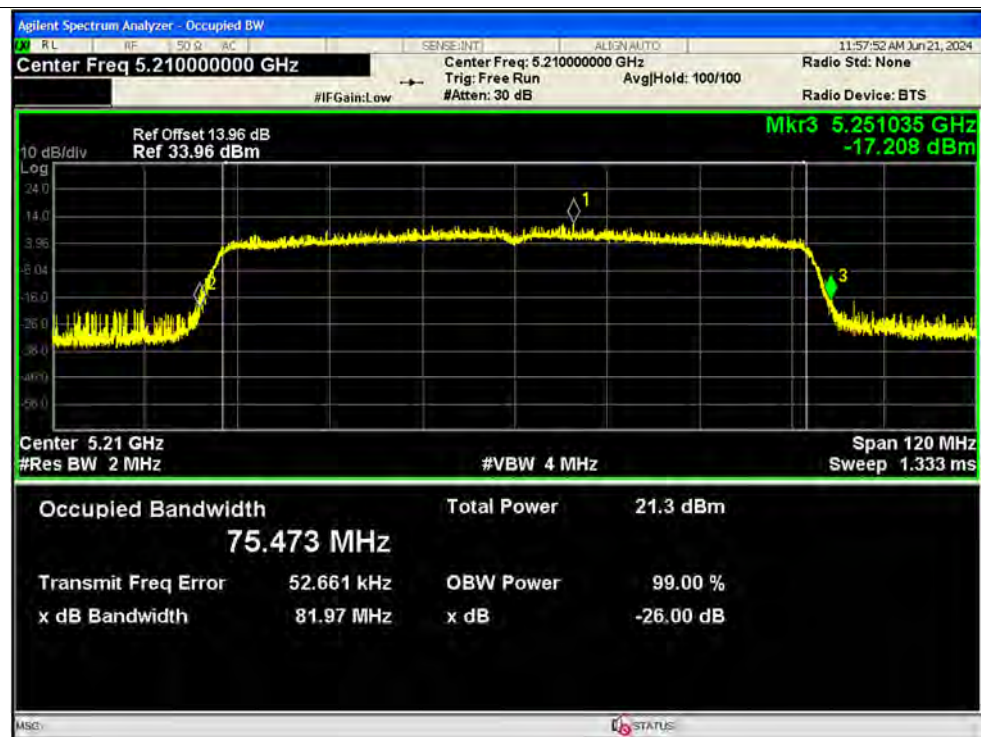




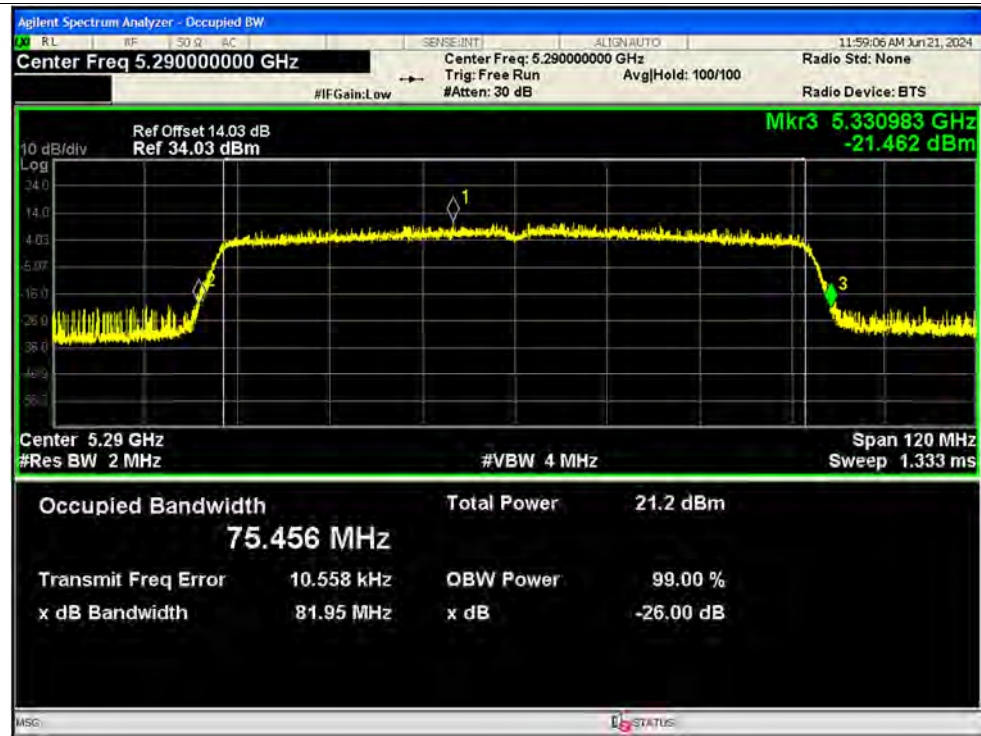
## -26dB Bandwidth NVNT ac40 5710MHz Ant1



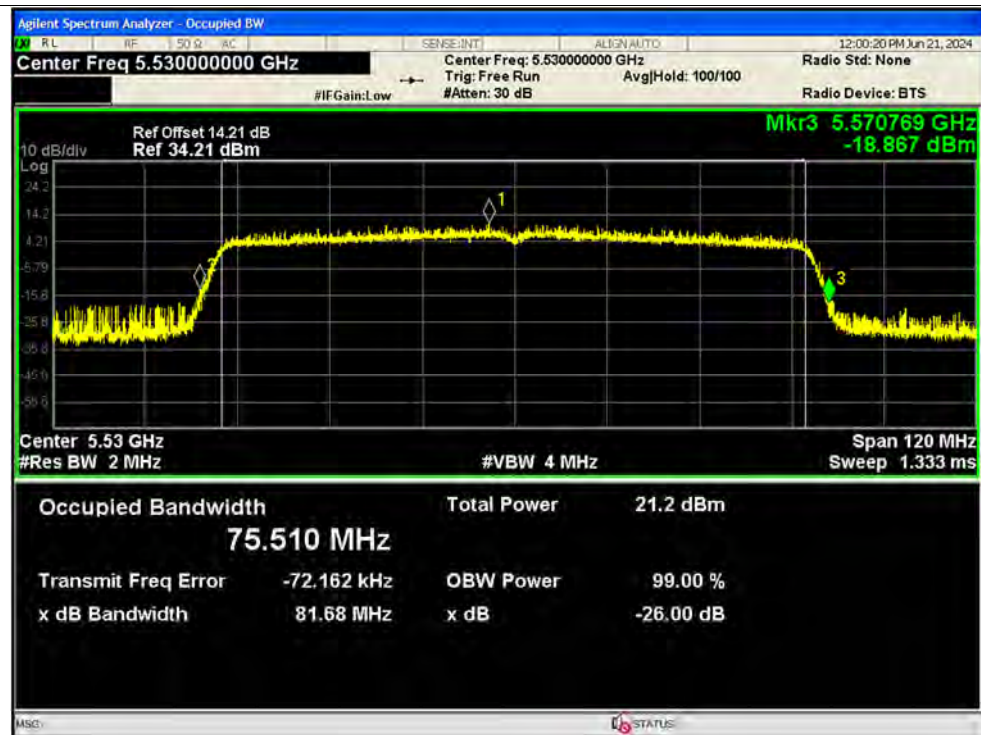
## -26dB Bandwidth NVNT ac80 5210MHz Ant1



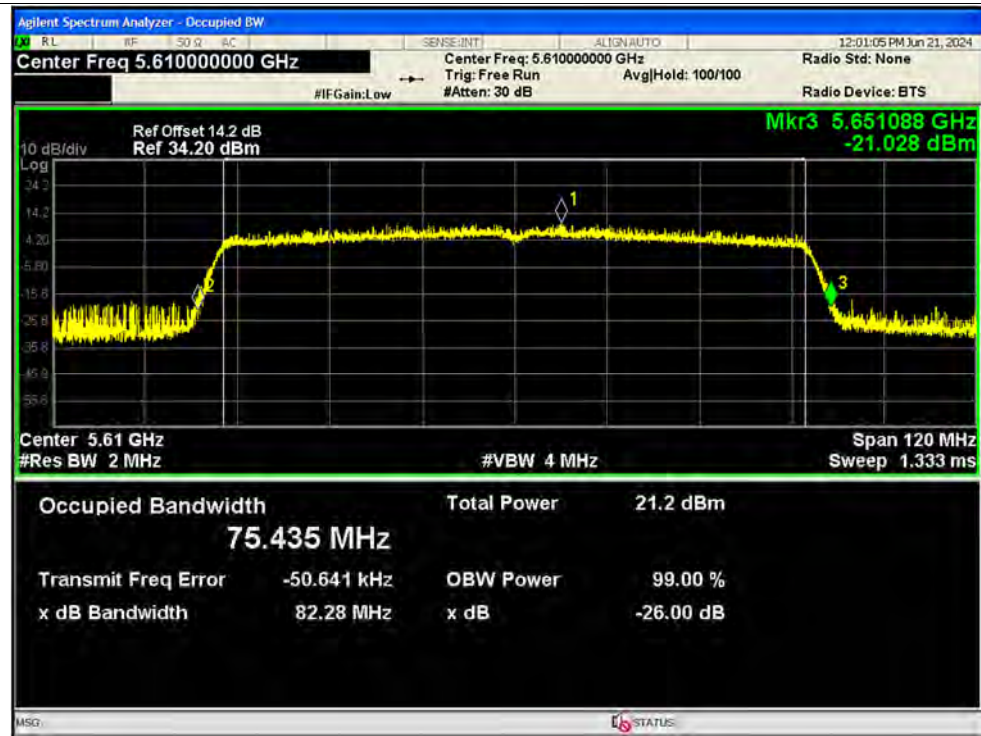
## -26dB Bandwidth NVNT ac80 5290MHz Ant1



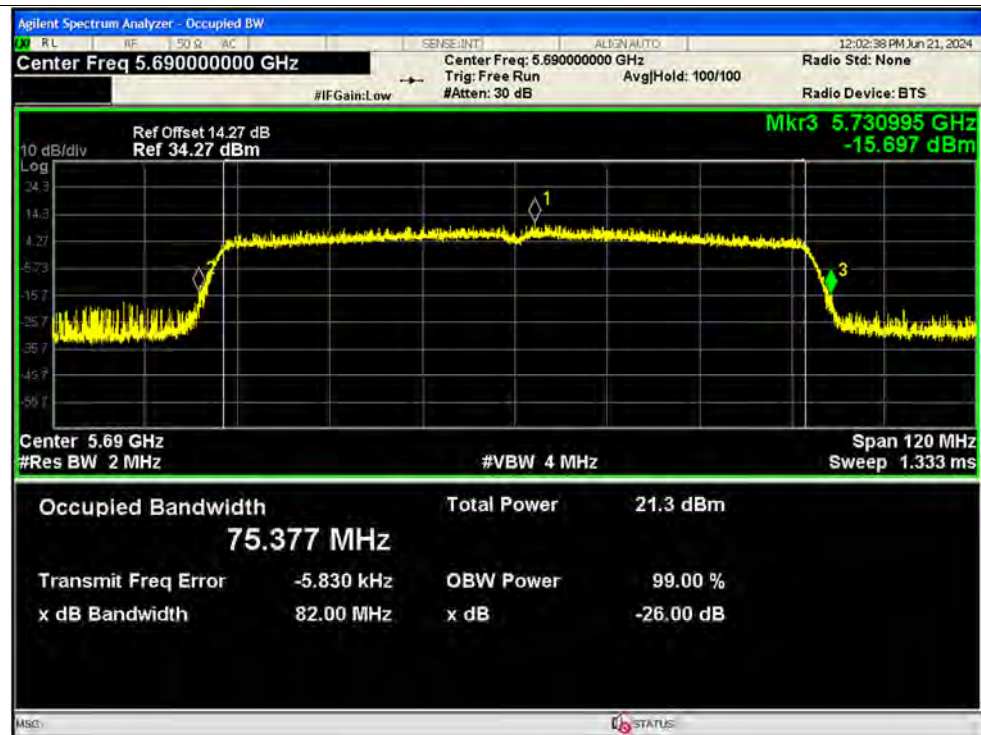
## -26dB Bandwidth NVNT ac80 5530MHz Ant1



## -26dB Bandwidth NVNT ac80 5610MHz Ant1



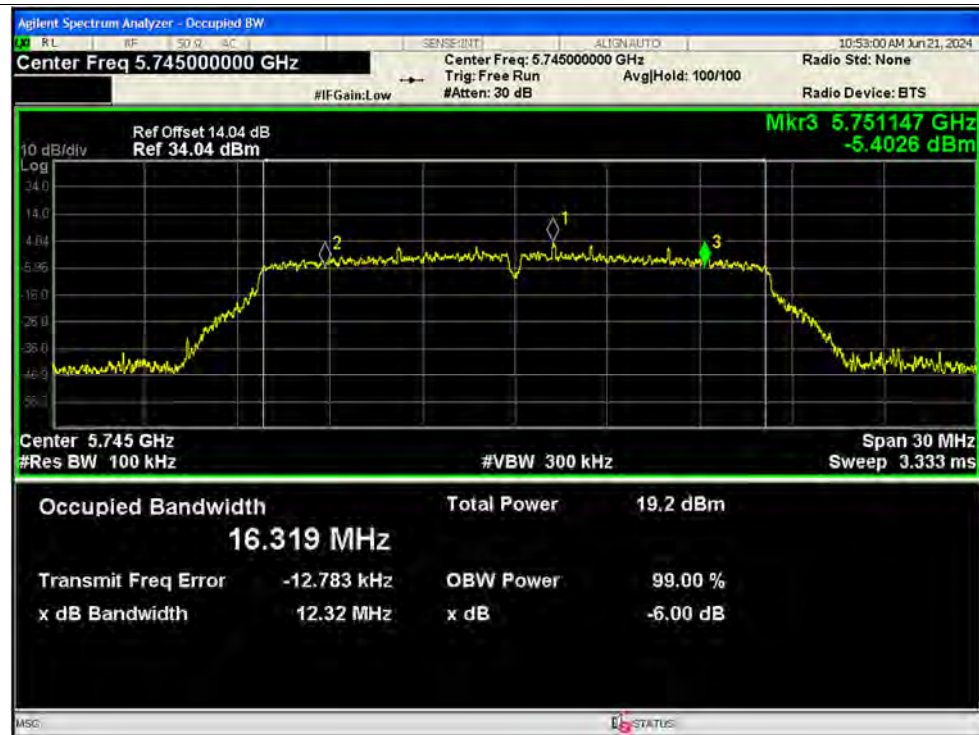
## -26dB Bandwidth NVNT ac80 5690MHz Ant1





