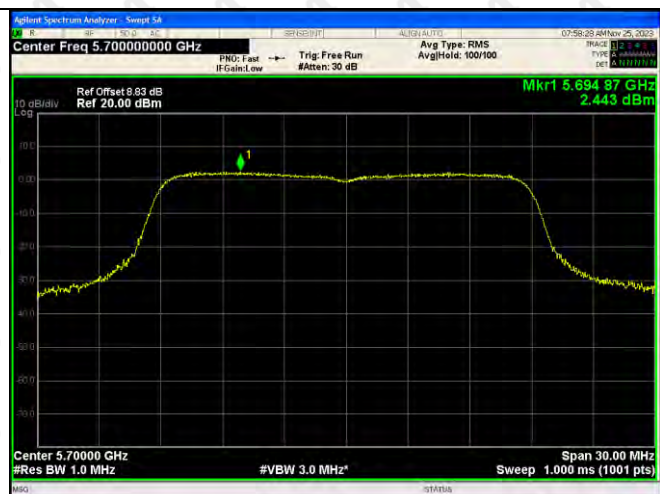
## ANT2







802.11ac(VH40)-5510



802.11ac(VH40)-5670



802.11ac(VH80)-5530



802.11n(HT20)-5500



802.11n(HT20)-5580



802.11n(HT20)-5700



802.11n(HT40)-5510



802.11n(HT40)-5670





5725-5850MHz:  
ANT1





802.11ac(VH80)-5775



802.11n(HT20)-5745



802.11n(HT20)-5785



802.11n(HT20)-5825



802.11n(HT40)-5795



802.11n(HT40)-5825





ANT2

802.11a-5745



802.11a-5785



802.11a-5825



802.11ac(VH20)-5745



802.11ac(VH20)-5785

802.11ac(VH20)-5825



802.11ac(VH40)-5755



802.11ac(VH40)-5795



802.11ac(VH80)-5775



802.11n(HT20)-5745



802.11n(HT20)-5785



802.11n(HT20)-5825





802.11n(HT40)-5795

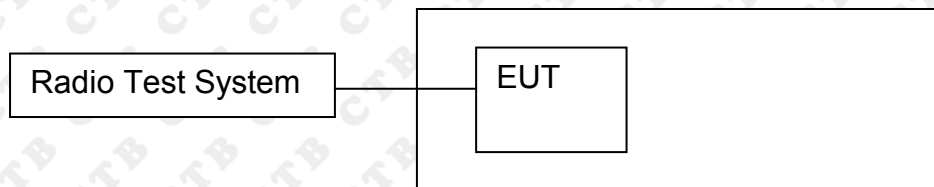


802.11n(HT40)-5825



## 12. FREQUENCY STABILITY

### 12.1 Block Diagram Of Test Setup



### 12.2 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.

### 12.3 Test procedure

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.
2. Set EUT as normal operation.
3. Turn the EUT on and couple its output to spectrum.
4. Turn the EUT off and set the chamber to the highest temperature specified.
5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.
6. Repeat step with the temperature chamber set to the lowest temperature.



## 12.4 Test Result

TX Frequency (5150-5250MHz)