## Test Graphs

## -6dB Bandwidth NVNT a 5745MHz Ant1



## -6dB Bandwidth NVNT a 5785MHz Ant1



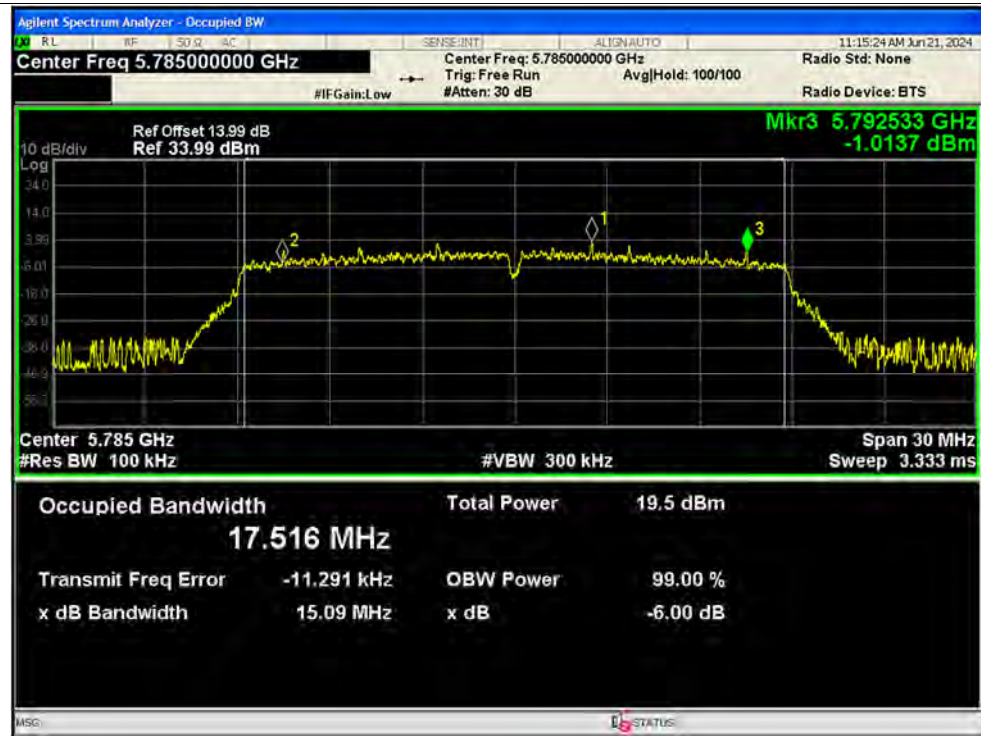
## -6dB Bandwidth NVNT a 5825MHz Ant1



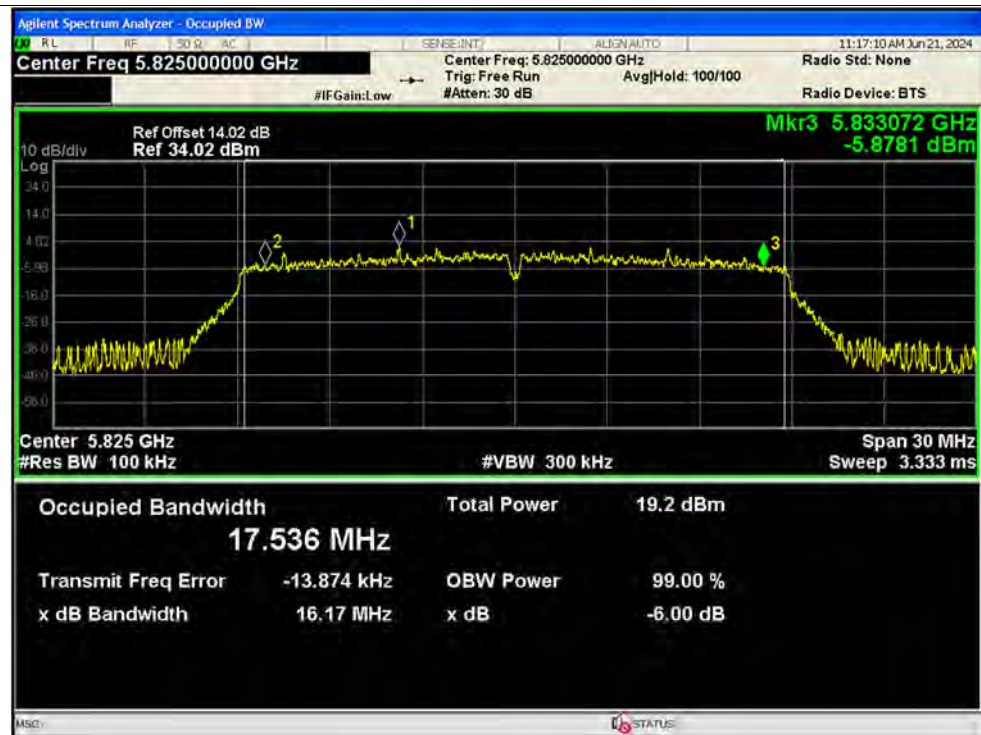
## -6dB Bandwidth NVNT n20 5745MHz Ant1



## -6dB Bandwidth NVNT n20 5785MHz Ant1

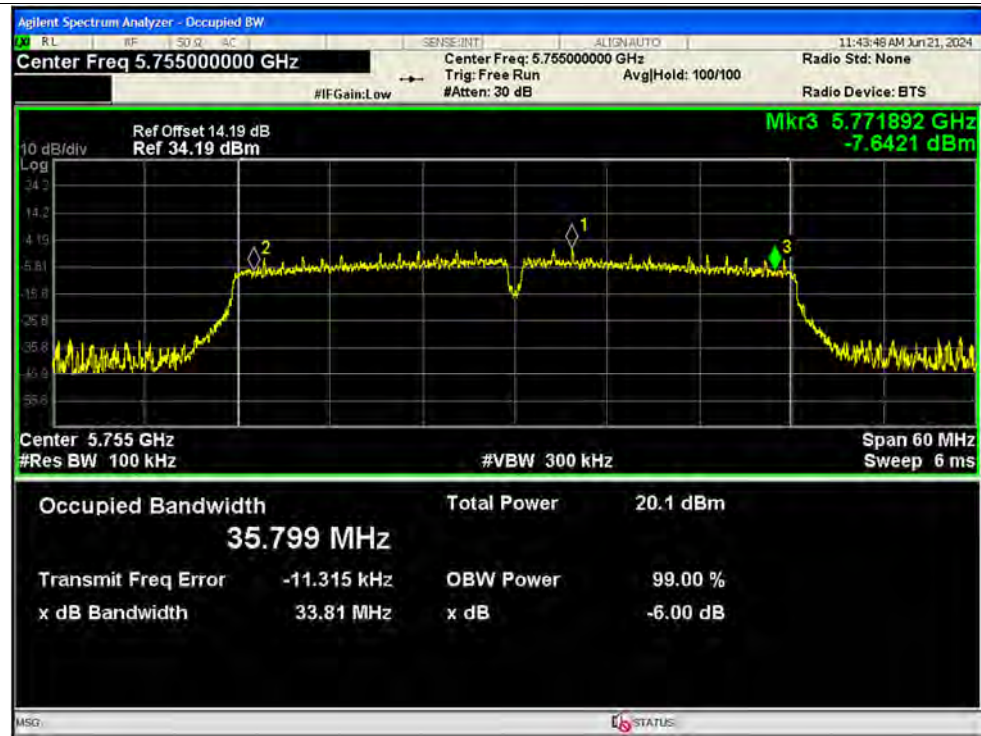


## -6dB Bandwidth NVNT n20 5825MHz Ant1

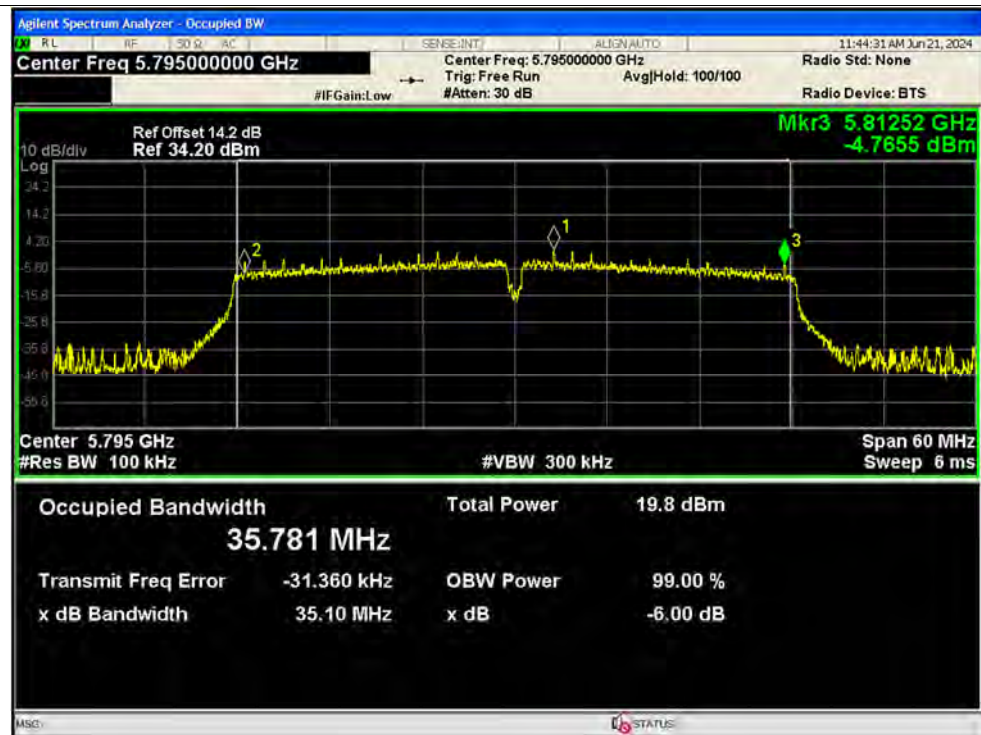




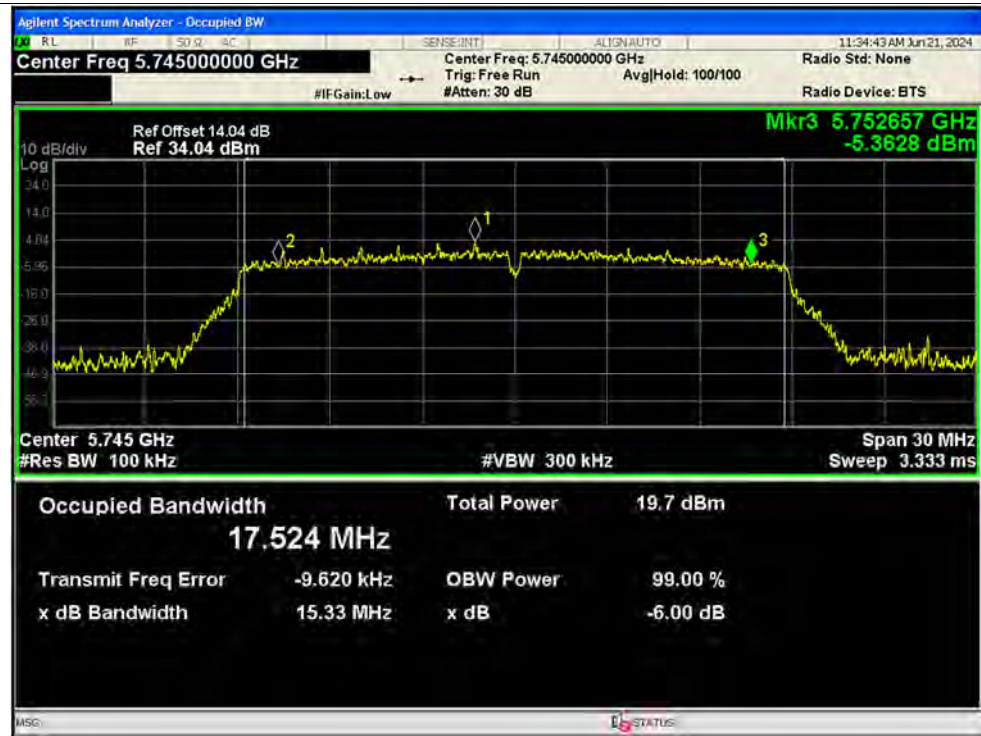
## -6dB Bandwidth NVNT n40 5755MHz Ant1



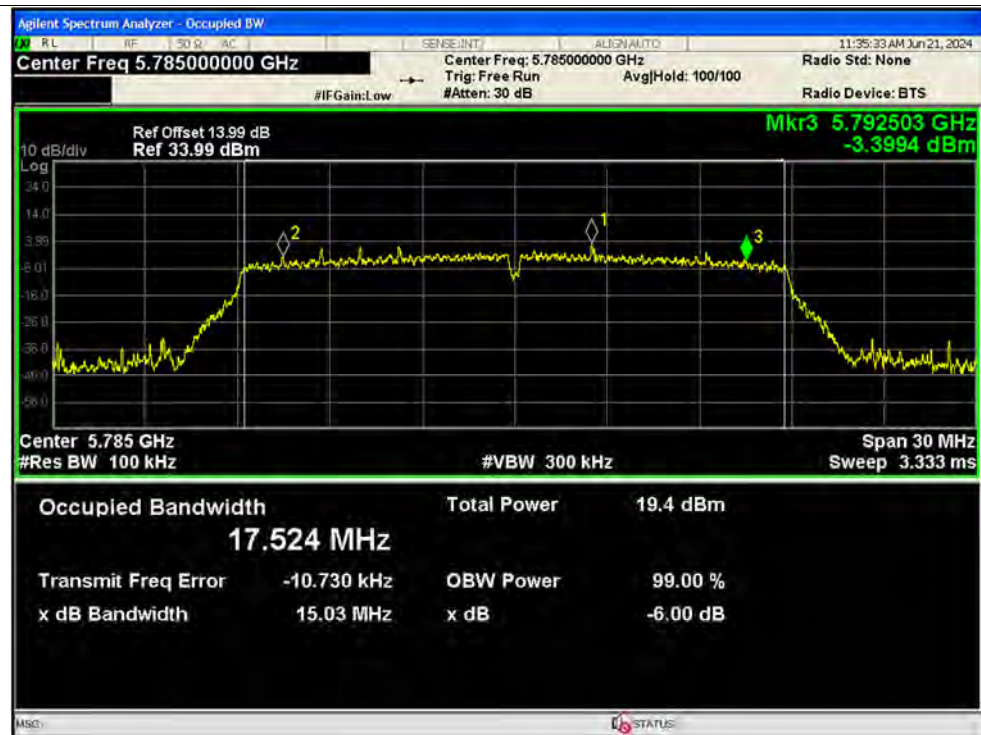
## -6dB Bandwidth NVNT n40 5795MHz Ant1



## -6dB Bandwidth NVNT ac20 5745MHz Ant1



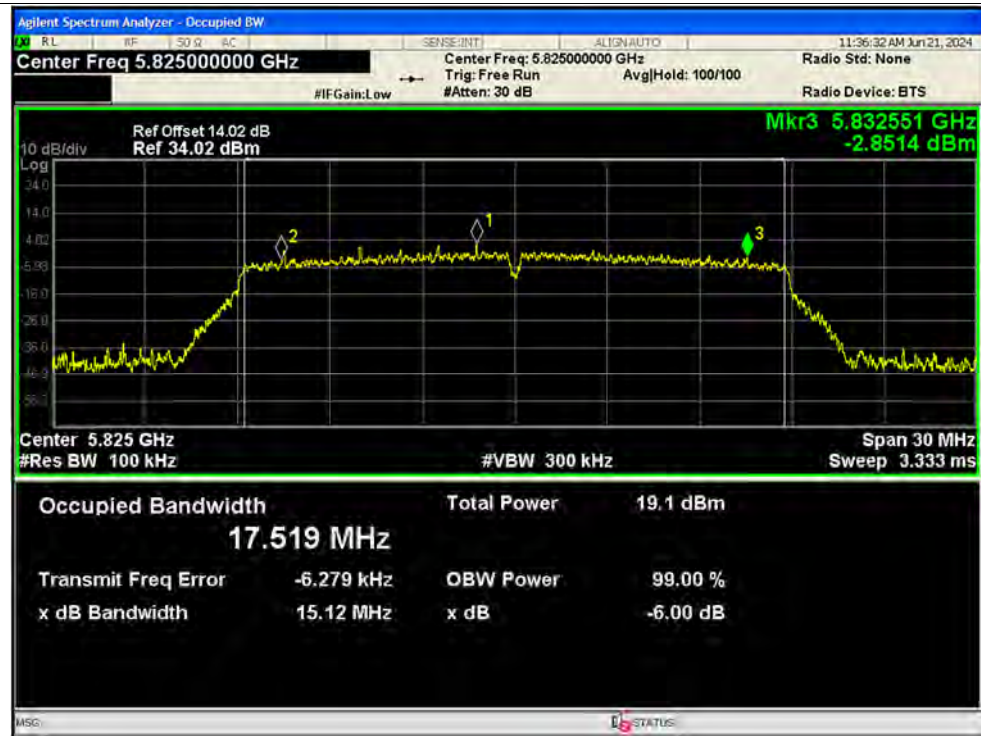
## -6dB Bandwidth NVNT ac20 5785MHz Ant1



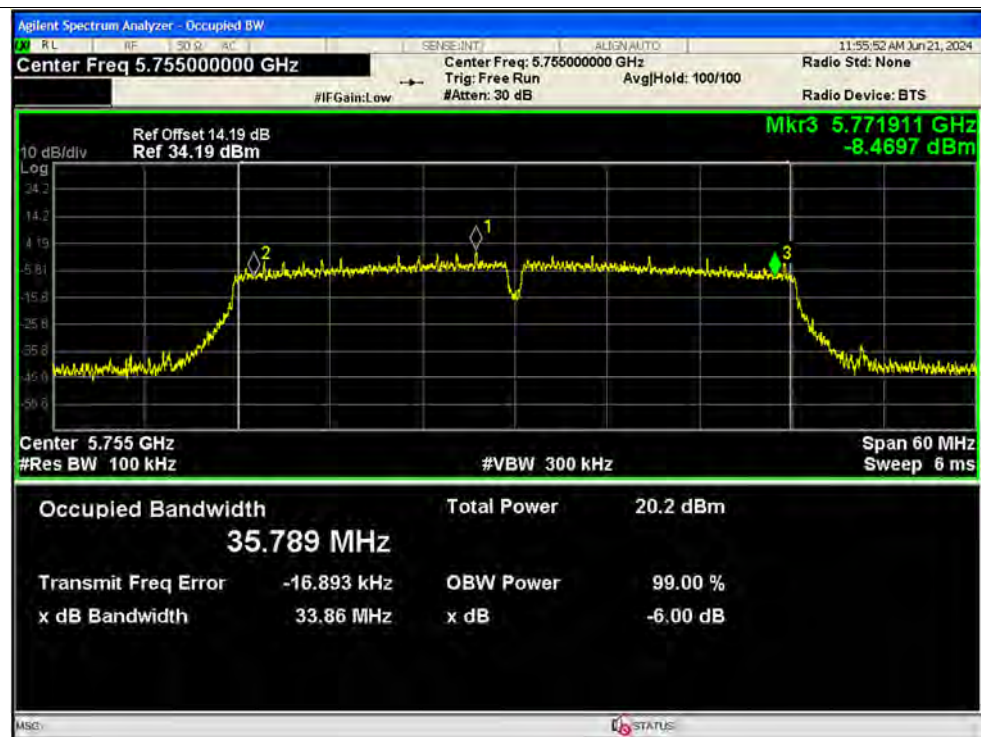




## -6dB Bandwidth NVNT ac20 5825MHz Ant1

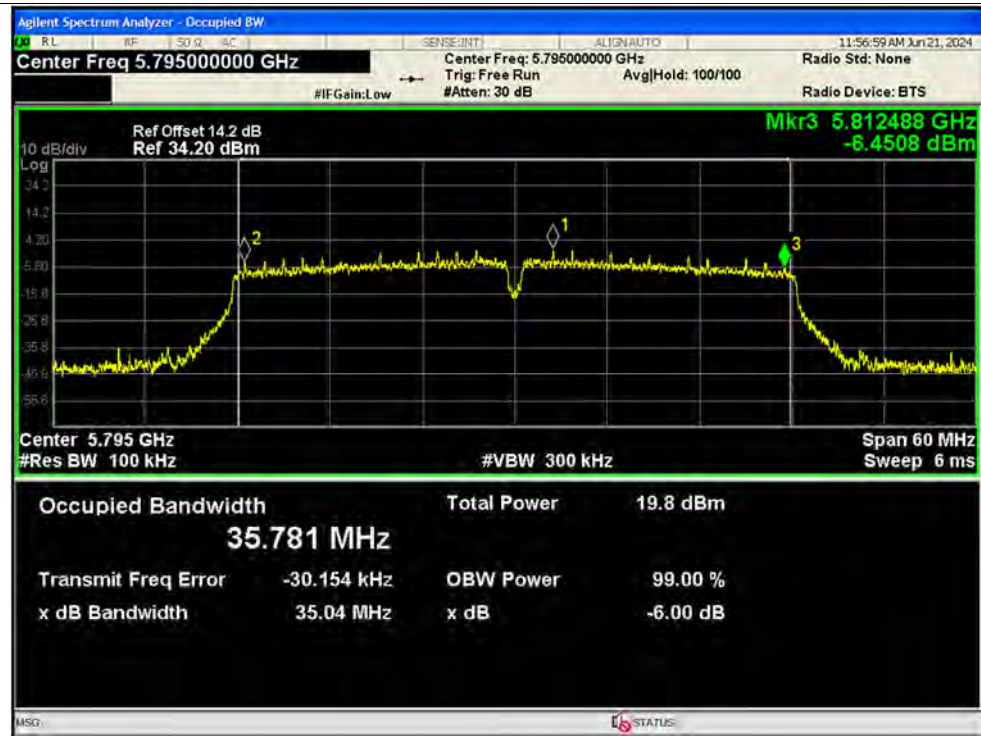


## -6dB Bandwidth NVNT ac40 5755MHz Ant1

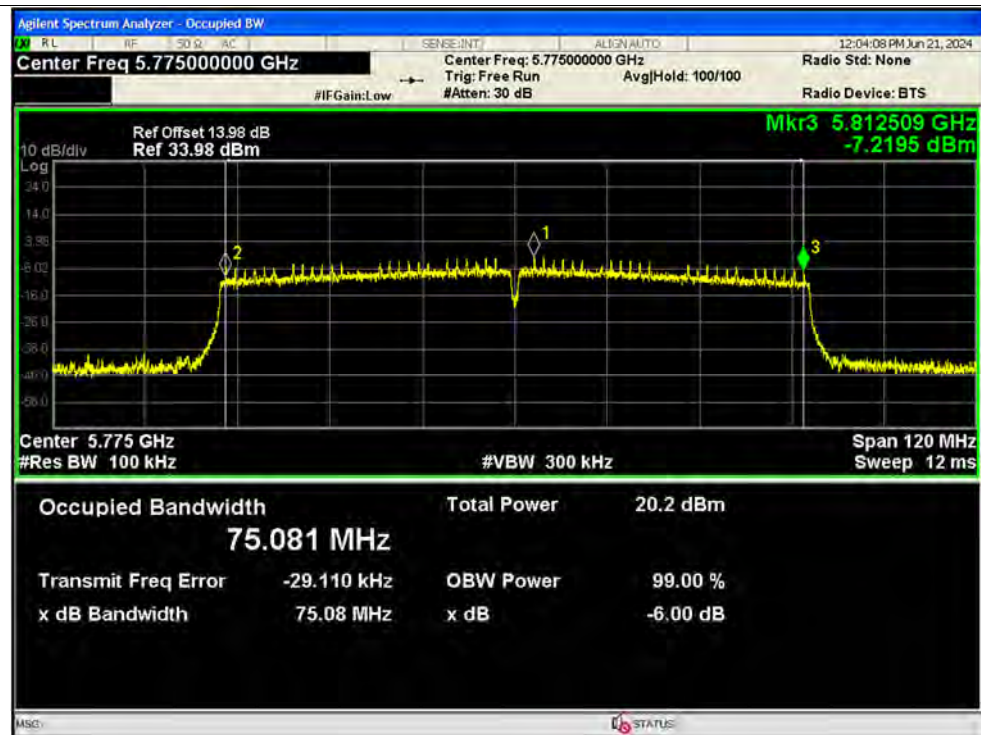




## -6dB Bandwidth NVNT ac40 5795MHz Ant1



## -6dB Bandwidth NVNT ac80 5775MHz Ant1



**A.4. Peak Power Spectral Density**

| Condition | Mode | Frequency (MHz) | Antenna | Conducted PSD (dBm) | Duty Factor (dB) | Total PSD (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|---------------------|------------------|-----------------|-------------|---------|
| NVNT      | a    | 5180            | Ant1    | 3.82                | 0.12             | 3.94            | 11          | Pass    |
| NVNT      | a    | 5220            | Ant1    | 4.07                | 0.15             | 4.22            | 11          | Pass    |
| NVNT      | a    | 5240            | Ant1    | 4.13                | 0.12             | 4.25            | 11          | Pass    |
| NVNT      | a    | 5260            | Ant1    | 3.61                | 0.12             | 3.73            | 11          | Pass    |
| NVNT      | a    | 5300            | Ant1    | 4.03                | 0.12             | 4.15            | 11          | Pass    |
| NVNT      | a    | 5320            | Ant1    | 4.2                 | 0.15             | 4.35            | 11          | Pass    |
| NVNT      | a    | 5500            | Ant1    | 3.55                | 0.15             | 3.7             | 11          | Pass    |
| NVNT      | a    | 5600            | Ant1    | 4.1                 | 0.15             | 4.25            | 11          | Pass    |
| NVNT      | a    | 5720            | Ant1    | 3.73                | 0.12             | 3.85            | 11          | Pass    |
| NVNT      | a    | 5745            | Ant1    | 0.23                | 0.12             | 0.35            | 30          | Pass    |
| NVNT      | a    | 5785            | Ant1    | 0.69                | 0.12             | 0.81            | 30          | Pass    |
| NVNT      | a    | 5825            | Ant1    | 0.65                | 0.15             | 0.8             | 30          | Pass    |
| NVNT      | n20  | 5180            | Ant1    | 3.43                | 0.13             | 3.56            | 11          | Pass    |
| NVNT      | n20  | 5220            | Ant1    | 3.47                | 0.16             | 3.63            | 11          | Pass    |
| NVNT      | n20  | 5240            | Ant1    | 3.4                 | 0.16             | 3.56            | 11          | Pass    |
| NVNT      | n20  | 5260            | Ant1    | 3.46                | 0.13             | 3.59            | 11          | Pass    |
| NVNT      | n20  | 5300            | Ant1    | 3.69                | 0.16             | 3.85            | 11          | Pass    |
| NVNT      | n20  | 5320            | Ant1    | 3.67                | 0.13             | 3.8             | 11          | Pass    |
| NVNT      | n20  | 5500            | Ant1    | 3.82                | 0.16             | 3.98            | 11          | Pass    |
| NVNT      | n20  | 5600            | Ant1    | 3.62                | 0.16             | 3.78            | 11          | Pass    |
| NVNT      | n20  | 5720            | Ant1    | 3.45                | 0.13             | 3.58            | 11          | Pass    |
| NVNT      | n20  | 5745            | Ant1    | 0.68                | 0.13             | 0.81            | 30          | Pass    |
| NVNT      | n20  | 5785            | Ant1    | 0.28                | 0.13             | 0.41            | 30          | Pass    |
| NVNT      | n20  | 5825            | Ant1    | 0.13                | 0.13             | 0.26            | 30          | Pass    |
| NVNT      | n40  | 5190            | Ant1    | 0.57                | 0.33             | 0.9             | 11          | Pass    |
| NVNT      | n40  | 5230            | Ant1    | 0.69                | 0.26             | 0.95            | 11          | Pass    |
| NVNT      | n40  | 5270            | Ant1    | 0.68                | 0.33             | 1.01            | 11          | Pass    |
| NVNT      | n40  | 5310            | Ant1    | 0.45                | 0.32             | 0.77            | 11          | Pass    |
| NVNT      | n40  | 5510            | Ant1    | 0.63                | 0.26             | 0.89            | 11          | Pass    |
| NVNT      | n40  | 5630            | Ant1    | 0.43                | 0.33             | 0.76            | 11          | Pass    |
| NVNT      | n40  | 5710            | Ant1    | 0.32                | 0.33             | 0.65            | 11          | Pass    |
| NVNT      | n40  | 5755            | Ant1    | -2.34               | 0.26             | -2.08           | 30          | Pass    |
| NVNT      | n40  | 5795            | Ant1    | -2.45               | 0.26             | -2.19           | 30          | Pass    |
| NVNT      | ac20 | 5180            | Ant1    | 3.63                | 0.13             | 3.76            | 11          | Pass    |





|      |      |      |      |       |      |       |    |      |
|------|------|------|------|-------|------|-------|----|------|
| NVNT | ac20 | 5220 | Ant1 | 3.46  | 0.13 | 3.59  | 11 | Pass |
| NVNT | ac20 | 5240 | Ant1 | 3.63  | 0.13 | 3.76  | 11 | Pass |
| NVNT | ac20 | 5260 | Ant1 | 3.6   | 0.13 | 3.73  | 11 | Pass |
| NVNT | ac20 | 5300 | Ant1 | 3.58  | 0.13 | 3.71  | 11 | Pass |
| NVNT | ac20 | 5320 | Ant1 | 3.65  | 0.13 | 3.78  | 11 | Pass |
| NVNT | ac20 | 5500 | Ant1 | 3.96  | 0.16 | 4.12  | 11 | Pass |
| NVNT | ac20 | 5600 | Ant1 | 3.48  | 0.16 | 3.64  | 11 | Pass |
| NVNT | ac20 | 5720 | Ant1 | 3.33  | 0.13 | 3.46  | 11 | Pass |
| NVNT | ac20 | 5745 | Ant1 | 0.34  | 0.13 | 0.47  | 30 | Pass |
| NVNT | ac20 | 5785 | Ant1 | 0.32  | 0.16 | 0.48  | 30 | Pass |
| NVNT | ac20 | 5825 | Ant1 | 0.1   | 0.13 | 0.23  | 30 | Pass |
| NVNT | ac40 | 5190 | Ant1 | 0.42  | 0.26 | 0.68  | 11 | Pass |
| NVNT | ac40 | 5230 | Ant1 | 0.63  | 0.32 | 0.95  | 11 | Pass |
| NVNT | ac40 | 5270 | Ant1 | 0.52  | 0.32 | 0.84  | 11 | Pass |
| NVNT | ac40 | 5310 | Ant1 | 0.41  | 0.32 | 0.73  | 11 | Pass |
| NVNT | ac40 | 5510 | Ant1 | 0.64  | 0.26 | 0.9   | 11 | Pass |
| NVNT | ac40 | 5630 | Ant1 | 0.48  | 0.32 | 0.8   | 11 | Pass |
| NVNT | ac40 | 5710 | Ant1 | 0.4   | 0.26 | 0.66  | 11 | Pass |
| NVNT | ac40 | 5755 | Ant1 | -2.15 | 0.26 | -1.89 | 30 | Pass |
| NVNT | ac40 | 5795 | Ant1 | -2.36 | 0.32 | -2.04 | 30 | Pass |
| NVNT | ac80 | 5210 | Ant1 | -2.54 | 0.63 | -1.91 | 11 | Pass |
| NVNT | ac80 | 5290 | Ant1 | -2.52 | 0.5  | -2.02 | 11 | Pass |
| NVNT | ac80 | 5530 | Ant1 | -2.45 | 0.5  | -1.95 | 11 | Pass |
| NVNT | ac80 | 5610 | Ant1 | -2.5  | 0.5  | -2    | 11 | Pass |
| NVNT | ac80 | 5690 | Ant1 | -2.34 | 0.51 | -1.83 | 11 | Pass |
| NVNT | ac80 | 5775 | Ant1 | -5.53 | 0.51 | -5.02 | 30 | Pass |

## Test Graphs

## PSD NVNT a 5180MHz Ant1



## PSD NVNT a 5220MHz Ant1



PSD NVNT a 5240MHz Ant1



PSD NVNT a 5260MHz Ant1





PSD NVNT a 5300MHz Ant1



PSD NVNT a 5320MHz Ant1



PSD NVNT a 5500MHz Ant1



PSD NVNT a 5600MHz Ant1



PSD NVNT a 5720MHz Ant1



PSD NVNT a 5745MHz Ant1





PSD NVNT a 5785MHz Ant1



PSD NVNT a 5825MHz Ant1





PSD NVNT n20 5180MHz Ant1

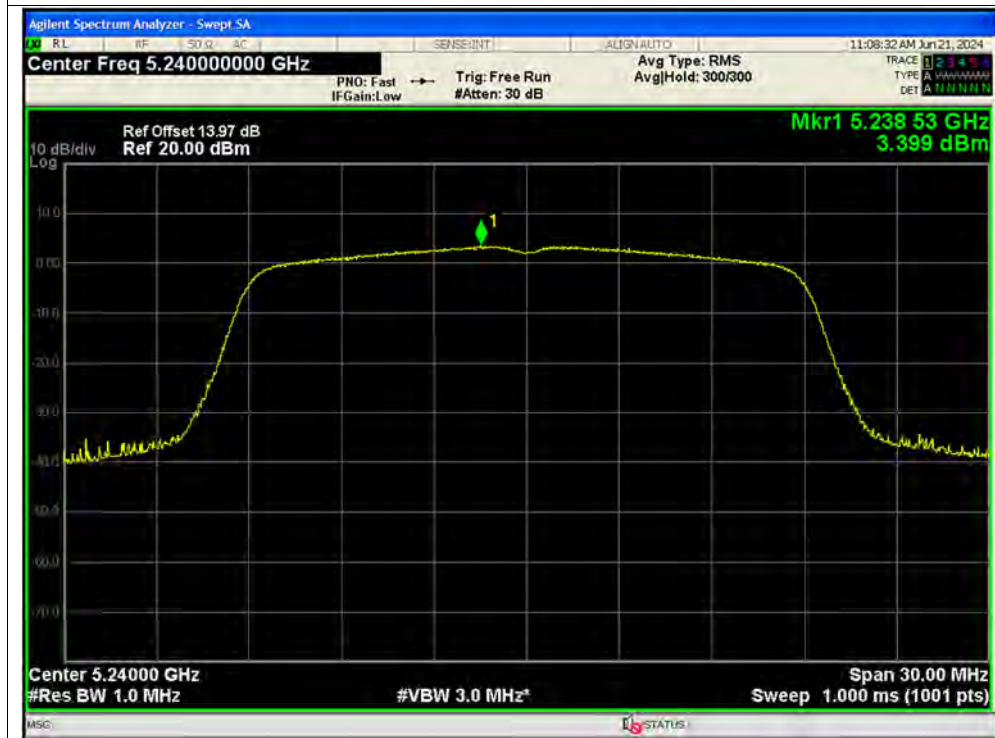


PSD NVNT n20 5220MHz Ant1





PSD NVNT n20 5240MHz Ant1



PSD NVNT n20 5260MHz Ant1







PSD NVNT n20 5300MHz Ant1



PSD NVNT n20 5320MHz Ant1





PSD NVNT n20 5500MHz Ant1



PSD NVNT n20 5600MHz Ant1



PSD NVNT n20 5720MHz Ant1



PSD NVNT n20 5745MHz Ant1







PSD NVNT n20 5785MHz Ant1



PSD NVNT n20 5825MHz Ant1





PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1





PSD NVNT n40 5270MHz Ant1



PSD NVNT n40 5310MHz Ant1







PSD NVNT n40 5510MHz Ant1

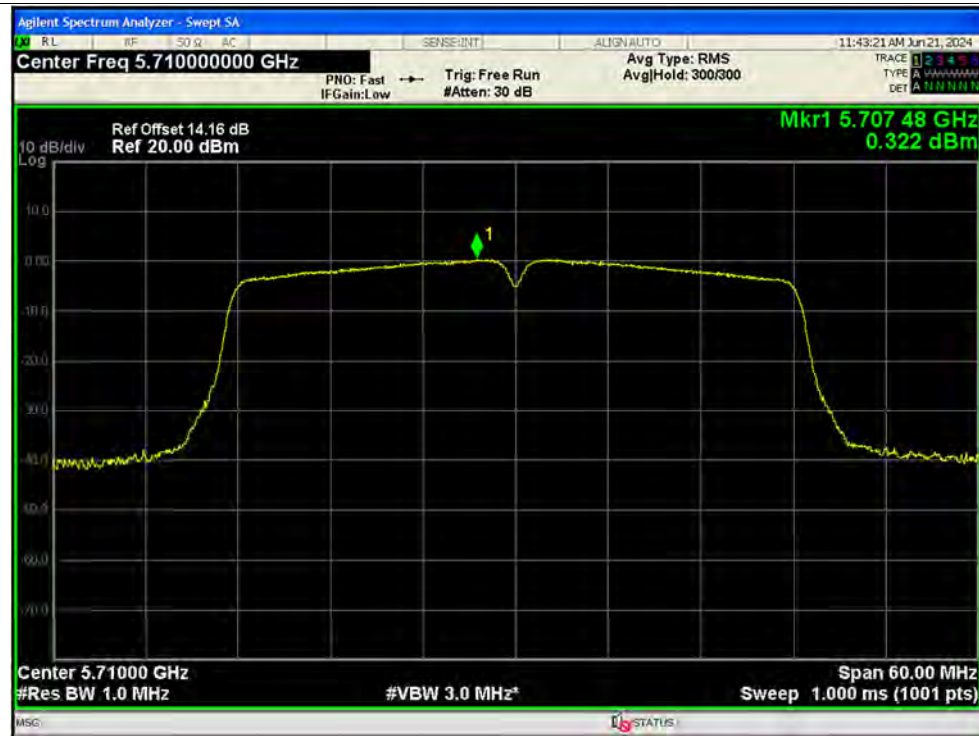


PSD NVNT n40 5630MHz Ant1





PSD NVNT n40 5710MHz Ant1



PSD NVNT n40 5755MHz Ant1



PSD NVNT n40 5795MHz Ant1



PSD NVNT ac20 5180MHz Ant1





PSD NVNT ac20 5220MHz Ant1



PSD NVNT ac20 5240MHz Ant1





PSD NVNT ac20 5260MHz Ant1



PSD NVNT ac20 5300MHz Ant1



PSD NVNT ac20 5320MHz Ant1

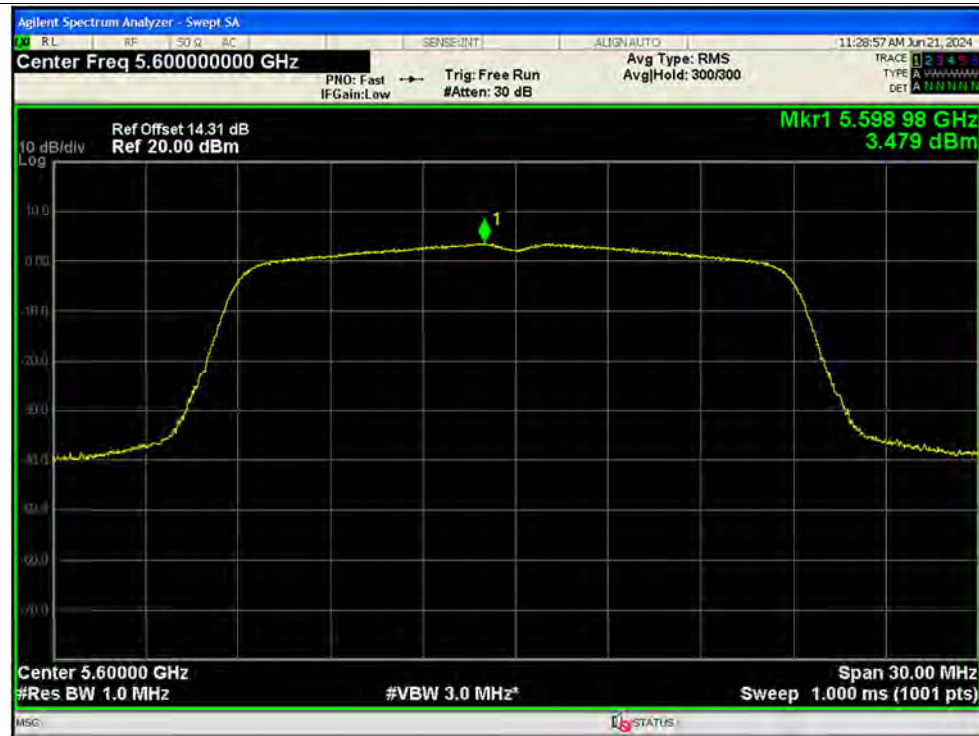


PSD NVNT ac20 5500MHz Ant1





PSD NVNT ac20 5600MHz Ant1



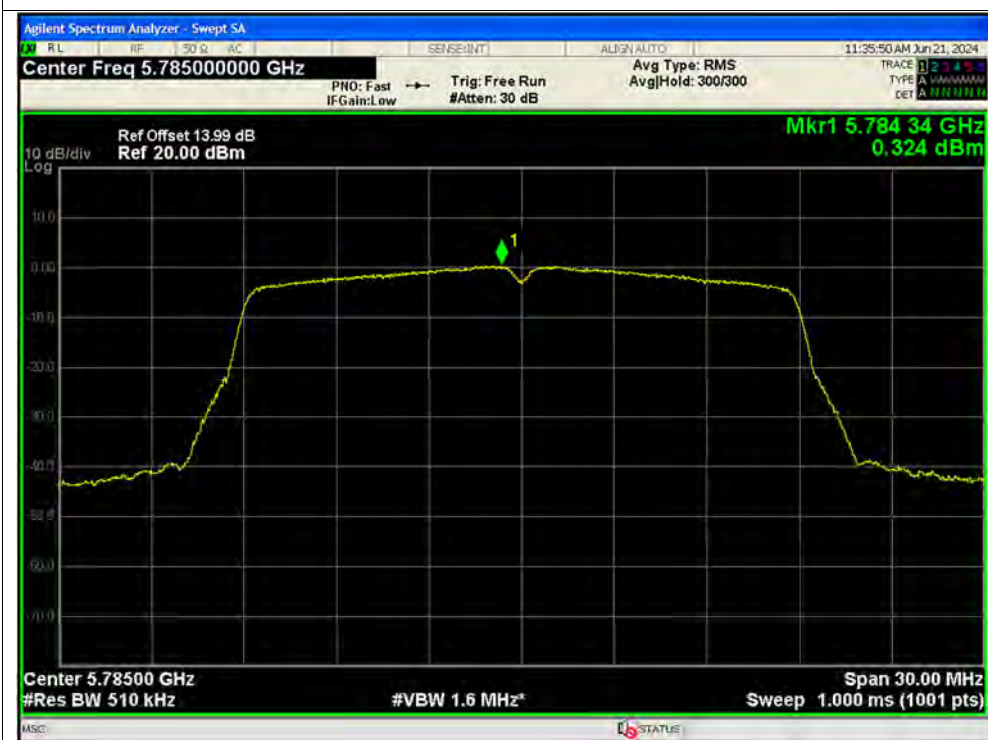
PSD NVNT ac20 5720MHz Ant1



PSD NVNT ac20 5745MHz Ant1



PSD NVNT ac20 5785MHz Ant1



PSD NVNT ac20 5825MHz Ant1



PSD NVNT ac40 5190MHz Ant1





PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac40 5270MHz Ant1



PSD NVNT ac40 5310MHz Ant1



PSD NVNT ac40 5510MHz Ant1



PSD NVNT ac40 5630MHz Ant1



PSD NVNT ac40 5710MHz Ant1





PSD NVNT ac40 5755MHz Ant1



PSD NVNT ac40 5795MHz Ant1



PSD NVNT ac80 5210MHz Ant1



PSD NVNT ac80 5290MHz Ant1



PSD NVNT ac80 5530MHz Ant1



PSD NVNT ac80 5610MHz Ant1





PSD NVNT ac80 5690MHz Ant1



PSD NVNT ac80 5775MHz Ant1



**A.5. Frequency Stability**

| Condition  | Mode    | Frequency (MHz) | Antenna | Measured Frequency (MHz) | Frequency Error (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
|------------|---------|-----------------|---------|--------------------------|----------------------|-----------------|-------------|---------|
| 20C 3.4V   | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 20C 3.87V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 20C 4.45V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| -20C 3.87V | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| -10C 3.87V | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 0C 3.87V   | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 10C 3.87V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 30C 3.87V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 40C 3.87V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 50C 3.87V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 60C 3.87V  | Carrier | 5180            | Ant1    | 5179.987                 | -13000               | -2.51           | 25          | Pass    |
| 20C 3.4V   | Carrier | 5260            | Ant1    | 5259.987                 | -13000               | -2.47           | 25          | Pass    |
| 20C 3.87V  | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 20C 4.45V  | Carrier | 5260            | Ant1    | 5259.987                 | -13000               | -2.47           | 25          | Pass    |
| -20C 3.87V | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| -10C 3.87V | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 0C 3.87V   | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 10C 3.87V  | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 30C 3.87V  | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 40C 3.87V  | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 50C 3.87V  | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 60C 3.87V  | Carrier | 5260            | Ant1    | 5259.986                 | -14000               | -2.66           | 25          | Pass    |
| 20C 3.4V   | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 20C 3.87V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 20C 4.45V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| -20C 3.87V | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| -10C 3.87V | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 0C 3.87V   | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 10C 3.87V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 30C 3.87V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 40C 3.87V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 50C 3.87V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 60C 3.87V  | Carrier | 5500            | Ant1    | 5499.98                  | -20000               | -3.64           | 25          | Pass    |
| 20C 3.4V   | Carrier | 5745            | Ant1    | 5744.984                 | -16000               | -2.79           | 25          | Pass    |



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|            |         |      |      |          |        |       |    |      |
|------------|---------|------|------|----------|--------|-------|----|------|
| 20C 3.87V  | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 20C 4.45V  | Carrier | 5745 | Ant1 | 5744.984 | -16000 | -2.79 | 25 | Pass |
| -20C 3.87V | Carrier | 5745 | Ant1 | 5744.984 | -16000 | -2.79 | 25 | Pass |
| -10C 3.87V | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 0C 3.87V   | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 10C 3.87V  | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 30C 3.87V  | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 40C 3.87V  | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 50C 3.87V  | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |
| 60C 3.87V  | Carrier | 5745 | Ant1 | 5744.983 | -17000 | -2.96 | 25 | Pass |



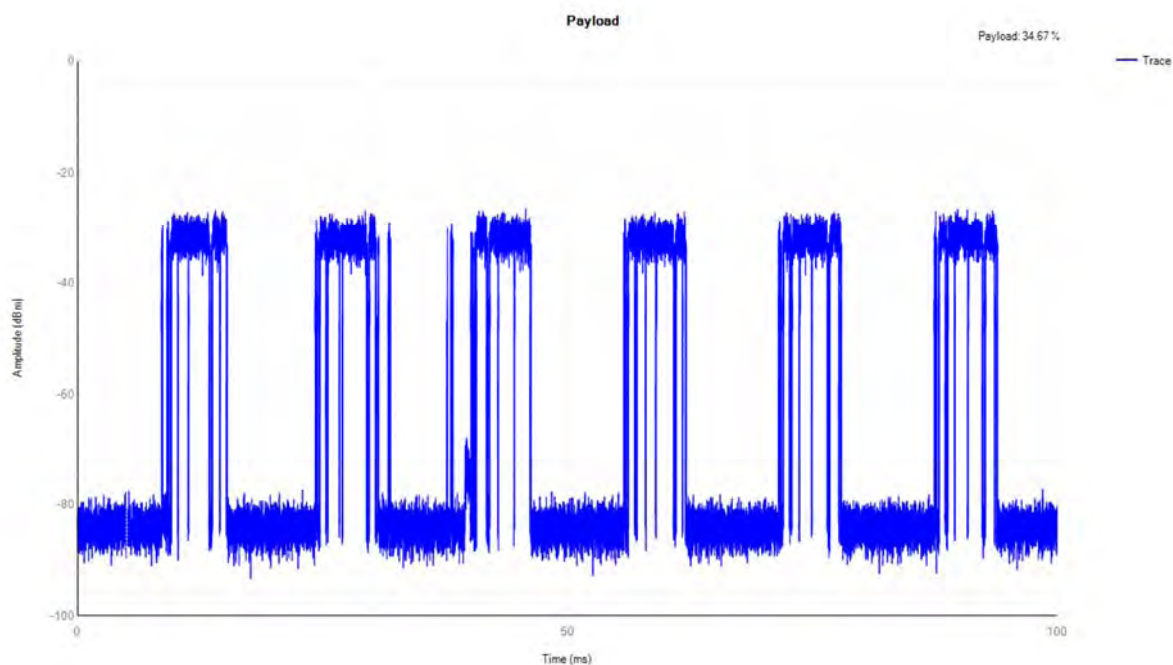
**A.6. Dynamic Frequency Selection**

Payload

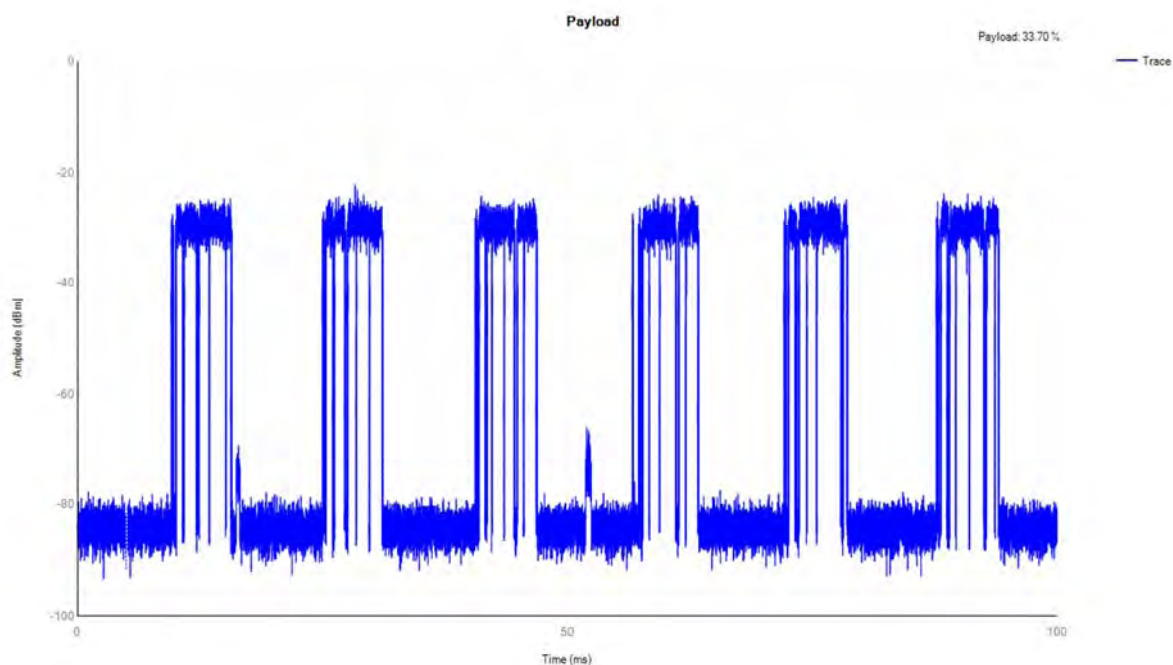
| Mode | Frequency (MHz) | Result | Verdict |
|------|-----------------|--------|---------|
| a    | 5320            | 34.67  | Pass    |
| a    | 5500            | 33.70  | Pass    |
| ac80 | 5290            | 34.19  | Pass    |
| ac80 | 5530            | 31.73  | Pass    |