ANT1

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5180MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5180.0555                    | 5180 | 0.0555               | 10.7214              |
|                 |    | V max (V) | 13.2 | 5180.0388                    | 5180 | 0.0388               | 7.4893               |
|                 |    | V min (V) | 10.8 | 5180.1242                    | 5180 | 0.1242               | 23.9785              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5180MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5180.0352                    | 5180 | 0.0352               | 6.7959               |
|                 |    | T (°C) | 10 | 5180.0186                    | 5180 | 0.0186               | 3.5886               |
|                 |    | T (°C) | 20 | 5180.0071                    | 5180 | 0.0071               | 1.3669               |
|                 |    | T (°C) | 30 | 5180.0300                    | 5180 | 0.0300               | 5.7991               |
|                 |    | T (°C) | 40 | 5180.0514                    | 5180 | 0.0514               | 9.9251               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5200MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5200.0028                    | 5200 | 0.0028               | 0.5437               |
|                 |    | V max (V) | 13.2 | 5200.0238                    | 5200 | 0.0238               | 4.5697               |
|                 |    | V min (V) | 10.8 | 5200.0515                    | 5200 | 0.0515               | 9.8965               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5200MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5200.0411                    | 5200 | 0.0411               | 7.9105               |
|                 |    | T (°C) | 10 | 5200.0085                    | 5200 | 0.0085               | 1.6256               |
|                 |    | T (°C) | 20 | 5200.0050                    | 5200 | 0.0050               | 0.9647               |
|                 |    | T (°C) | 30 | 5200.0246                    | 5200 | 0.0246               | 4.7338               |
|                 |    | T (°C) | 40 | 5200.0180                    | 5200 | 0.0180               | 3.4538               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5240MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5240.0242                    | 5240 | 0.0242               | 4.6103               |
|                 |    | V max (V) | 13.2 | 5240.0375                    | 5240 | 0.0375               | 7.1500               |
|                 |    | V min (V) | 10.8 | 5240.0187                    | 5240 | 0.0187               | 3.5743               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5240MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5240.0435                    | 5240 | 0.0435               | 8.2976               |
|                 |    | T (°C) | 10 | 5240.0212                    | 5240 | 0.0212               | 4.0535               |
|                 |    | T (°C) | 20 | 5240.0101                    | 5240 | 0.0101               | 1.9230               |
|                 |    | T (°C) | 30 | 5240.0268                    | 5240 | 0.0268               | 5.1168               |
|                 |    | T (°C) | 40 | 5240.0320                    | 5240 | 0.0320               | 6.1028               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5260MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5260.0132                    | 5260 | 0.0132               | 2.5062               |
|                 |    | V max (V) | 13.2 | 5260.0083                    | 5260 | 0.0083               | 1.5834               |
|                 |    | V min (V) | 10.8 | 5260.0295                    | 5260 | 0.0295               | 5.6059               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5260MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5260.0522                    | 5260 | 0.0522               | 9.9299               |
|                 |    | T (°C) | 10 | 5260.0861                    | 5260 | 0.0861               | 16.3599              |
|                 |    | T (°C) | 20 | 5260.0166                    | 5260 | 0.0166               | 3.1601               |
|                 |    | T (°C) | 30 | 5260.0881                    | 5260 | 0.0881               | 16.7401              |
|                 |    | T (°C) | 40 | 5260.0107                    | 5260 | 0.0107               | 2.0303               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5280MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5280.0370                    | 5280 | 0.0370               | 7.0070               |
|                 |    | V max (V) | 13.2 | 5280.0220                    | 5280 | 0.0220               | 4.1596               |
|                 |    | V min (V) | 10.8 | 5280.0798                    | 5280 | 0.0798               | 15.1170              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5280MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5280.0837                    | 5280 | 0.0837               | 15.8513              |
|                 |    | T (°C) | 10 | 5280.0841                    | 5280 | 0.0841               | 15.9282              |
|                 |    | T (°C) | 20 | 5280.0008                    | 5280 | 0.0008               | 0.1468               |
|                 |    | T (°C) | 30 | 5280.0405                    | 5280 | 0.0405               | 7.6790               |
|                 |    | T (°C) | 40 | 5280.0770                    | 5280 | 0.0770               | 14.5926              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5320MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5320.0341                    | 5320 | 0.0341               | 6.4113               |
|                 |    | V max (V) | 13.2 | 5320.0303                    | 5320 | 0.0303               | 5.6900               |
|                 |    | V min (V) | 10.8 | 5320.0461                    | 5320 | 0.0461               | 8.6657               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5320MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5320.0586                    | 5320 | 0.0586               | 11.0127              |
|                 |    | T (°C) | 10 | 5320.0656                    | 5320 | 0.0656               | 12.3239              |
|                 |    | T (°C) | 20 | 5320.0591                    | 5320 | 0.0591               | 11.1165              |
|                 |    | T (°C) | 30 | 5320.0350                    | 5320 | 0.0350               | 6.5821               |
|                 |    | T (°C) | 40 | 5320.0209                    | 5320 | 0.0209               | 3.9272               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5500MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5550.0041                    | 5500 | 50.0041              | 9091.6471            |
|                 |    | V max (V) | 13.2 | 5550.0431                    | 5500 | 50.0431              | 9098.7411            |
|                 |    | V min (V) | 10.8 | 5550.0691                    | 5500 | 50.0691              | 9103.4667            |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5500MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5500.0290                    | 5500 | 0.0290               | 5.2797               |
|                 |    | T (°C) | 10 | 5500.0634                    | 5500 | 0.0634               | 11.5233              |
|                 |    | T (°C) | 20 | 5500.0042                    | 5500 | 0.0042               | 0.7588               |
|                 |    | T (°C) | 30 | 5500.0296                    | 5500 | 0.0296               | 5.3734               |
|                 |    | T (°C) | 40 | 5500.0258                    | 5500 | 0.0258               | 4.6887               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5580MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5580.0199                    | 5580 | 0.0199               | 3.5732               |
|                 |    | V max (V) | 13.2 | 5580.0475                    | 5580 | 0.0475               | 8.5196               |
|                 |    | V min (V) | 10.8 | 5580.0812                    | 5580 | 0.0812               | 14.5551              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5580MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5580.0547                    | 5580 | 0.0547               | 9.7954               |
|                 |    | T (°C) | 10 | 5580.0087                    | 5580 | 0.0087               | 1.5632               |
|                 |    | T (°C) | 20 | 5580.0488                    | 5580 | 0.0488               | 8.7478               |
|                 |    | T (°C) | 30 | 5580.0480                    | 5580 | 0.0480               | 8.5995               |
|                 |    | T (°C) | 40 | 5580.0540                    | 5580 | 0.0540               | 9.6739               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5700MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5700.0377                    | 5700 | 0.0377               | 6.6199               |
|                 |    | V max (V) | 13.2 | 5700.0082                    | 5700 | 0.0082               | 1.4439               |
|                 |    | V min (V) | 10.8 | 5700.0523                    | 5700 | 0.0523               | 9.1751               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5700MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5700.0001                    | 5700 | 0.0001               | 0.0239               |
|                 |    | T (°C) | 10 | 5700.0259                    | 5700 | 0.0259               | 4.5499               |
|                 |    | T (°C) | 20 | 5700.0214                    | 5700 | 0.0214               | 3.7530               |