## Test Graphs

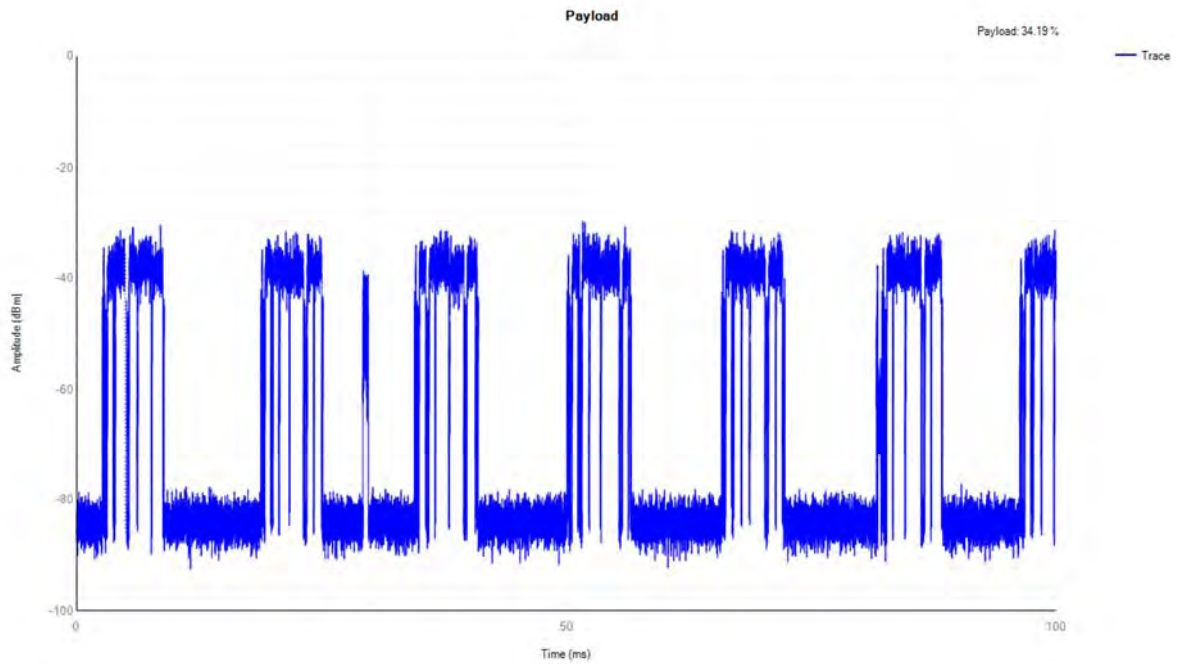
## a 5320MHz Payload



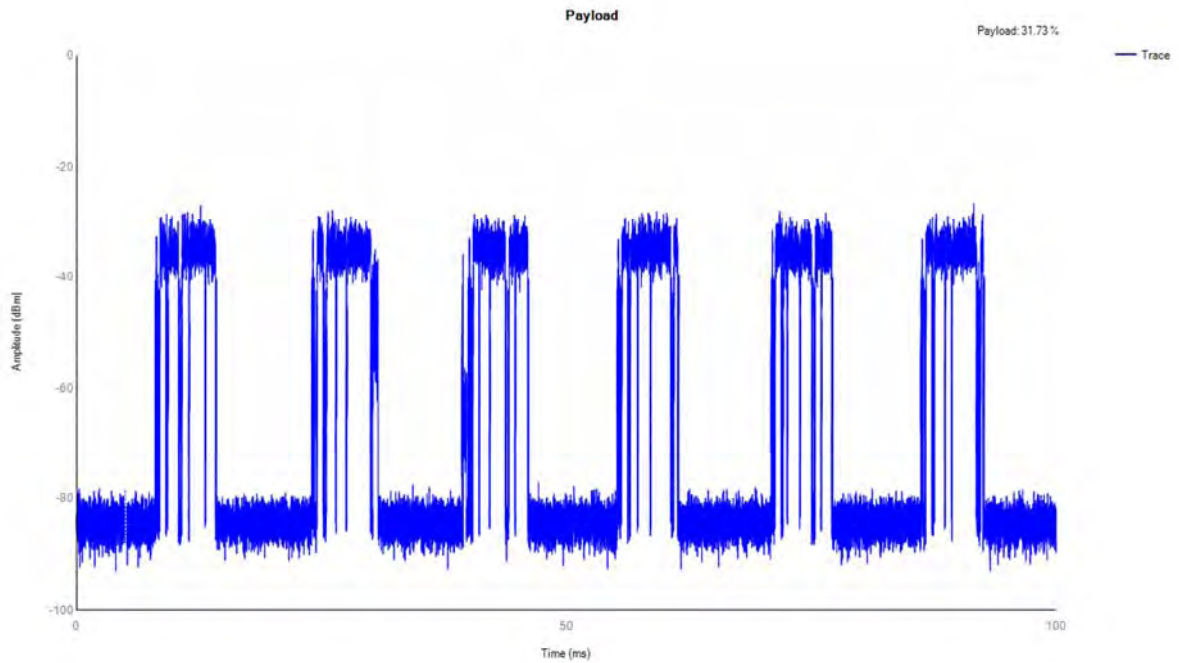
## a 5500MHz Payload



## ac80 5290MHz Payload



## ac80 5530MHz Payload





## Detection Thresholds

| Mode | Frequency (MHz) | Type       | Result         | Verdict |
|------|-----------------|------------|----------------|---------|
| a    | 5320            | DFS_FCC_T0 | See test Graph | Pass    |
| a    | 5500            | DFS_FCC_T0 | See test Graph | Pass    |
| ac80 | 5290            | DFS_FCC_T0 | See test Graph | Pass    |
| ac80 | 5530            | DFS_FCC_T0 | See test Graph | Pass    |

## Spectrum analyzer settings:

Span: Zero

Detector Type: Peak

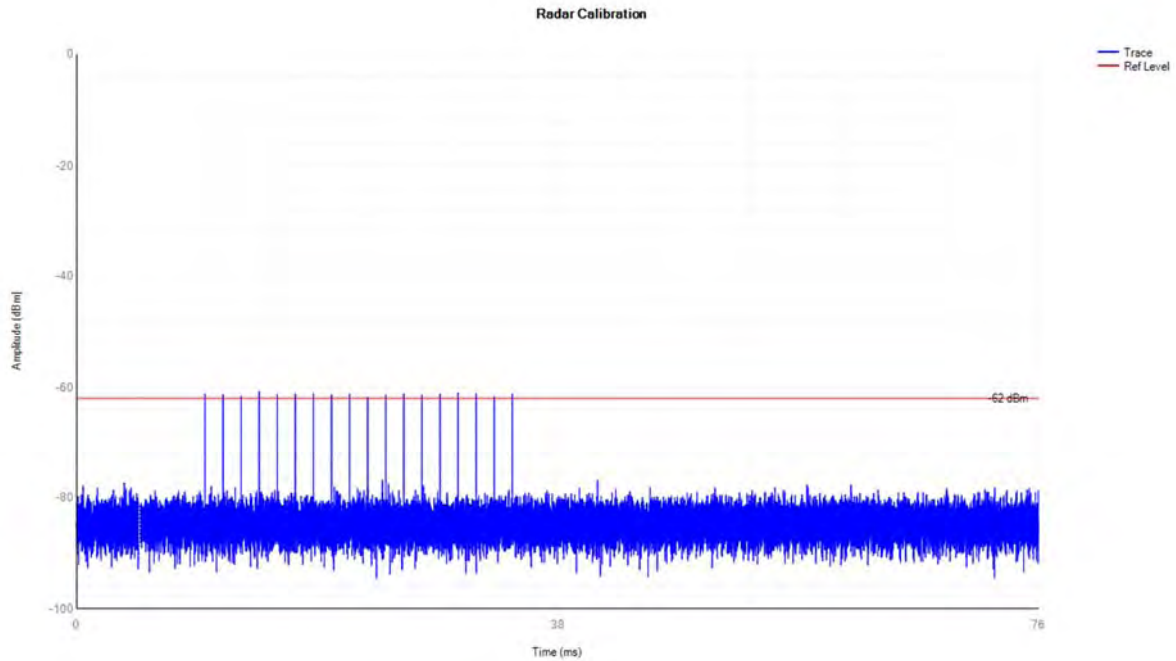
RBW: 3MHz

VBW: 3MHz

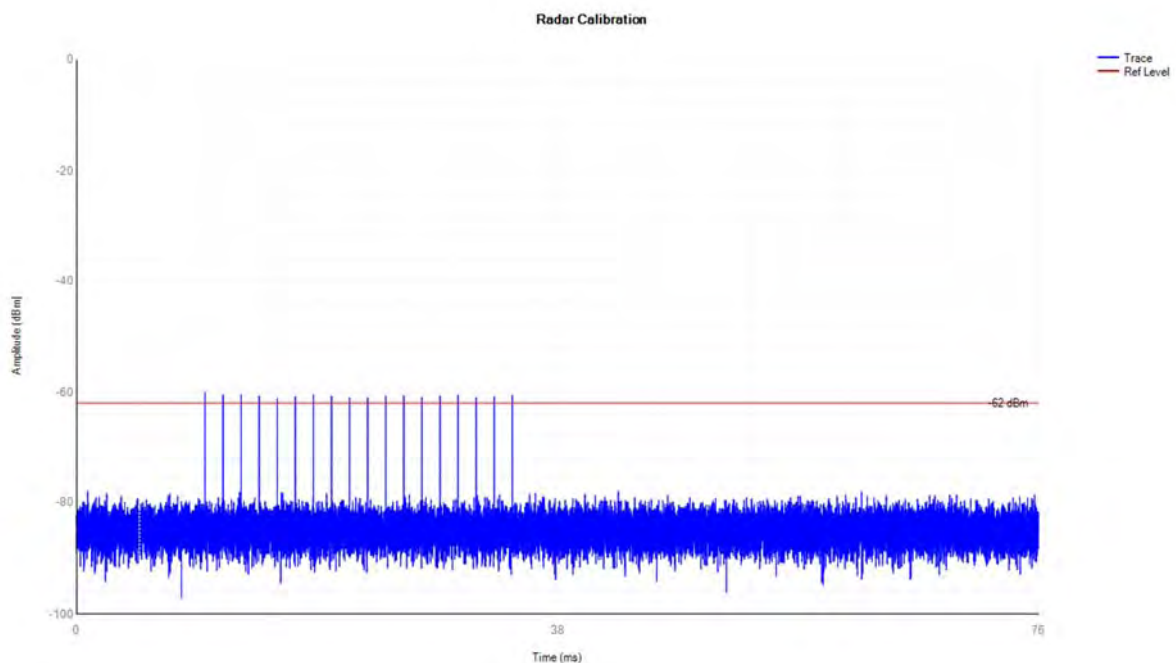


## Test Graphs

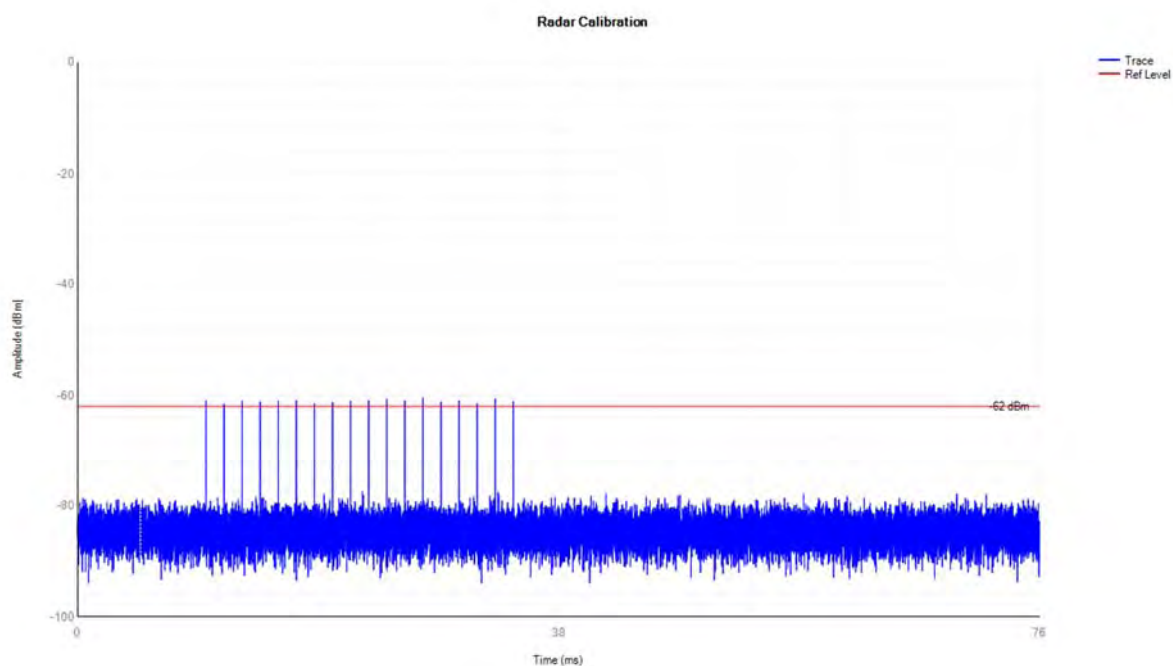
## 5320MHz DFS\_FCC\_T0



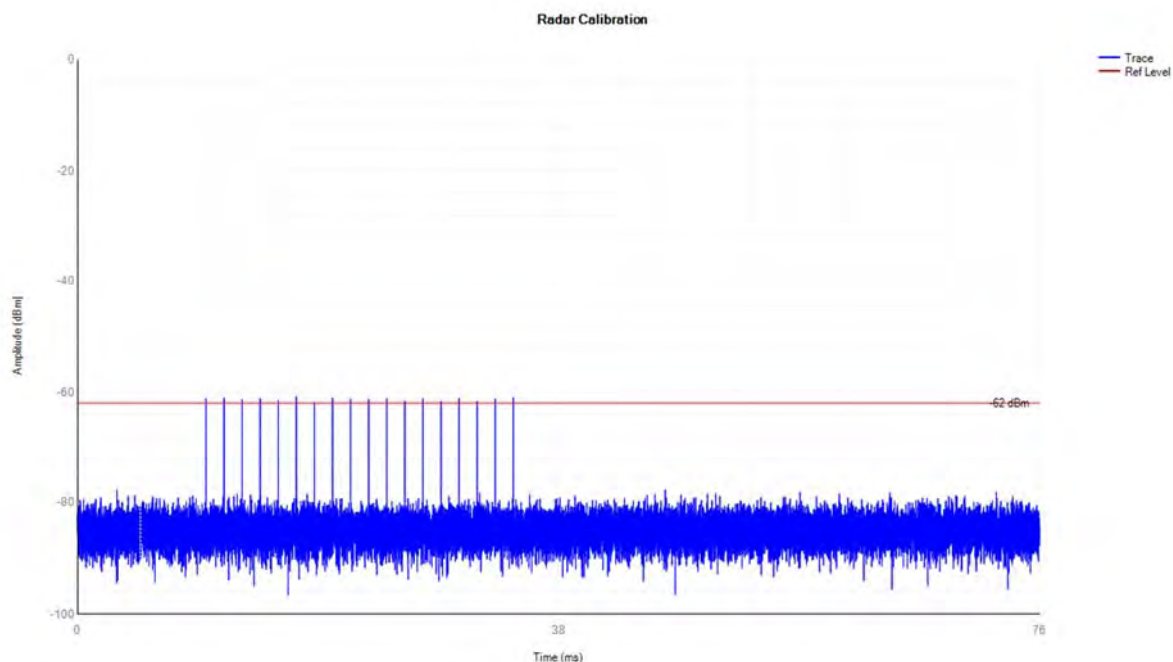
## 5500MHz DFS\_FCC\_T0



## 5290MHz DFS\_FCC\_T0



## 5530MHz DFS\_FCC\_T0





## Channel Move Time and Channel Closing Transmission Time

| Mode | Frequency (MHz) | Channel Move Time (s) | Limit Channel Move Time (s) | Close Transmission Time (s) | Limit Close Transmission Time (s) | Close Transmission Time after 200ms(s) | Limit Close Transmission Time after 200ms (s) | Verdict |
|------|-----------------|-----------------------|-----------------------------|-----------------------------|-----------------------------------|----------------------------------------|-----------------------------------------------|---------|
| a    | 5320            | 0.921                 | 10                          | 0.025                       | 0.26                              | 0.020                                  | 0.06                                          | Pass    |
| a    | 5500            | 0.859                 | 10                          | 0.053                       | 0.26                              | 0.015                                  | 0.06                                          | Pass    |
| ac80 | 5290            | 0.832                 | 10                          | 0.038                       | 0.26                              | 0.015                                  | 0.06                                          | Pass    |
| ac80 | 5530            | 0.840                 | 10                          | 0.037                       | 0.26                              | 0.016                                  | 0.06                                          | Pass    |

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

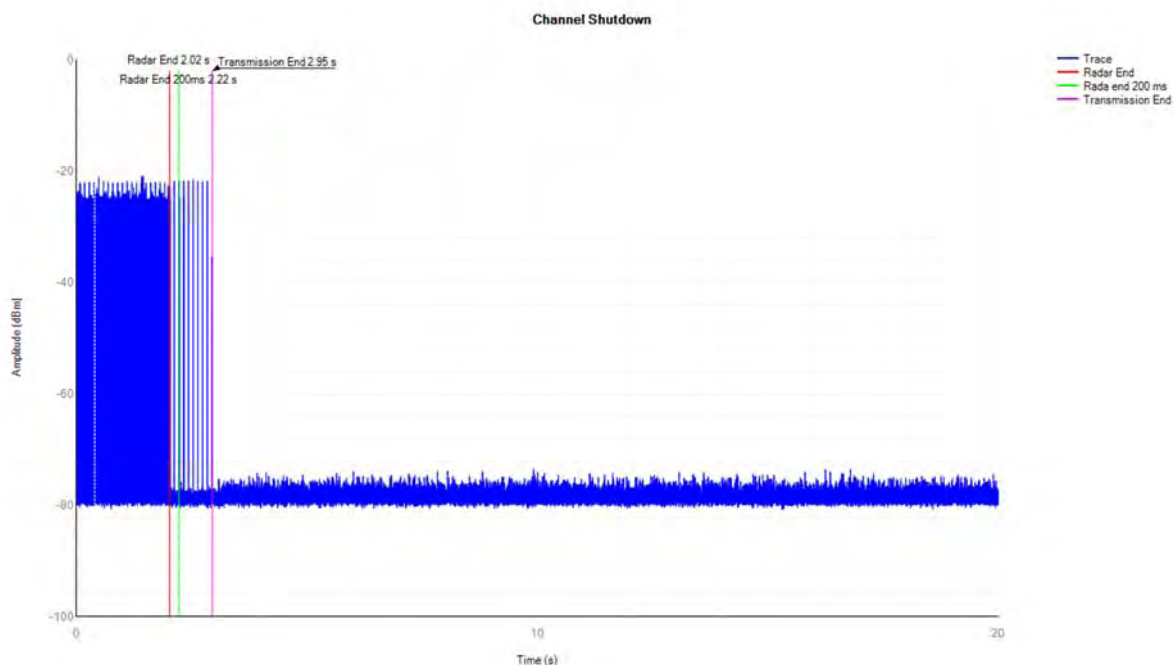
RBW: 3MHz

VBW: 3MHz

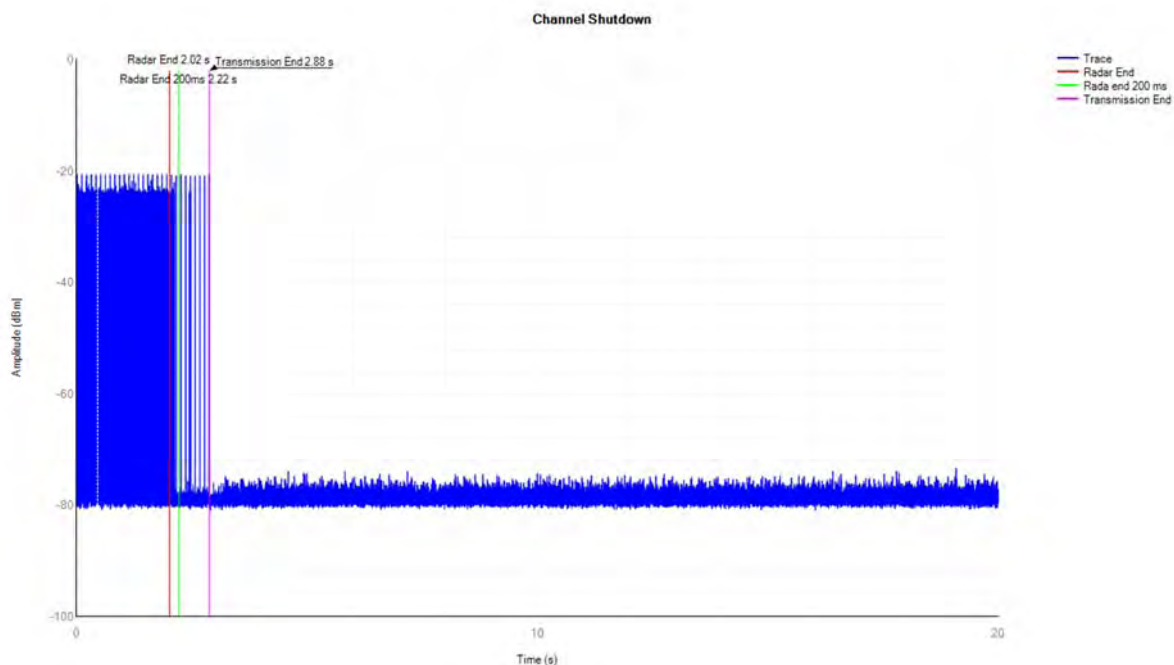
Sweep time: 20s

## Test Graphs

## a 5320MHz Shutdown

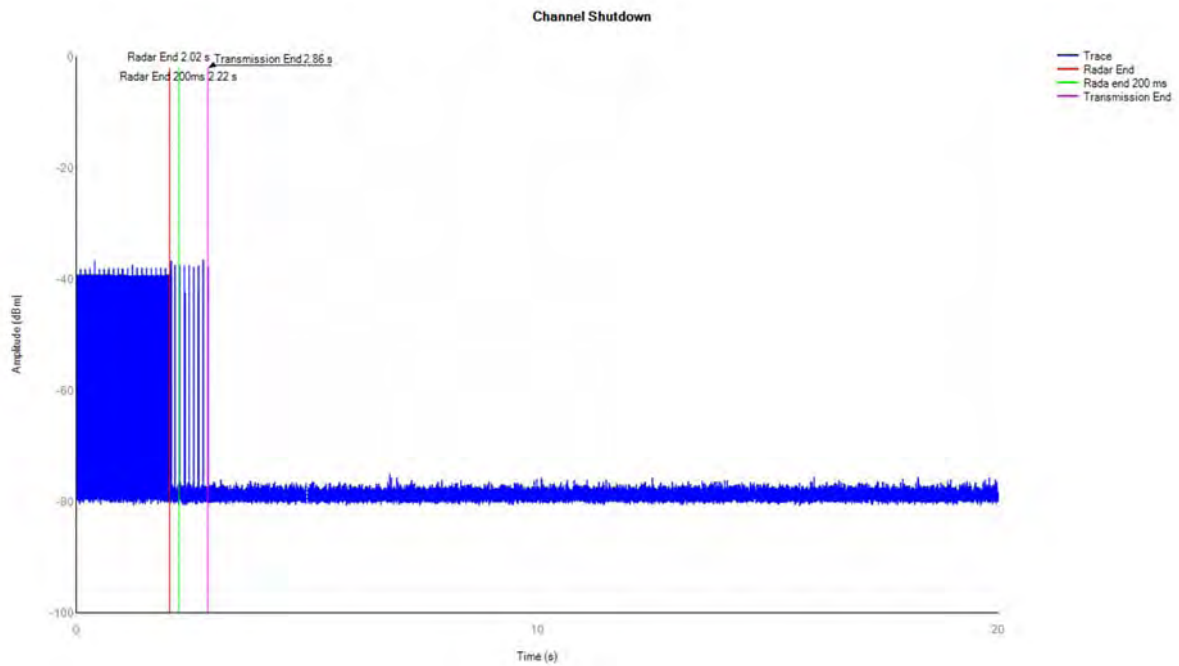


## a 5500MHz Shutdown

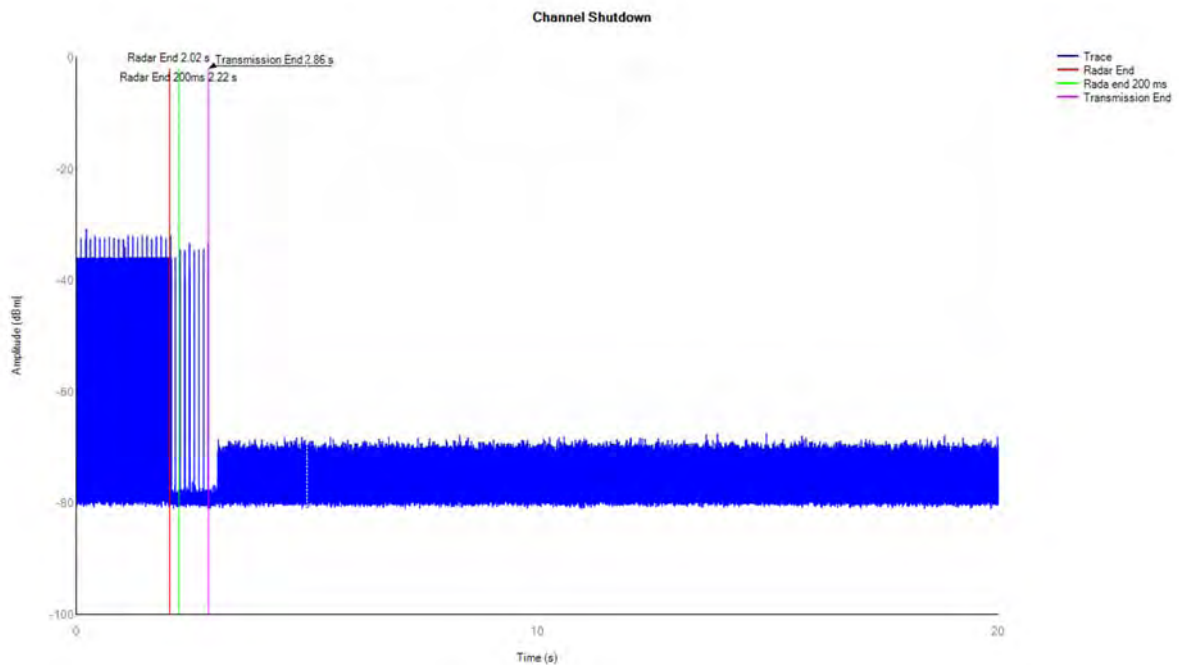




## ac80 5290MHz Shutdown



## ac80 5530MHz Shutdown



Note: The signal above the noise floor after the radar signal ends is the signal which leaked from other channels that have been moved following the Master device.