|                 |    | T (°C) | 30 | 5700.0608                    | 5700 | 0.0608               | 10.6727              |
|                 |    | T (°C) | 40 | 5700.0098                    | 5700 | 0.0098               | 1.7195               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5745MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5745.0062                    | 5745 | 0.0062               | 1.0804               |
|                 |    | V max (V) | 13.2 | 5745.0183                    | 5745 | 0.0183               | 3.1935               |
|                 |    | V min (V) | 10.8 | 5745.0062                    | 5745 | 0.0062               | 1.0804               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5745MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5745.0024                    | 5745 | 0.0024               | 0.4260               |
|                 |    | T (°C) | 10 | 5745.0141                    | 5745 | 0.0141               | 2.4625               |
|                 |    | T (°C) | 20 | 5745.0371                    | 5745 | 0.0371               | 6.4500               |
|                 |    | T (°C) | 30 | 5745.0909                    | 5745 | 0.0909               | 15.8261              |
|                 |    | T (°C) | 40 | 5745.0705                    | 5745 | 0.0705               | 12.2663              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5785MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5785.0602                    | 5785 | 0.0602               | 10.4013              |
|                 |    | V max (V) | 13.2 | 5785.0271                    | 5785 | 0.0271               | 4.6800               |
|                 |    | V min (V) | 10.8 | 5785.0080                    | 5785 | 0.0080               | 1.3837               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5785MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5785.0924                    | 5785 | 0.0924               | 15.9776              |
|                 |    | T (°C) | 10 | 5785.0297                    | 5785 | 0.0297               | 5.1257               |
|                 |    | T (°C) | 20 | 5785.0543                    | 5785 | 0.0543               | 9.3917               |
|                 |    | T (°C) | 30 | 5785.0303                    | 5785 | 0.0303               | 5.2377               |
|                 |    | T (°C) | 40 | 5785.0067                    | 5785 | 0.0067               | 1.1500               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5825MHz |      |                            |                         |
|-----------------|----|-----------|------|------------------------------|------|----------------------------|-------------------------|
|                 |    |           |      | f                            | fc   | Max.<br>Deviation<br>(MHz) | Max. Deviation<br>(ppm) |
| T nom (°<br>C)  | 20 | V nom (V) | 12.0 | 5825.0098                    | 5825 | 0.0098                     | 1.6909                  |
|                 |    | V max (V) | 13.2 | 5825.0320                    | 5825 | 0.0320                     | 5.5009                  |
|                 |    | V min (V) | 10.8 | 5825.0792                    | 5825 | 0.0792                     | 13.5984                 |
| Limits          |    |           |      | ±20ppm                       |      |                            |                         |
| Result          |    |           |      | Complies                     |      |                            |                         |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5825MHz |      |                            |                         |
|-----------------|----|--------|----|------------------------------|------|----------------------------|-------------------------|
|                 |    |        |    | f                            | fc   | Max.<br>Deviation<br>(MHz) | Max. Deviation<br>(ppm) |
| V nom<br>(V)    | 12 | T (°C) | 0  | 5825.0140                    | 5825 | 0.0140                     | 2.3986                  |
|                 |    | T (°C) | 10 | 5825.0715                    | 5825 | 0.0715                     | 12.2720                 |
|                 |    | T (°C) | 20 | 5825.0153                    | 5825 | 0.0153                     | 2.6253                  |
|                 |    | T (°C) | 30 | 5825.0635                    | 5825 | 0.0635                     | 10.9078                 |
|                 |    | T (°C) | 40 | 5825.0248                    | 5825 | 0.0248                     | 4.2633                  |
| Limits          |    |        |    | ±20ppm                       |      |                            |                         |
| Result          |    |        |    | Complies                     |      |                            |                         |