REPORT No.: SZ24050296W04

Non-Occupancy Period

| Mode | Frequency (MHz) | Result         | Verdict |
|------|-----------------|----------------|---------|
| a    | 5320            | See test Graph | Pass    |
| a    | 5500            | See test Graph | Pass    |

Spectrum analyzer settings:

Span: Zero

Detector type: Peak

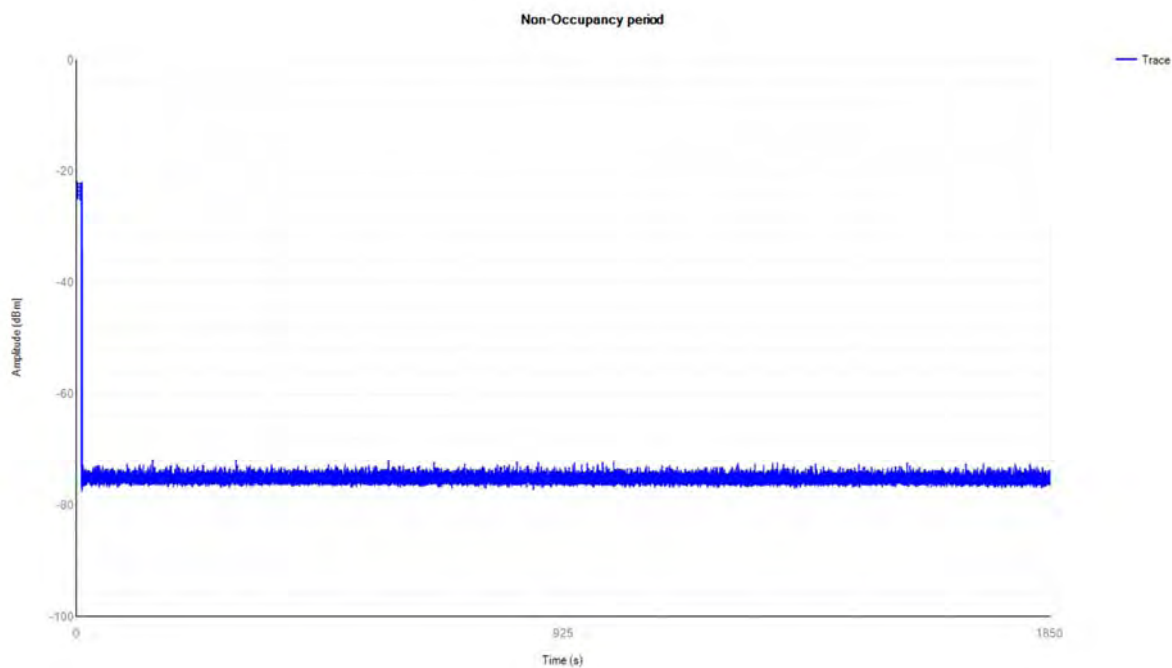
RBW: 3MHz

VBW: 3MHz

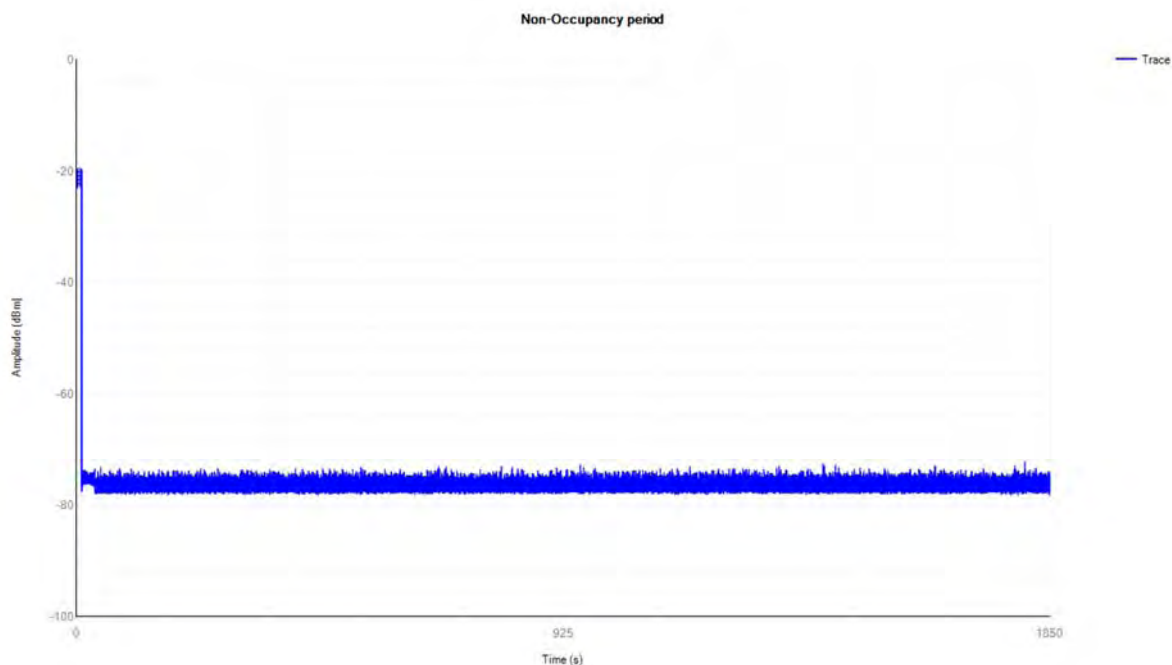
Sweep time: 1850s

Test Graphs

a 5320MHz Non-Occupancy



a 5500MHz Non-Occupancy





### A.7. Conducted Emission

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

**Note:** Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

#### A. Test Setup:

Test Mode: EUT + Adapter + USB Cable + WIFI TX

Test voltage: AC 120V/60Hz

The measurement results are obtained as below:

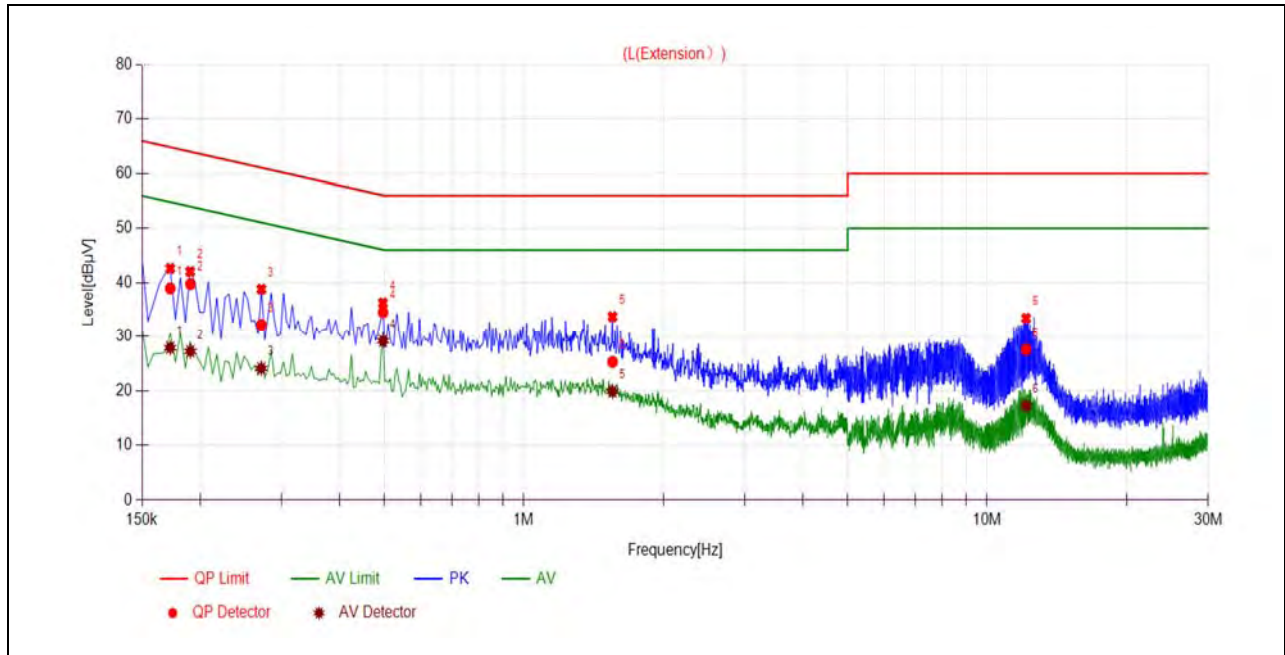
$$E \text{ [dB}\mu\text{V]} = U_R + L_{\text{Cable loss [dB]} + A_{\text{Factor}}$$

$U_R$ : Receiver Reading

$A_{\text{Factor}}$ : Voltage division factor of LISN

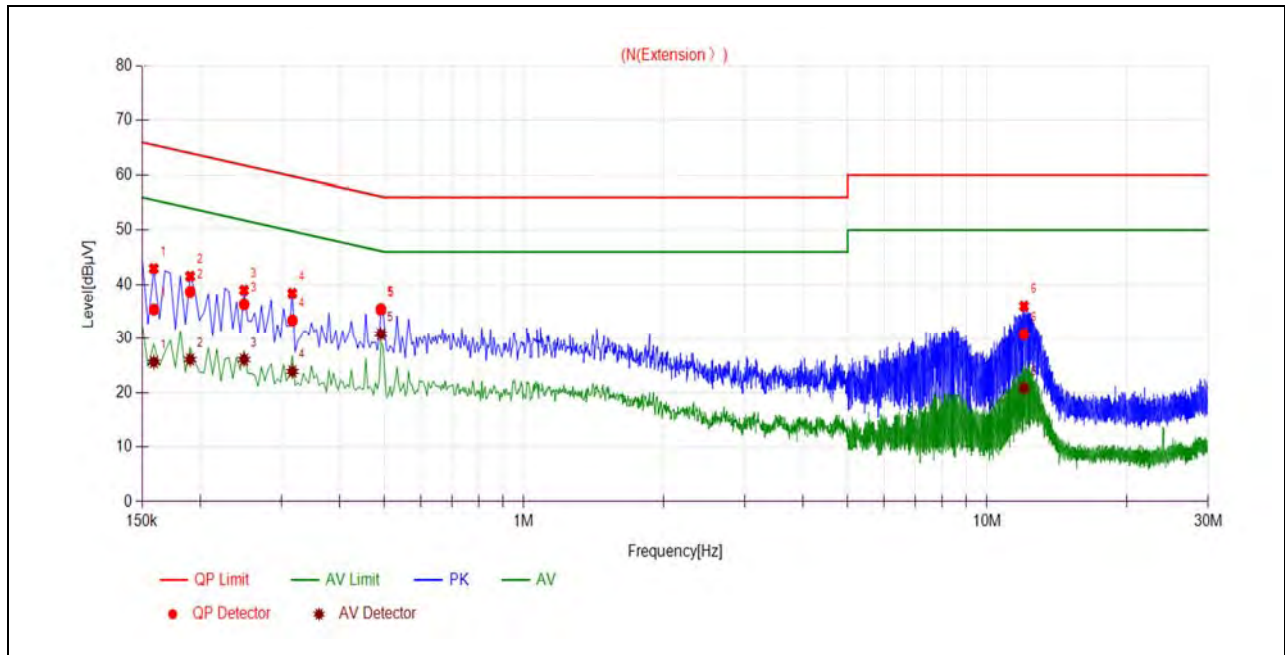


## B. Test Plot:



(L Phase)

| No. | Fre.<br>(MHz) | Emission Level (dBμV) |         | Limit (dBμV) |         | Power-line | Verdict |
|-----|---------------|-----------------------|---------|--------------|---------|------------|---------|
|     |               | Quai-peak             | Average | Quai-peak    | Average |            |         |
| 1   | 0.1725        | 38.96                 | 27.87   | 64.84        | 54.84   | Line       | PASS    |
| 2   | 0.1907        | 39.76                 | 27.22   | 64.01        | 54.01   |            | PASS    |
| 3   | 0.2713        | 32.19                 | 24.09   | 61.08        | 51.08   |            | PASS    |
| 4   | 0.4969        | 34.54                 | 29.18   | 56.05        | 46.05   |            | PASS    |
| 5   | 1.5544        | 25.27                 | 19.86   | 56.00        | 46.00   |            | PASS    |
| 6   | 12.1367       | 27.57                 | 17.20   | 60.00        | 50.00   |            | PASS    |



(N Phase)

| No. | Fre.<br>(MHz) | Emission Level (dBμV) |         | Limit (dBμV) |         | Power-line | Verdict |
|-----|---------------|-----------------------|---------|--------------|---------|------------|---------|
|     |               | Quai-peak             | Average | Quai-peak    | Average |            |         |
| 1   | 0.1591        | 35.42                 | 25.60   | 65.51        | 55.51   | Neutral    | PASS    |
| 2   | 0.1905        | 38.67                 | 26.08   | 64.02        | 54.02   |            | PASS    |
| 3   | 0.2490        | 36.39                 | 26.06   | 61.79        | 51.79   |            | PASS    |
| 4   | 0.3167        | 33.40                 | 23.87   | 59.79        | 49.79   |            | PASS    |
| 5   | 0.4915        | 35.49                 | 30.80   | 56.14        | 46.14   |            | PASS    |
| 6   | 12.0042       | 30.82                 | 20.75   | 60.00        | 50.00   |            | PASS    |



### A.8. Restricted Frequency Bands

The lowest and highest channels are tested to verify the Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

$A_T$ : Total correction Factor except Antenna

$U_R$ : Receiver Reading

$G_{\text{preamp}}$ : Preamplifier Gain

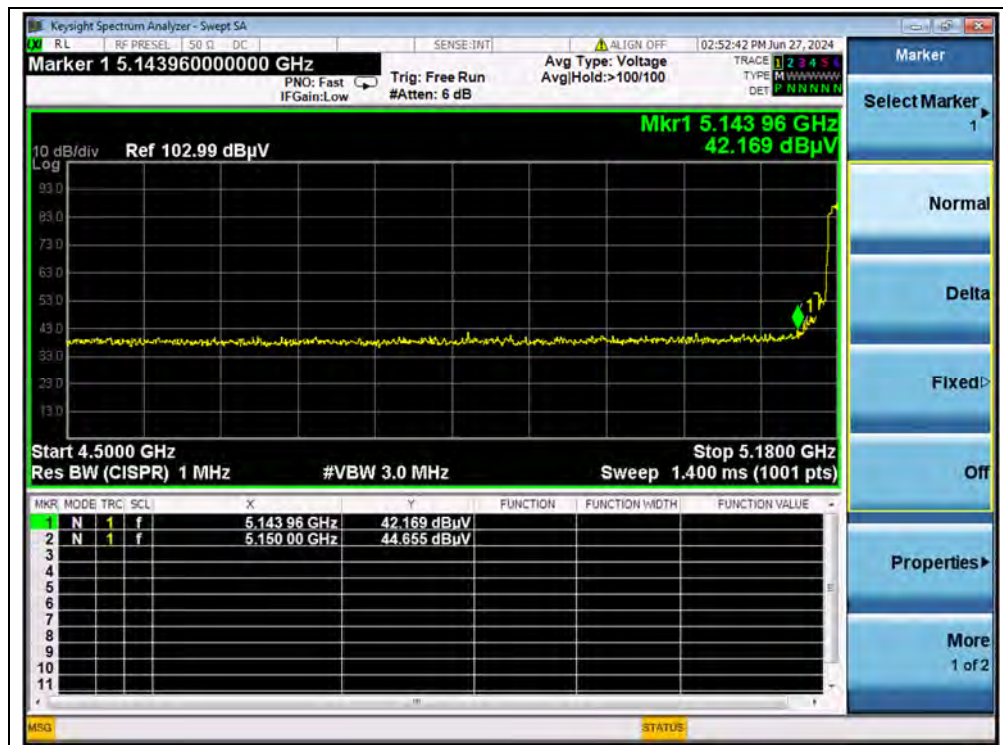
$A_{\text{Factor}}$ : Antenna Factor at 3m

**Note 1:** Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

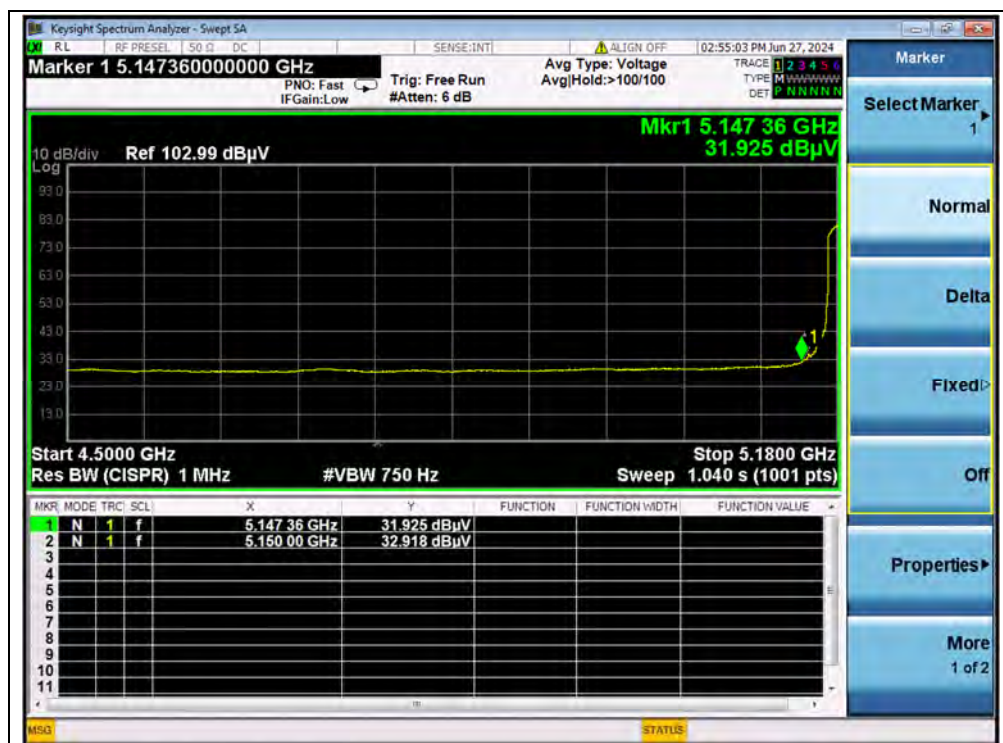
**Note 2** All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

#### 802.11a Mode

| Channel | Frequency<br>(MHz) | Detector | Receiver<br>Reading      | A <sub>T</sub><br>(dB) | A <sub>Factor</sub><br>(dB@3m) | Max.<br>Emission | Limit<br>(dBμV/m) | Verdict |
|---------|--------------------|----------|--------------------------|------------------------|--------------------------------|------------------|-------------------|---------|
|         |                    | PK/ AV   | U <sub>R</sub><br>(dBμV) |                        |                                | E<br>(dBμV/m)    |                   |         |
| 36      | 5150.00            | PK       | 44.66                    | -21.29                 | 32.20                          | 55.57            | 74                | PASS    |
| 36      | 5150.00            | AV       | 32.92                    | -21.29                 | 32.20                          | 43.83            | 54                | PASS    |
| 64      | 5353.46            | PK       | 42.57                    | -20.66                 | 32.20                          | 54.11            | 74                | PASS    |
| 64      | 5350.00            | AV       | 29.52                    | -20.66                 | 32.20                          | 41.06            | 54                | PASS    |
| 100     | 5470.00            | PK       | 40.29                    | -20.24                 | 32.20                          | 52.25            | 68.23             | PASS    |
| 100     | 5460.00            | AV       | 29.31                    | -20.24                 | 32.20                          | 41.27            | 54                | PASS    |
| 144     | 5729.40            | PK       | 42.38                    | -20.24                 | 32.20                          | 54.34            | 68.23             | PASS    |
| 149     | 5725.00            | PK       | 45.26                    | -21.11                 | 32.20                          | 56.35            | 122.23            | PASS    |
| 165     | 5855.00            | PK       | 38.07                    | -21.11                 | 32.20                          | 49.16            | 122.23            | PASS    |

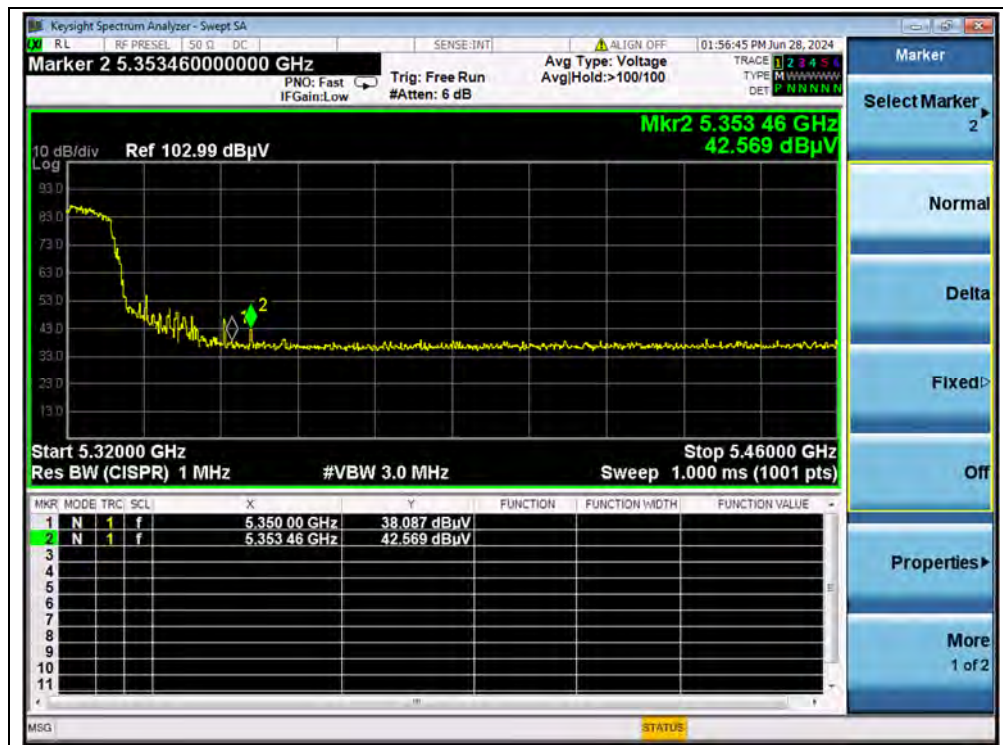


(PEAK, Channel 36, 802.11a)

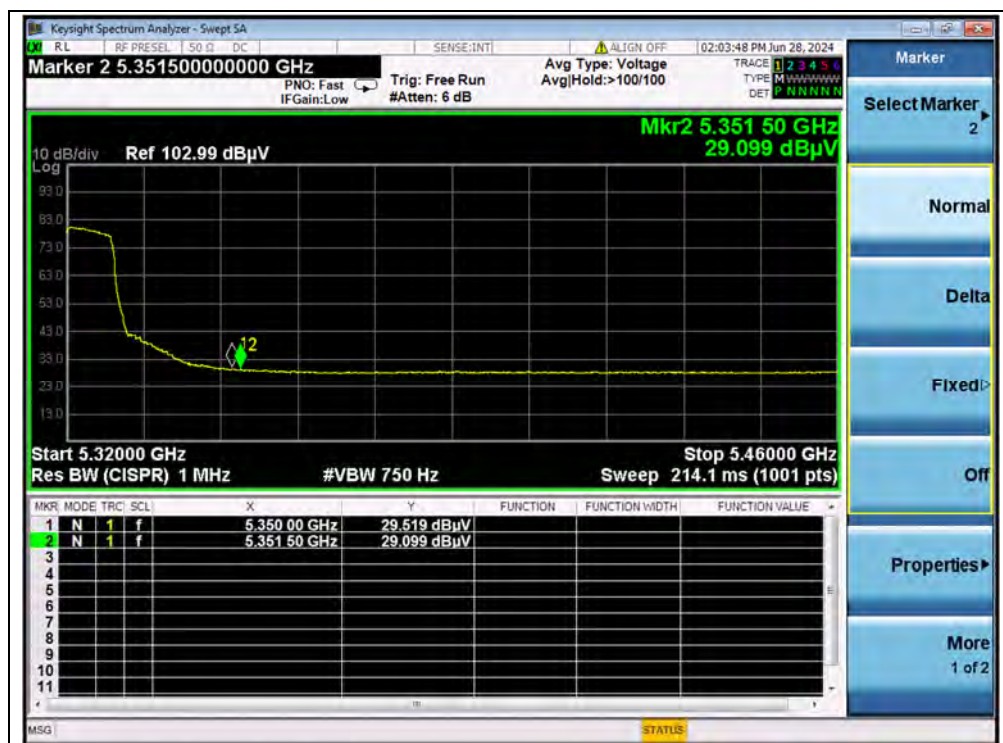


(AVERAGE, Channel 36, 802.11a)

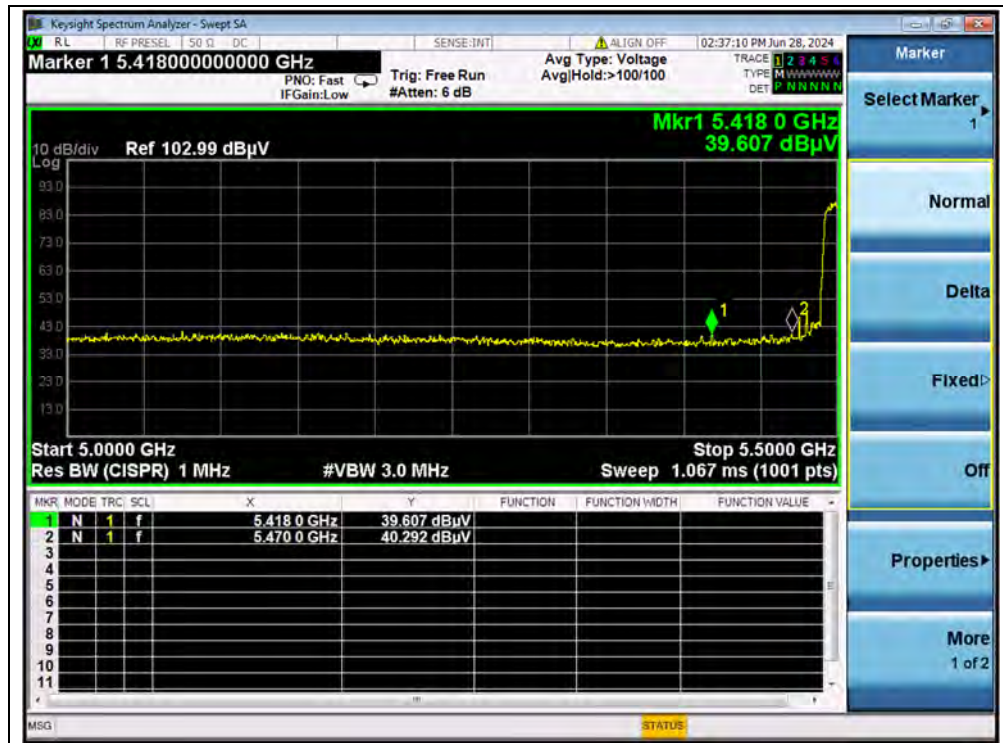




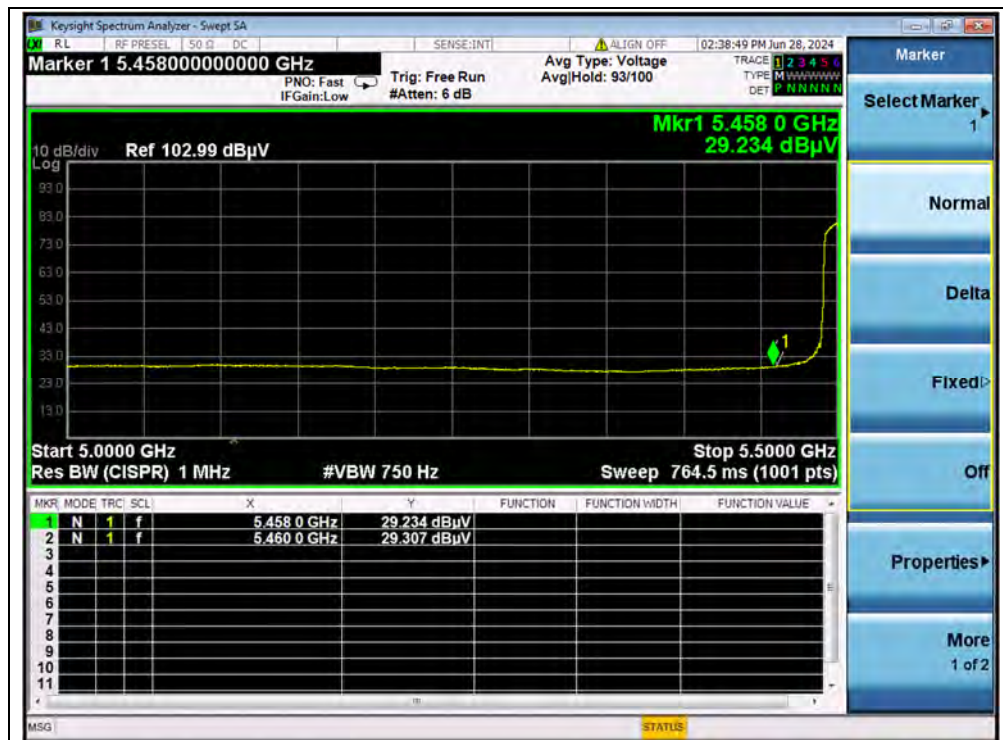
(PEAK, Channel 64, 802.11a)



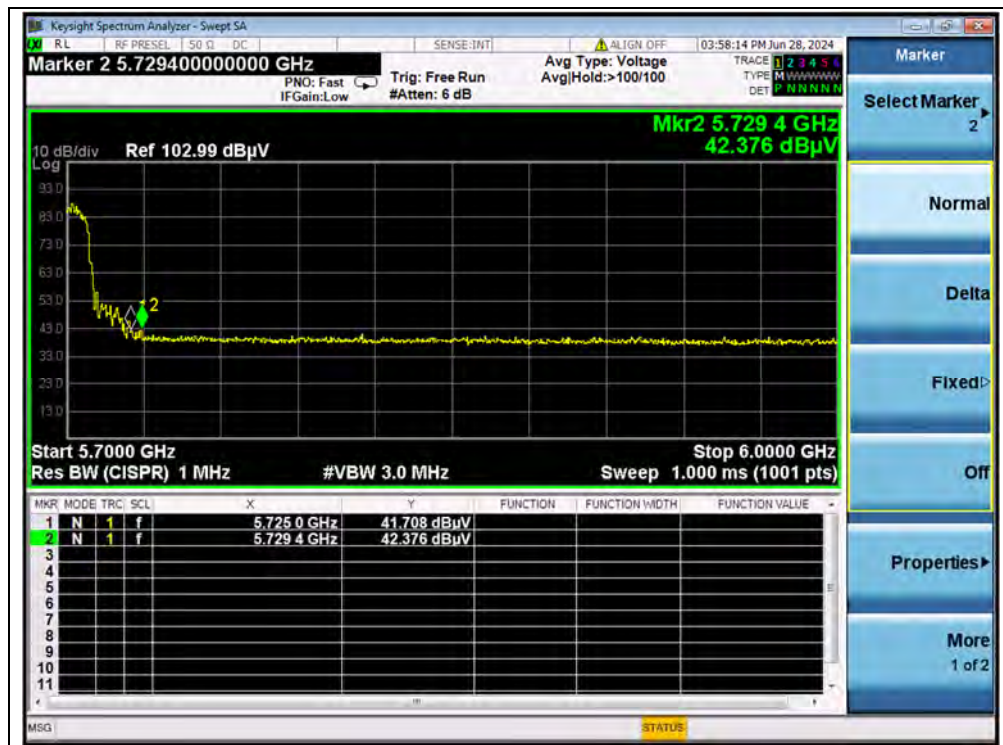
(AVERAGE, Channel 64, 802.11a)



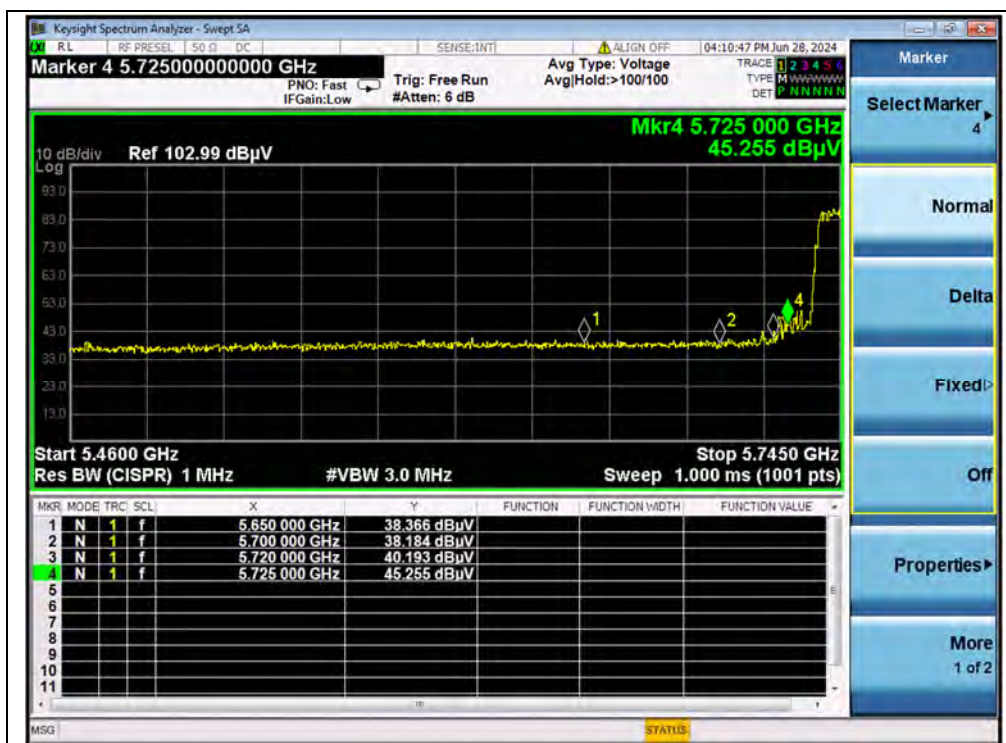
(PEAK, Channel 100, 802.11a)



(AVERAGE, Channel 100, 802.11a)

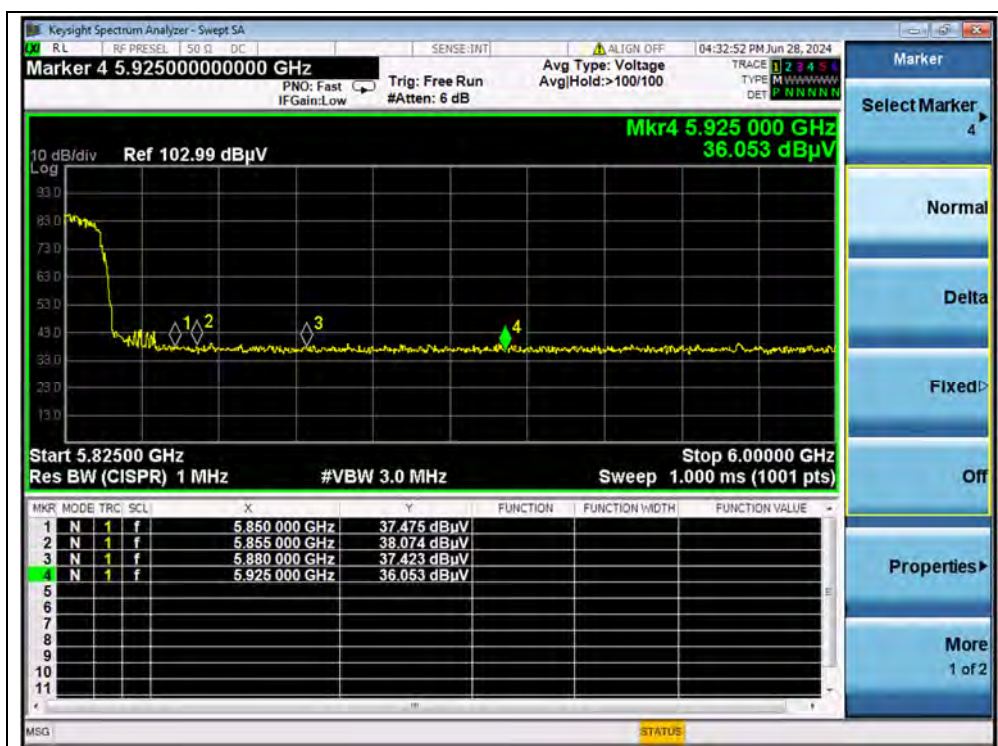


(PEAK, Channel 144, 802.11a)



(PEAK, Channel 149, 802.11a)



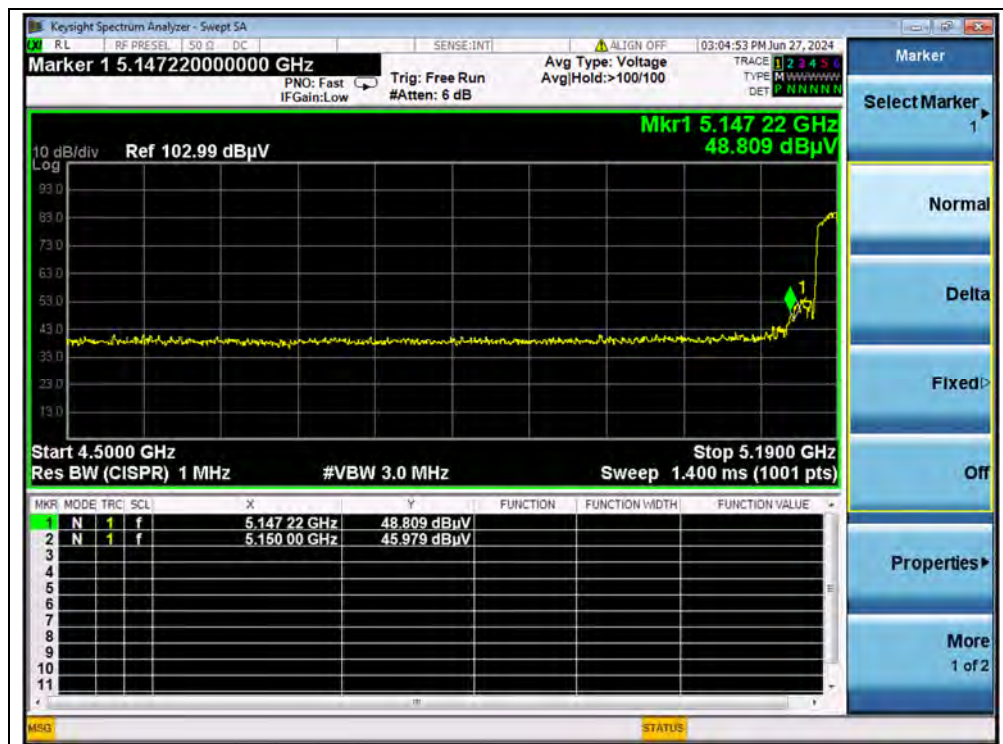


(PEAK, Channel 165, 802.11a)

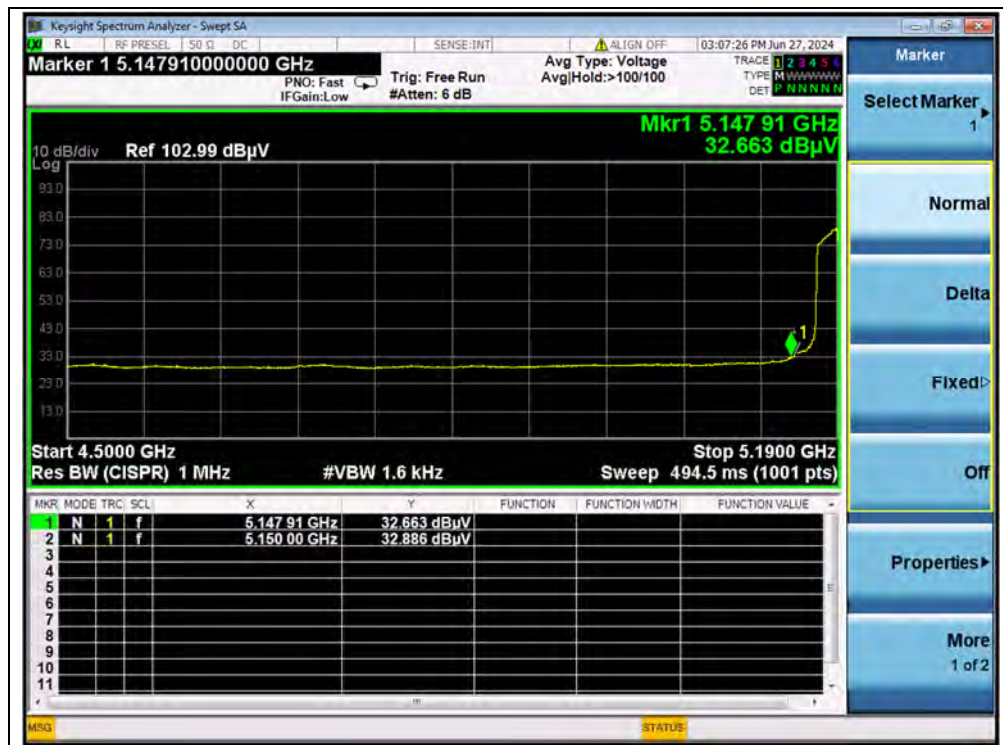


**802.11n (HT40) Mode**

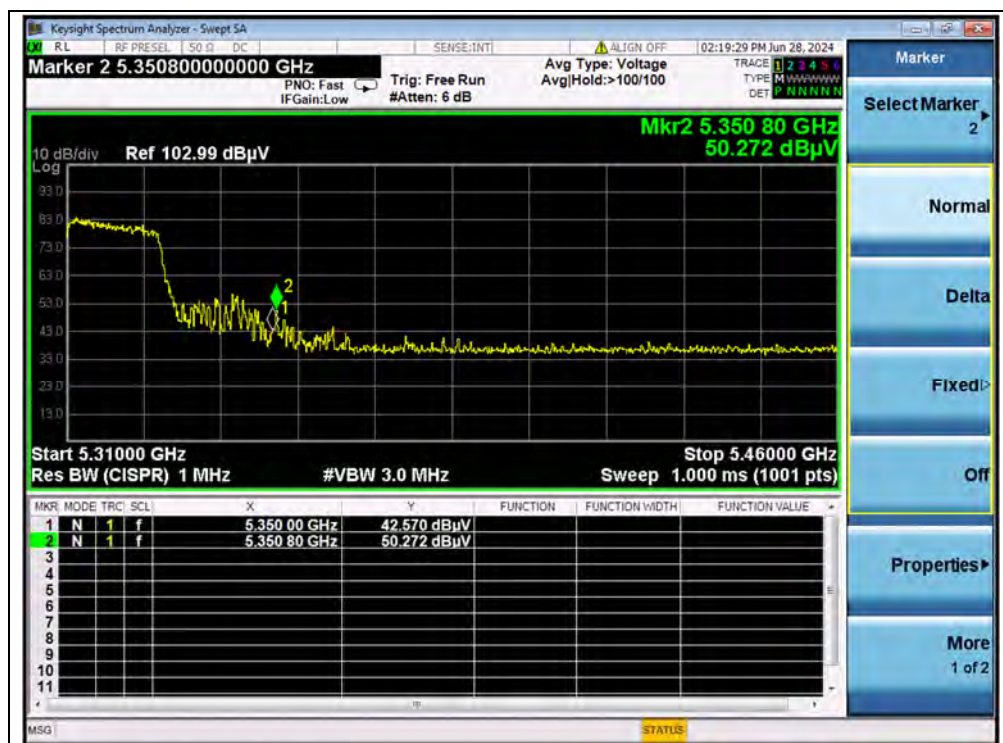
| Channel | Frequency (MHz) | Detector | Receiver Reading<br>$U_R$<br>(dB $\mu$ V) | $A_T$<br>(dB) | $A_{Factor}$<br>(dB@3m) | Max. Emission<br>$E$<br>(dB $\mu$ V/m) | Limit<br>(dB $\mu$ V/m) | Verdict |
|---------|-----------------|----------|-------------------------------------------|---------------|-------------------------|----------------------------------------|-------------------------|---------|
|         |                 | PK/ AV   |                                           |               |                         |                                        |                         |         |
| 38      | 5147.22         | PK       | 48.81                                     | -21.29        | 32.20                   | 59.72                                  | 74                      | PASS    |
| 38      | 5150.00         | AV       | 32.89                                     | -21.29        | 32.20                   | 43.80                                  | 54                      | PASS    |
| 62      | 5350.80         | PK       | 50.27                                     | -20.66        | 32.20                   | 61.81                                  | 74                      | PASS    |
| 62      | 5350.35         | AV       | 31.55                                     | -20.66        | 32.20                   | 43.09                                  | 54                      | PASS    |
| 102     | 5468.18         | PK       | 49.96                                     | -20.24        | 32.20                   | 61.92                                  | 68.23                   | PASS    |
| 102     | 5459.00         | AV       | 30.17                                     | -20.24        | 32.20                   | 42.13                                  | 54                      | PASS    |
| 142     | 5726.43         | PK       | 40.55                                     | -20.24        | 32.20                   | 52.51                                  | 68.23                   | PASS    |
| 151     | 5725.00         | PK       | 45.10                                     | -21.11        | 32.20                   | 56.19                                  | 122.23                  | PASS    |
| 159     | 5850.00         | PK       | 38.52                                     | -21.11        | 32.20                   | 49.61                                  | 122.23                  | PASS    |