ANT2:

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5180MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5180.0758                    | 5180 | 0.0758               | 14.6302              |
|                 |    | V max (V) | 13.2 | 5180.1190                    | 5180 | 0.1190               | 22.9684              |
|                 |    | V min (V) | 10.8 | 5180.0275                    | 5180 | 0.0275               | 5.3090               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5180MHz |      |                            |                         |
|-----------------|----|--------|----|------------------------------|------|----------------------------|-------------------------|
|                 |    |        |    | f                            | fc   | Max.<br>Deviation<br>(MHz) | Max. Deviation<br>(ppm) |
| V nom<br>(V)    | 12 | T (°C) | 0  | 5180.0498                    | 5180 | 0.0498                     | 9.6071                  |
|                 |    | T (°C) | 10 | 5180.0092                    | 5180 | 0.0092                     | 1.7707                  |
|                 |    | T (°C) | 20 | 5180.0316                    | 5180 | 0.0316                     | 6.0921                  |
|                 |    | T (°C) | 30 | 5180.0204                    | 5180 | 0.0204                     | 3.9363                  |
|                 |    | T (°C) | 40 | 5180.0474                    | 5180 | 0.0474                     | 9.1565                  |
| Limits          |    |        |    | ±20ppm                       |      |                            |                         |
| Result          |    |        |    | Complies                     |      |                            |                         |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5200MHz |      |                            |                         |
|-----------------|----|-----------|------|------------------------------|------|----------------------------|-------------------------|
|                 |    |           |      | f                            | fc   | Max.<br>Deviation<br>(MHz) | Max. Deviation<br>(ppm) |
| T nom (°<br>C)  | 20 | V nom (V) | 12.0 | 5200.0046                    | 5200 | 0.0046                     | 0.8903                  |
|                 |    | V max (V) | 13.2 | 5200.0449                    | 5200 | 0.0449                     | 8.6258                  |
|                 |    | V min (V) | 10.8 | 5200.0235                    | 5200 | 0.0235                     | 4.5165                  |
| Limits          |    |           |      | ±20ppm                       |      |                            |                         |
| Result          |    |           |      | Complies                     |      |                            |                         |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5200MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5200.0289                    | 5200 | 0.0289               | 5.5652               |
|                 |    | T (°C) | 10 | 5200.0069                    | 5200 | 0.0069               | 1.3364               |
|                 |    | T (°C) | 20 | 5200.0233                    | 5200 | 0.0233               | 4.4719               |
|                 |    | T (°C) | 30 | 5200.0164                    | 5200 | 0.0164               | 3.1531               |
|                 |    | T (°C) | 40 | 5200.0344                    | 5200 | 0.0344               | 6.6149               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5240MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5240.0190                    | 5240 | 0.0190               | 3.6241               |
|                 |    | V max (V) | 13.2 | 5240.0273                    | 5240 | 0.0273               | 5.2189               |
|                 |    | V min (V) | 10.8 | 5240.0292                    | 5240 | 0.0292               | 5.5676               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5240MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5240.0026                    | 5240 | 0.0026               | 0.5016               |
|                 |    | T (°C) | 10 | 5240.0141                    | 5240 | 0.0141               | 2.6966               |
|                 |    | T (°C) | 20 | 5240.0169                    | 5240 | 0.0169               | 3.2236               |
|                 |    | T (°C) | 30 | 5240.0196                    | 5240 | 0.0196               | 3.7373               |
|                 |    | T (°C) | 40 | 5240.0311                    | 5240 | 0.0311               | 5.9274               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5260MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5260.0402                    | 5260 | 0.0402               | 7.6394               |
|                 |    | V max (V) | 13.2 | 5260.0492                    | 5260 | 0.0492               | 9.3562               |
|                 |    | V min (V) | 10.8 | 5260.0510                    | 5260 | 0.0510               | 9.6881               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5260MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5260.0297                    | 5260 | 0.0297               | 5.6541               |
|                 |    | T (°C) | 10 | 5260.0120                    | 5260 | 0.0120               | 2.2761               |
|                 |    | T (°C) | 20 | 5260.0877                    | 5260 | 0.0877               | 16.6706              |
|                 |    | T (°C) | 30 | 5260.0934                    | 5260 | 0.0934               | 17.7505              |
|                 |    | T (°C) | 40 | 5260.0726                    | 5260 | 0.0726               | 13.7953              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5280MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5280.0202                    | 5280 | 0.0202               | 3.8242               |
|                 |    | V max (V) | 13.2 | 5280.0107                    | 5280 | 0.0107               | 2.0343               |
|                 |    | V min (V) | 10.8 | 5280.0725                    | 5280 | 0.0725               | 13.7260              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5280MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5280.0606                    | 5280 | 0.0606               | 11.4770              |