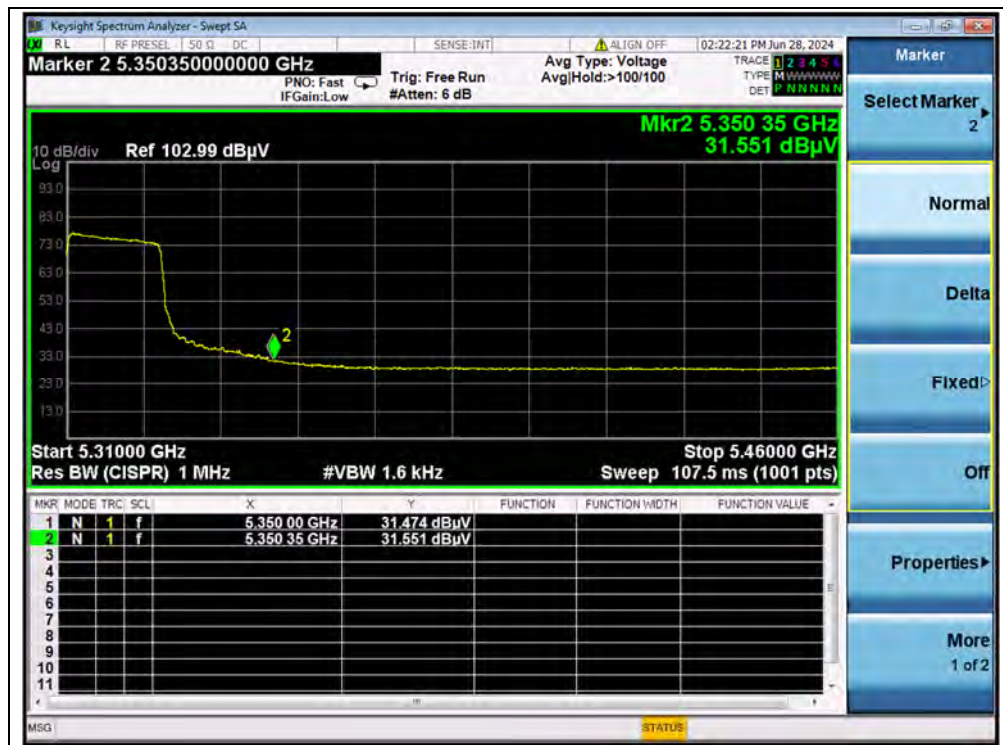
(PEAK, Channel 38, 802.11n (HT40))



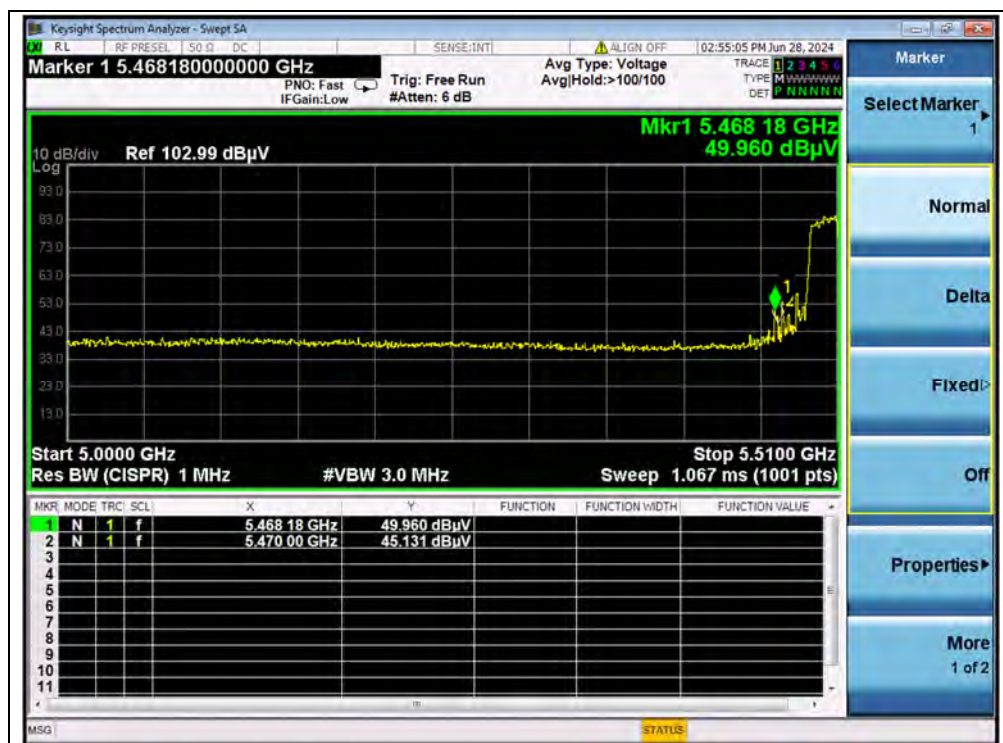
(AVERAGE, Channel 38, 802.11n (HT40))



(PEAK, Channel 62, 802.11n (HT40))

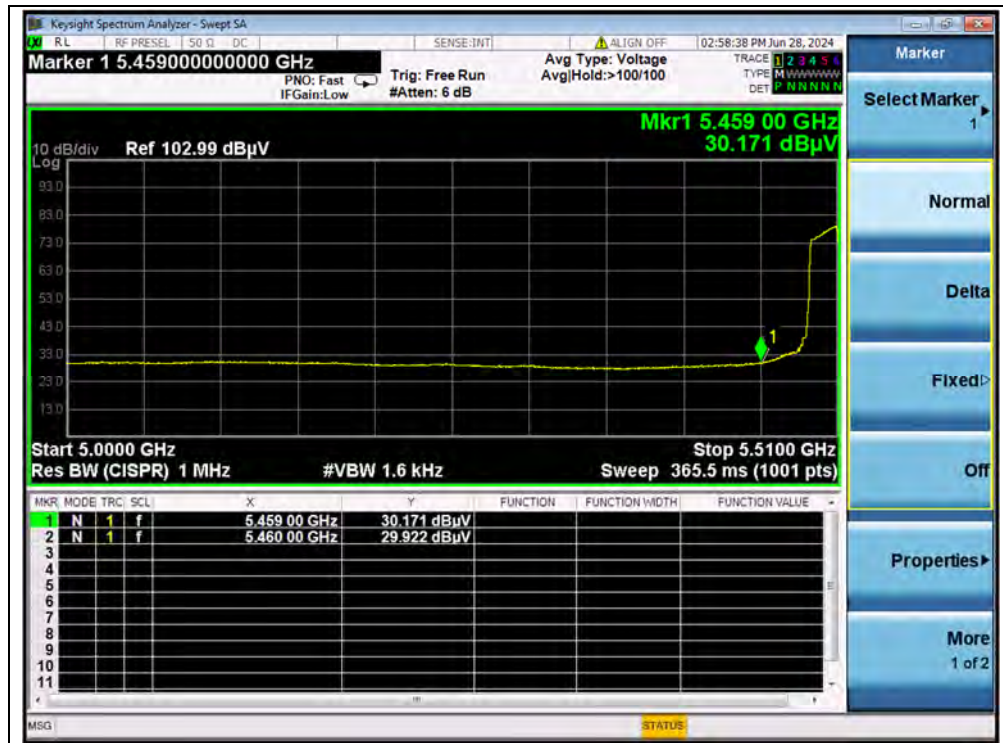


(AVERAGE, Channel 62, 802.11n (HT40))



(PEAK, Channel 102, 802.11n (HT40))



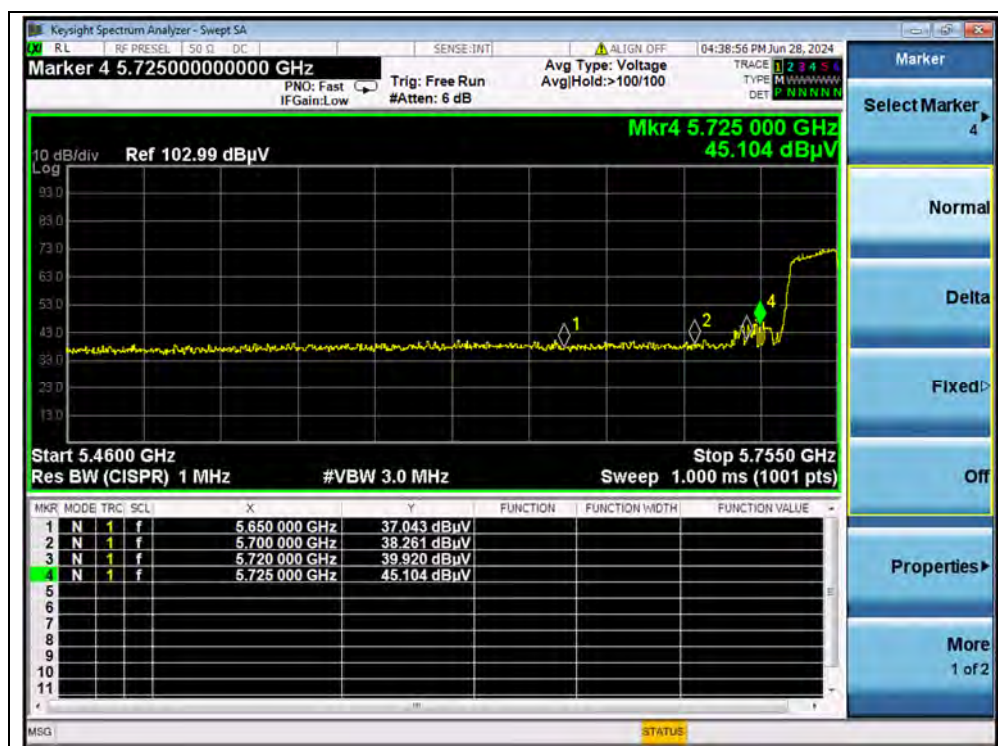


(AVERAGE, Channel 102, 802.11n (HT40))

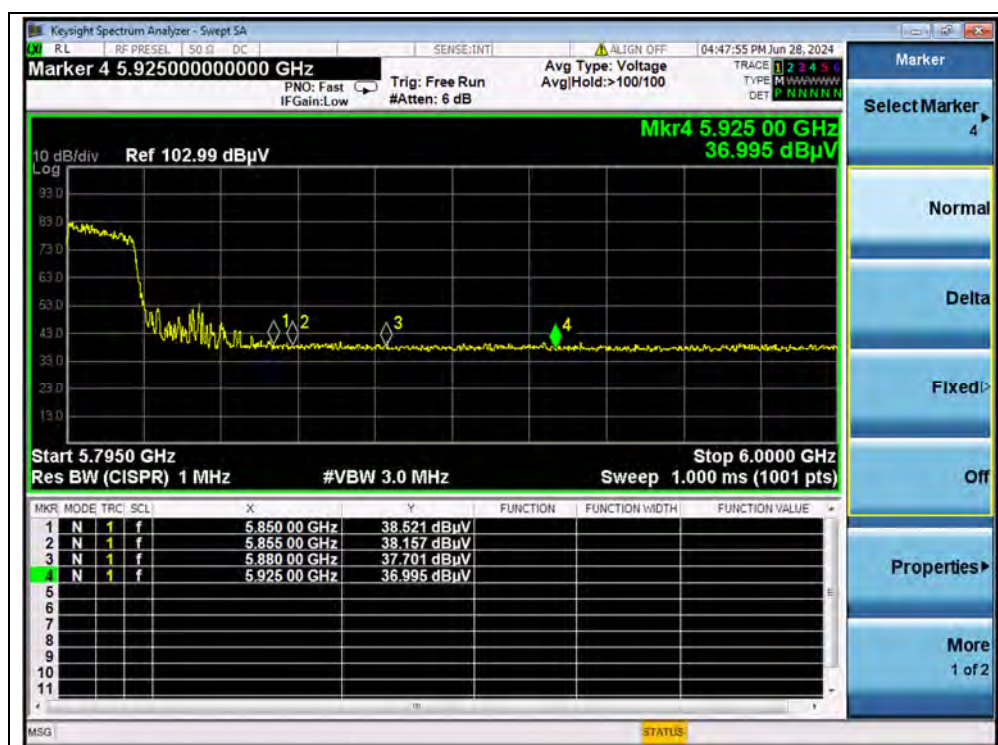


(PEAK, Channel 142, 802.11n (HT40))





(PEAK, Channel 151, 802.11n (HT40))

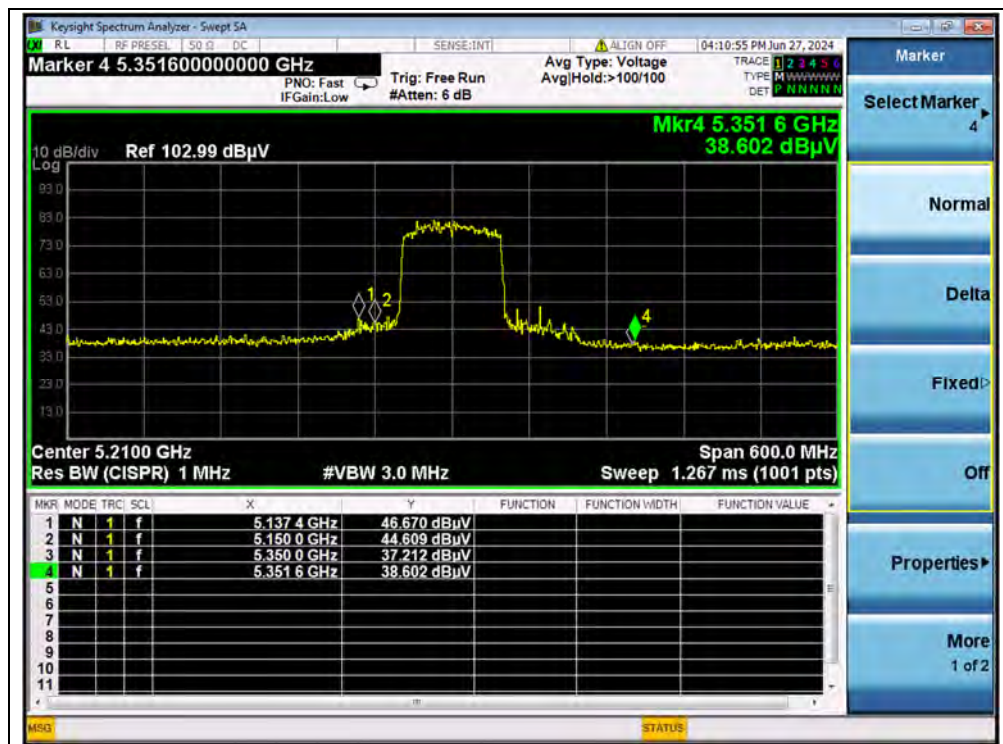


(PEAK, Channel 159, 802.11n (HT40))

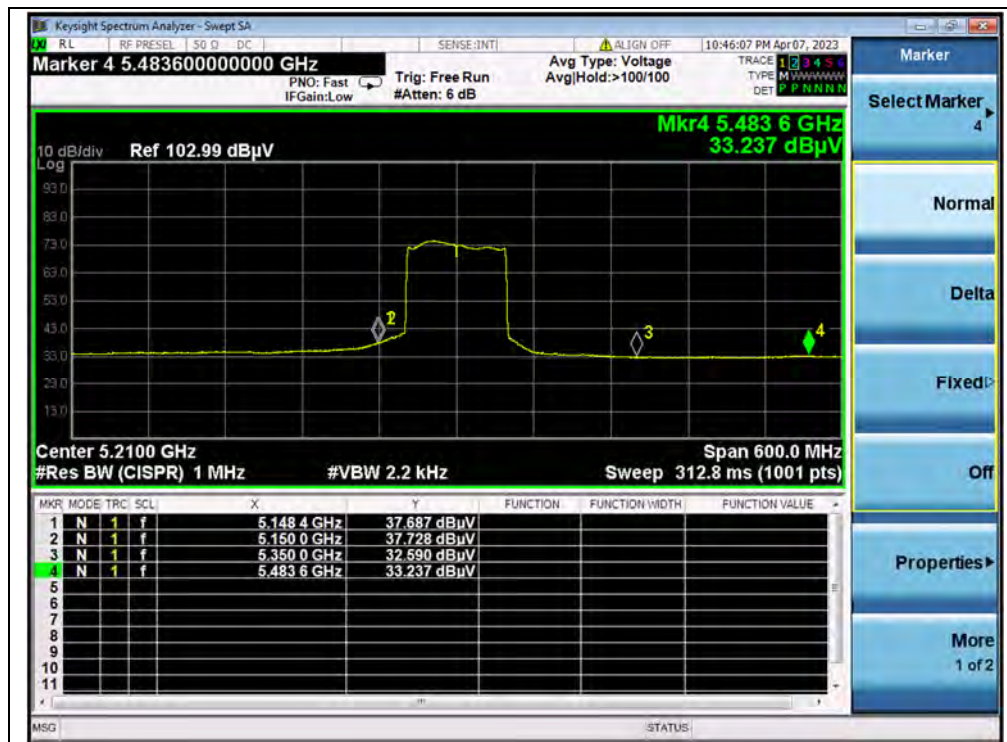


### 802.11ac (VHT80) Mode

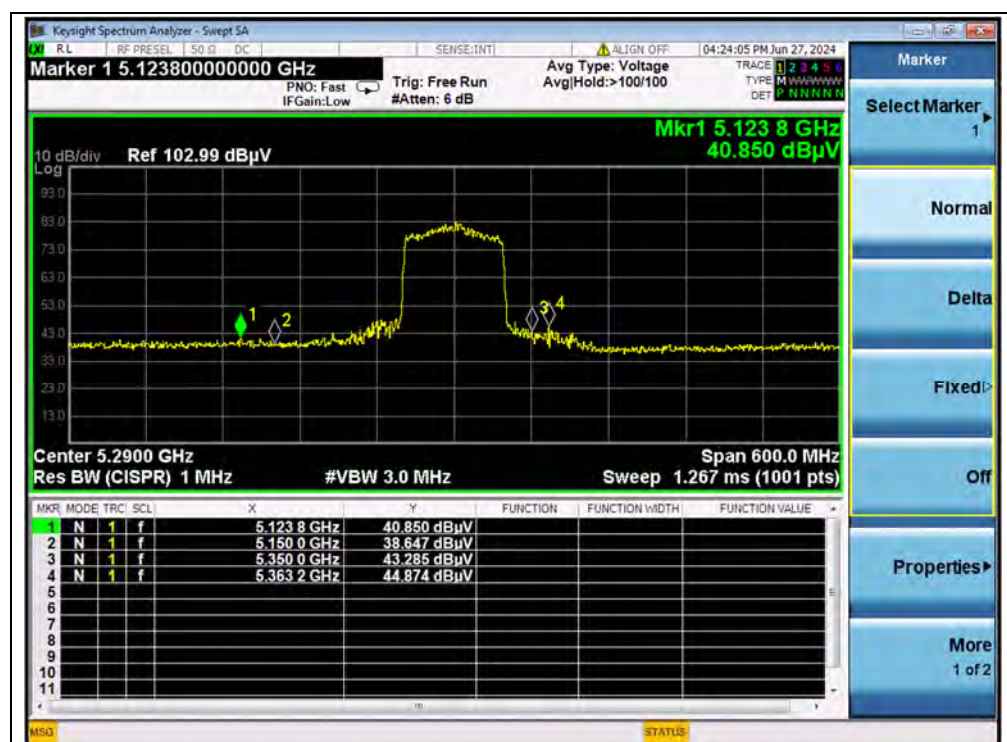
| Channel | Frequency (MHz) | Detector | Receiver Reading<br>$U_R$<br>(dB $\mu$ V) | $A_T$<br>(dB) | $A_{Factor}$<br>(dB@3m) | Max. Emission<br>$E$<br>(dB $\mu$ V/m) | Limit<br>(dB $\mu$ V/m) | Verdict |
|---------|-----------------|----------|-------------------------------------------|---------------|-------------------------|----------------------------------------|-------------------------|---------|
|         |                 | PK/ AV   |                                           |               |                         |                                        |                         |         |
| 42      | 5137.40         | PK       | 46.67                                     | -21.29        | 32.20                   | 57.58                                  | 74                      | PASS    |
| 42      | 5144.60         | AV       | 35.67                                     | -21.29        | 32.20                   | 46.58                                  | 54                      | PASS    |
| 58      | 5363.20         | PK       | 44.87                                     | -20.66        | 32.20                   | 56.41                                  | 74                      | PASS    |
| 58      | 5350.00         | AV       | 36.82                                     | -20.66        | 32.20                   | 48.36                                  | 54                      | PASS    |
| 106     | 5467.46         | PK       | 33.56                                     | -20.24        | 32.20                   | 45.52                                  | 68.23                   | PASS    |
| 106     | 5469.05         | AV       | 48.09                                     | -20.24        | 32.20                   | 60.05                                  | 54                      | PASS    |
| 138     | 5729.34         | PK       | 40.47                                     | -20.24        | 32.20                   | 52.43                                  | 68.23                   | PASS    |
| 155     | 5720.00         | PK       | 46.83                                     | -21.11        | 32.20                   | 57.92                                  | 110.83                  | PASS    |
| 155     | 5855.00         | PK       | 38.45                                     | -21.11        | 32.20                   | 49.54                                  | 122.23                  | PASS    |