|                 |    | T (°C) | 10 | 5280.0613                    | 5280 | 0.0613               | 11.6170              |
|                 |    | T (°C) | 20 | 5280.0822                    | 5280 | 0.0822               | 15.5601              |
|                 |    | T (°C) | 30 | 5280.0617                    | 5280 | 0.0617               | 11.6947              |
|                 |    | T (°C) | 40 | 5280.0667                    | 5280 | 0.0667               | 12.6261              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5320MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5320.0470                    | 5320 | 0.0470               | 8.8278               |
|                 |    | V max (V) | 13.2 | 5320.0833                    | 5320 | 0.0833               | 15.6572              |
|                 |    | V min (V) | 10.8 | 5320.0481                    | 5320 | 0.0481               | 9.0323               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5320MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5320.0182                    | 5320 | 0.0182               | 3.4280               |
|                 |    | T (°C) | 10 | 5320.0595                    | 5320 | 0.0595               | 11.1749              |
|                 |    | T (°C) | 20 | 5320.0258                    | 5320 | 0.0258               | 4.8573               |
|                 |    | T (°C) | 30 | 5320.0061                    | 5320 | 0.0061               | 1.1416               |
|                 |    | T (°C) | 40 | 5320.0518                    | 5320 | 0.0518               | 9.7404               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5500MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5550.0289                    | 5500 | 50.0289              | 9096.1709            |
|                 |    | V max (V) | 13.2 | 5550.0133                    | 5500 | 50.0133              | 9093.3220            |
|                 |    | V min (V) | 10.8 | 5550.0525                    | 5500 | 50.0525              | 9100.4577            |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5500MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5500.0799                    | 5500 | 0.0799               | 14.5206              |
|                 |    | T (°C) | 10 | 5500.0245                    | 5500 | 0.0245               | 4.4579               |
|                 |    | T (°C) | 20 | 5500.0838                    | 5500 | 0.0838               | 15.2369              |
|                 |    | T (°C) | 30 | 5500.0049                    | 5500 | 0.0049               | 0.8927               |
|                 |    | T (°C) | 40 | 5500.0750                    | 5500 | 0.0750               | 13.6293              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5580MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5580.0602                    | 5580 | 0.0602               | 10.7877              |
|                 |    | V max (V) | 13.2 | 5580.0809                    | 5580 | 0.0809               | 14.4921              |
|                 |    | V min (V) | 10.8 | 5580.0629                    | 5580 | 0.0629               | 11.2801              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5580MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5580.0320                    | 5580 | 0.0320               | 5.7400               |
|                 |    | T (°C) | 10 | 5580.0168                    | 5580 | 0.0168               | 3.0171               |
|                 |    | T (°C) | 20 | 5580.0844                    | 5580 | 0.0844               | 15.1218              |
|                 |    | T (°C) | 30 | 5580.0259                    | 5580 | 0.0259               | 4.6421               |
|                 |    | T (°C) | 40 | 5580.0830                    | 5580 | 0.0830               | 14.8702              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5700MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5700.0469                    | 5700 | 0.0469               | 8.2241               |
|                 |    | V max (V) | 13.2 | 5700.0602                    | 5700 | 0.0602               | 10.5540              |
|                 |    | V min (V) | 10.8 | 5700.0606                    | 5700 | 0.0606               | 10.6333              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5700MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5700.0267                    | 5700 | 0.0267               | 4.6808               |
|                 |    | T (°C) | 10 | 5700.0490                    | 5700 | 0.0490               | 8.5900               |
|                 |    | T (°C) | 20 | 5700.0769                    | 5700 | 0.0769               | 13.4889              |
|                 |    | T (°C) | 30 | 5700.0194                    | 5700 | 0.0194               | 3.4067               |
|                 |    | T (°C) | 40 | 5700.0428                    | 5700 | 0.0428               | 7.5106               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5745MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5745.0004                    | 5745 | 0.0004               | 0.0646               |
|                 |    | V max (V) | 13.2 | 5745.0228                    | 5745 | 0.0228               | 3.9613               |
|                 |    | V min (V) | 10.8 | 5745.0004                    | 5745 | 0.0004               | 0.0646               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5745MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5745.0651                    | 5745 | 0.0651               | 11.3237              |
|                 |    | T (°C) | 10 | 5745.0069                    | 5745 | 0.0069               | 1.2084               |
|                 |    | T (°C) | 20 | 5745.0098                    | 5745 | 0.0098               | 1.7022               |
|                 |    | T (°C) | 30 | 5745.0652                    | 5745 | 0.0652               | 11.3513              |
|                 |    | T (°C) | 40 | 5745.0604                    | 5745 | 0.0604               | 10.5212              |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |



## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5785MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5785.0366                    | 5785 | 0.0366               | 6.3239               |
|                 |    | V max (V) | 13.2 | 5785.0861                    | 5785 | 0.0861               | 14.8776              |
|                 |    | V min (V) | 10.8 | 5785.0110                    | 5785 | 0.0110               | 1.9094               |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5785MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5785.0907                    | 5785 | 0.0907               | 15.6828              |
|                 |    | T (°C) | 10 | 5785.0906                    | 5785 | 0.0906               | 15.6537              |
|                 |    | T (°C) | 20 | 5785.0077                    | 5785 | 0.0077               | 1.3324               |
|                 |    | T (°C) | 30 | 5785.0616                    | 5785 | 0.0616               | 10.6446              |
|                 |    | T (°C) | 40 | 5785.0071                    | 5785 | 0.0071               | 1.2313               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

## Voltage vs. Frequency Stability

| TEST CONDITIONS |    |           |      | Reference Frequency: 5825MHz |      |                      |                      |
|-----------------|----|-----------|------|------------------------------|------|----------------------|----------------------|
|                 |    |           |      | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| T nom (°C)      | 20 | V nom (V) | 12.0 | 5825.0752                    | 5825 | 0.0752               | 12.9108              |
|                 |    | V max (V) | 13.2 | 5825.0427                    | 5825 | 0.0427               | 7.3293               |
|                 |    | V min (V) | 10.8 | 5825.0664                    | 5825 | 0.0664               | 11.4067              |
| Limits          |    |           |      | ±20ppm                       |      |                      |                      |
| Result          |    |           |      | Complies                     |      |                      |                      |

## Temperature vs. Frequency Stability

| TEST CONDITIONS |    |        |    | Reference Frequency: 5825MHz |      |                      |                      |
|-----------------|----|--------|----|------------------------------|------|----------------------|----------------------|
|                 |    |        |    | f                            | fc   | Max. Deviation (MHz) | Max. Deviation (ppm) |
| V nom (V)       | 12 | T (°C) | 0  | 5825.0085                    | 5825 | 0.0085               | 1.4633               |
|                 |    | T (°C) | 10 | 5825.0319                    | 5825 | 0.0319               | 5.4780               |
|                 |    | T (°C) | 20 | 5825.0734                    | 5825 | 0.0734               | 12.6048              |
|                 |    | T (°C) | 30 | 5825.0570                    | 5825 | 0.0570               | 9.7885               |
|                 |    | T (°C) | 40 | 5825.0339                    | 5825 | 0.0339               | 5.8151               |
| Limits          |    |        |    | ±20ppm                       |      |                      |                      |
| Result          |    |        |    | Complies                     |      |                      |                      |

### 13. OPERATION IN THE ABSENCE OF INFORMATION TO THE TRANSMIT

#### 13.1 Requirement

##### 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 signal ling 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.

#### 13.2 Test Results

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 )



#### 14. 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.

##### 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

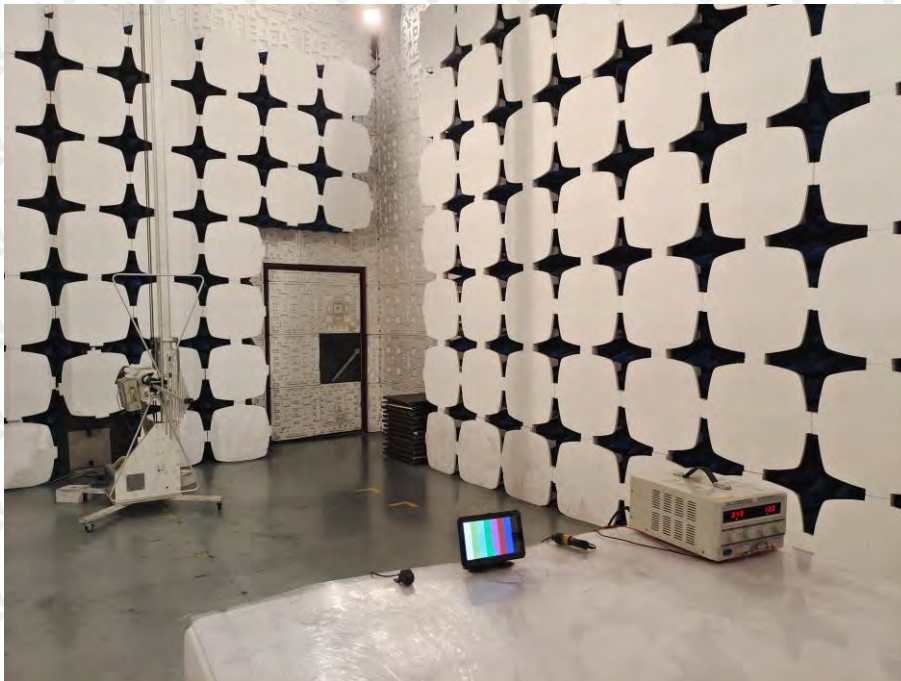
##### EUT Antenna:

The antenna is FPC antenna and no consideration of replacement. The best case gain of the antenna is WiFi (5.2G): 4.28dBi, WiFi (5.3G): 4.28dBi, WiFi (5.6G): 4.01dBi, WiFi (5.8G): 3.96dBi.

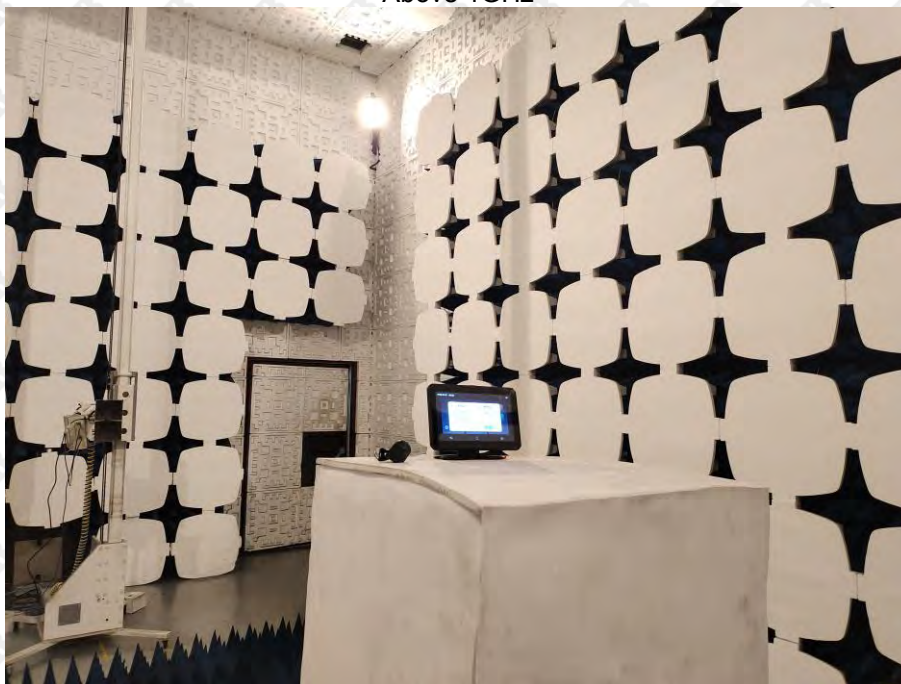
## 15. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz



Above 1GHz



\*\*\*\*\* END OF REPORT \*\*\*\*\*