(PEAK, Channel 42, 802.11ac (VHT80))

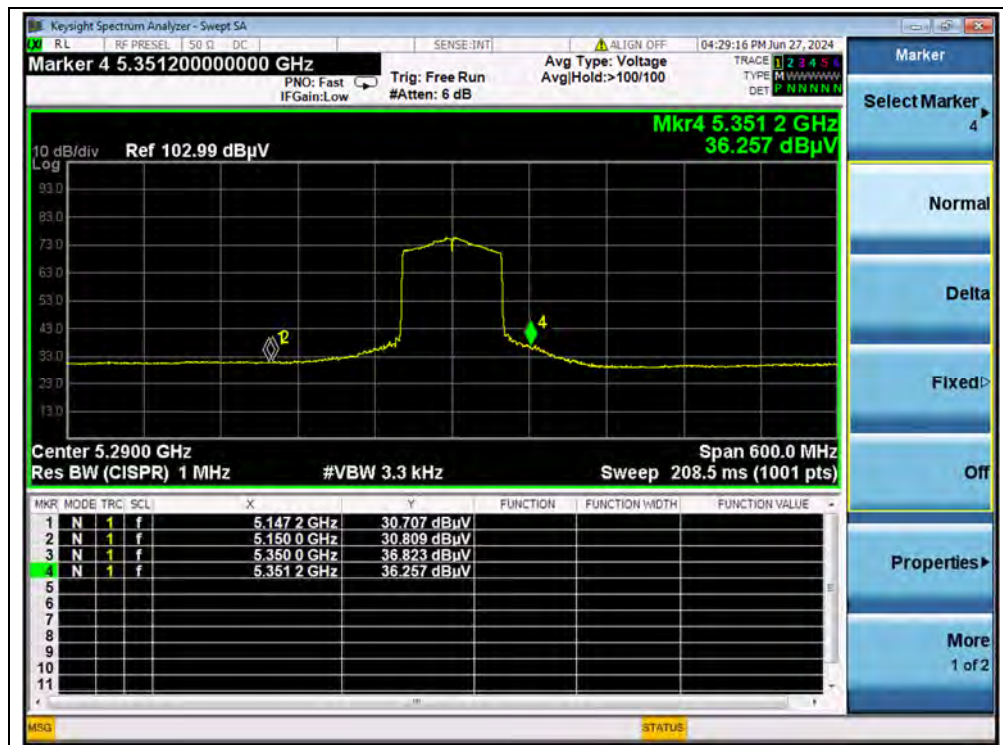


(AVERAGE, Channel 42, 802.11ac (VHT80))

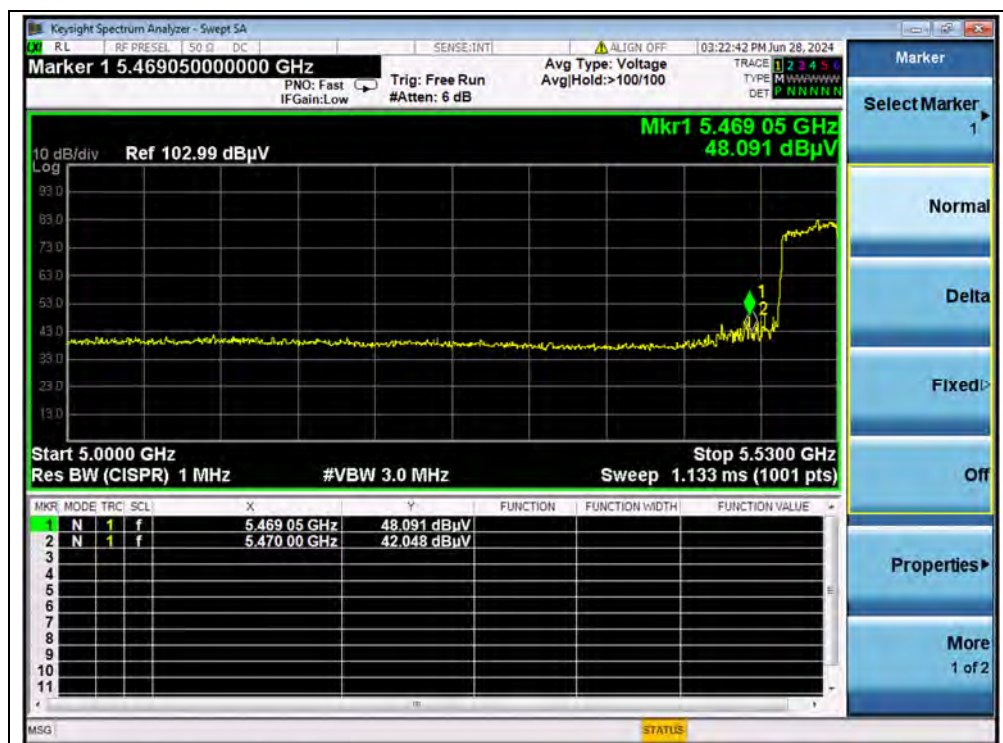


(PEAK, Channel 58, 802.11ac (VHT80))



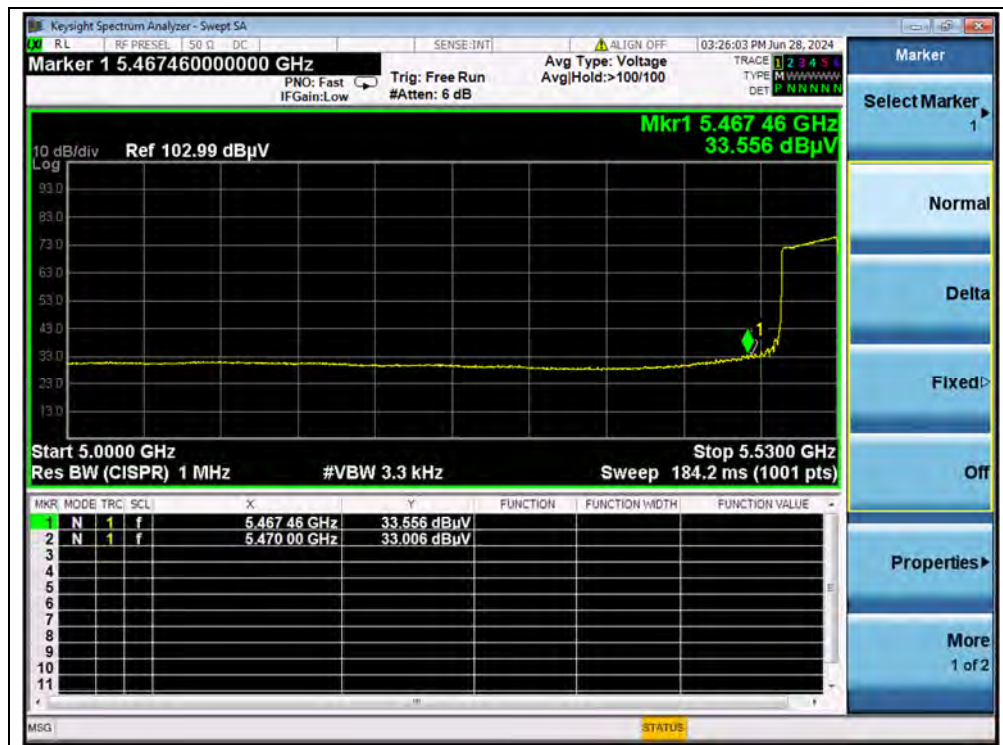


(AVERAGE, Channel 58, 802.11ac (VHT80))

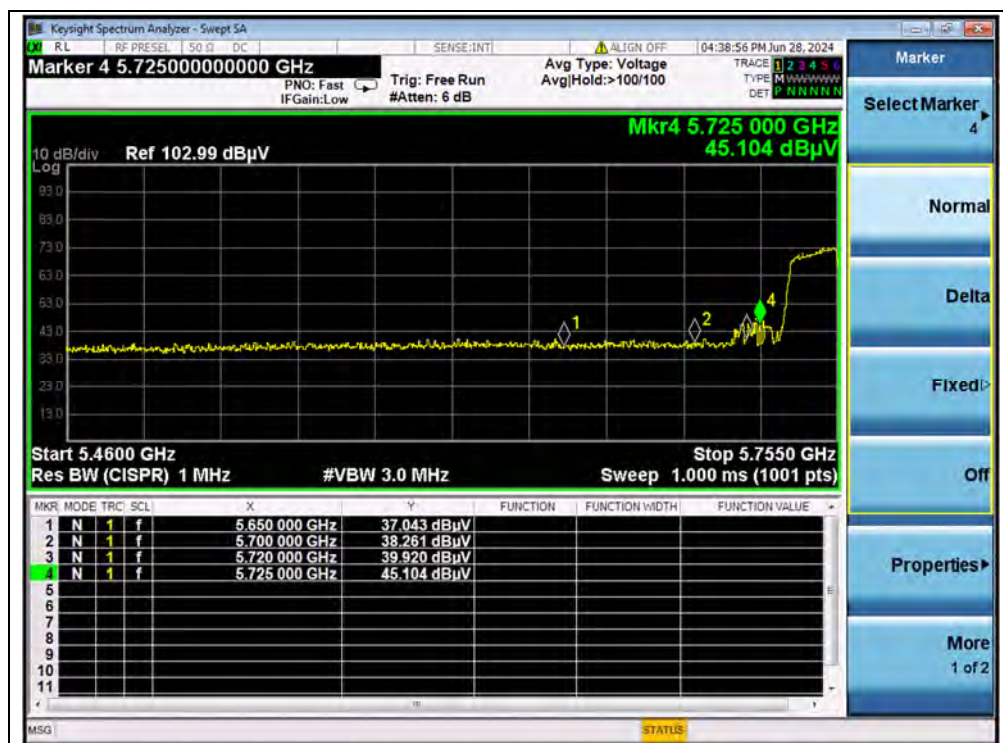


(PEAK, Channel 106, 802.11ac (VHT80))

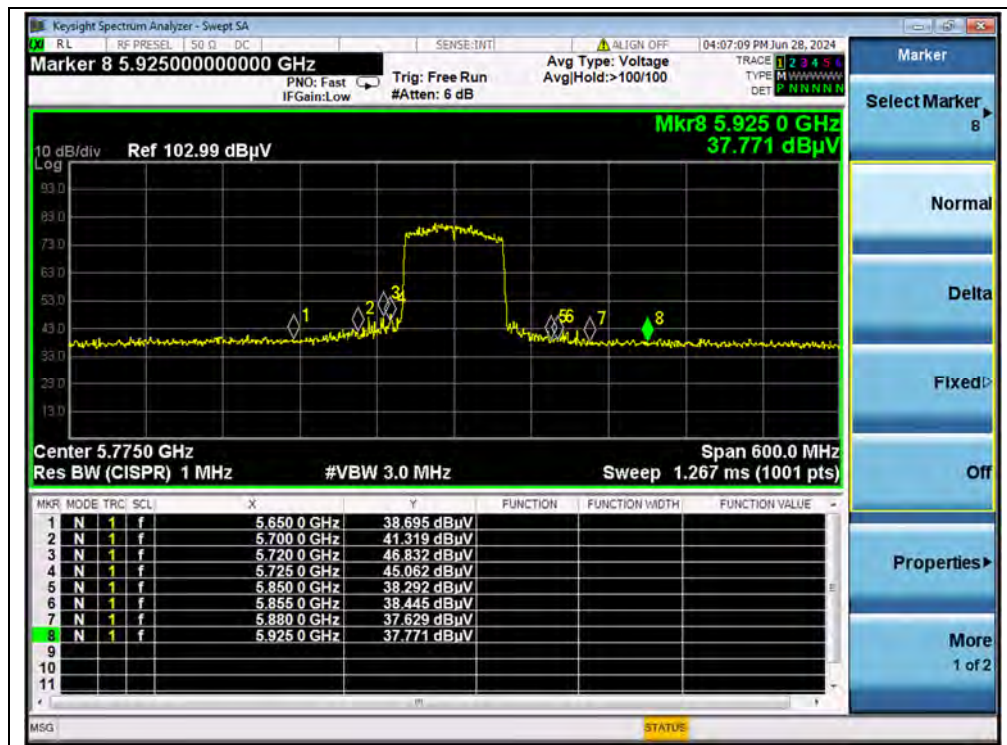




(AVERAGE, Channel 106, 802.11ac (VHT80))



(PEAK, Channel 138, 802.11ac (VHT80))



(PEAK, Channel 155, 802.11ac (VHT80))



### A.9. Radiated Emission

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

$A_T$ : Total correction Factor except Antenna

$U_R$ : Receiver Reading

$G_{\text{preamp}}$ : Preamplifier Gain

$A_{\text{Factor}}$ : Antenna Factor at 3m

During the test, the total correction Factor  $A_T$  and  $A_{\text{Factor}}$  were built in test software.

**Note1:** All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

**Note2:** For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

**Note3:** For the frequency, which started from 18GHz to 40GHz harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

**Note 4:** All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

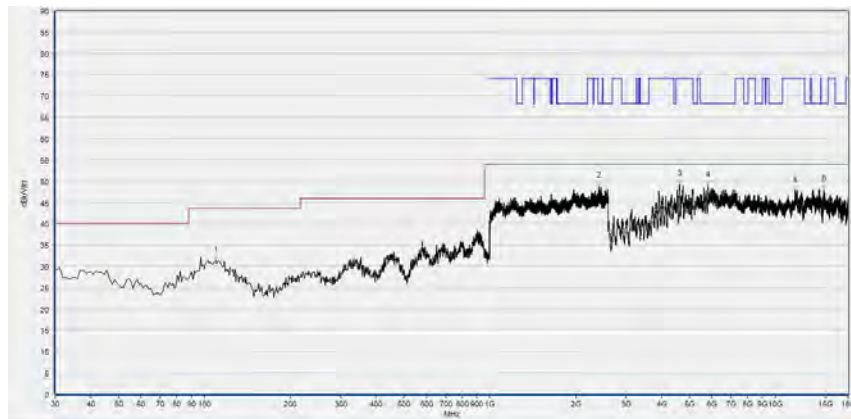
Field strength of fundamental:

| Frequency<br>(MHz) | Reading_Peak<br>(dB $\mu$ V/m) | Antenna<br>Factor (dB) | Path Loss<br>(dB) | Final_Peak<br>(dB $\mu$ V/m) | Antenna<br>Polarity |
|--------------------|--------------------------------|------------------------|-------------------|------------------------------|---------------------|
| 5196.20            | 81.91                          | 32.20                  | -21.29            | 92.82                        | Horizontal          |

The field strength (the lowest) of fundamenta is more than 20dB higher than the unwanted emissions, in accordance with FCC part 15.215(b).

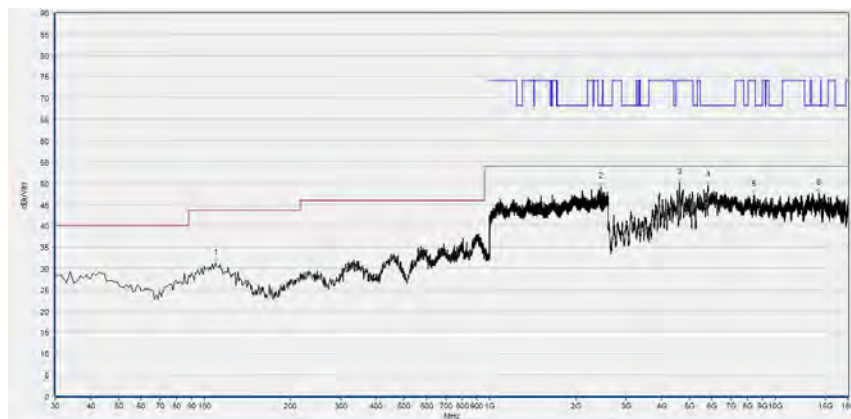
**802.11a Mode**

## Plot for Channel 44



| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna    | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|------------|---------|
| 109.540    | 31.33          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Horizontal | PASS    |
| 2406.933   | 48.77          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Horizontal | PASS    |
| 4623.560   | 49.35          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 5812.440   | 48.86          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Horizontal | PASS    |
| 11778.400  | 47.69          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 14833.760  | 48.04          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)



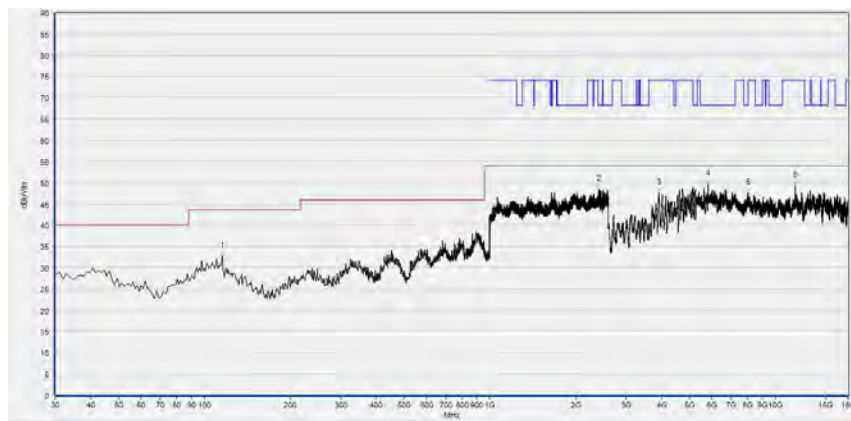
| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna  | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|----------|---------|
| 109.540    | 31.15          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Vertical | PASS    |
| 2444.800   | 49.10          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 4623.560   | 50.05          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 5821.680   | 49.45          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 8433.520   | 47.19          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 14190.040  | 47.52          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)



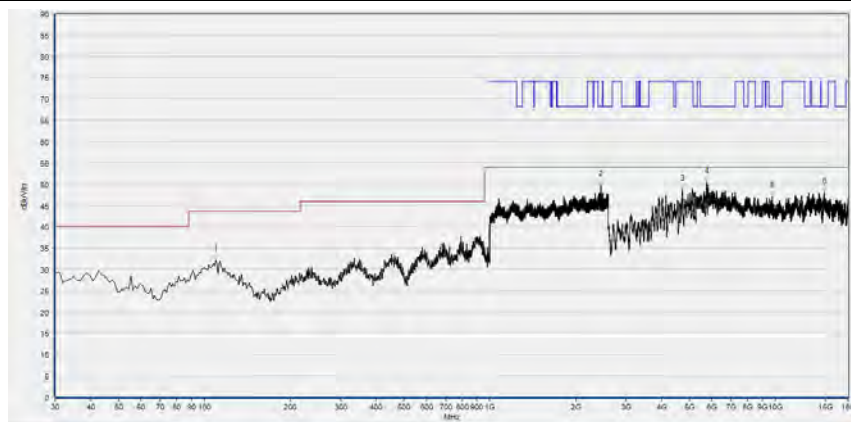


Plot for Channel 60



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 115.360    | 32.69       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2409.600   | 48.50       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 3899.760   | 47.67       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5815.520   | 49.66       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 8020.800   | 47.57       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 11769.160  | 49.22       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |

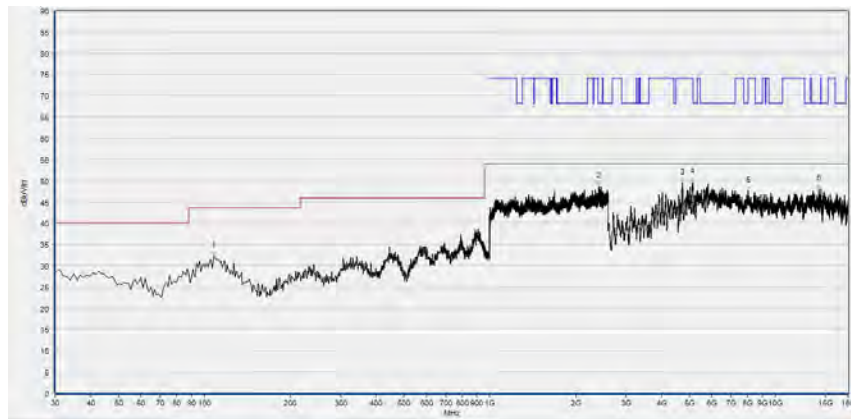
(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 109.540    | 32.13       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2452.267   | 49.72       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 4734.440   | 48.79       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5741.600   | 50.36       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 9745.600   | 47.07       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 14839.920  | 48.08       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |

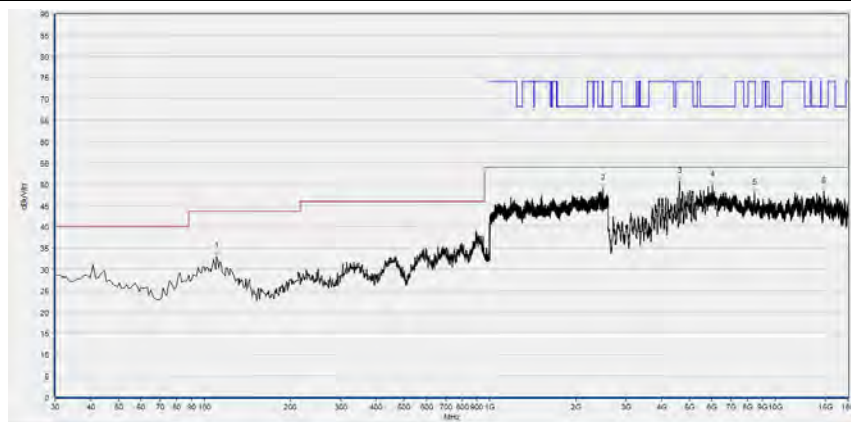
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 120



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 107.600    | 32.18       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2413.333   | 48.56       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 4734.440   | 49.46       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5137.920   | 49.60       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 8051.600   | 47.62       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 14251.640  | 48.13       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |

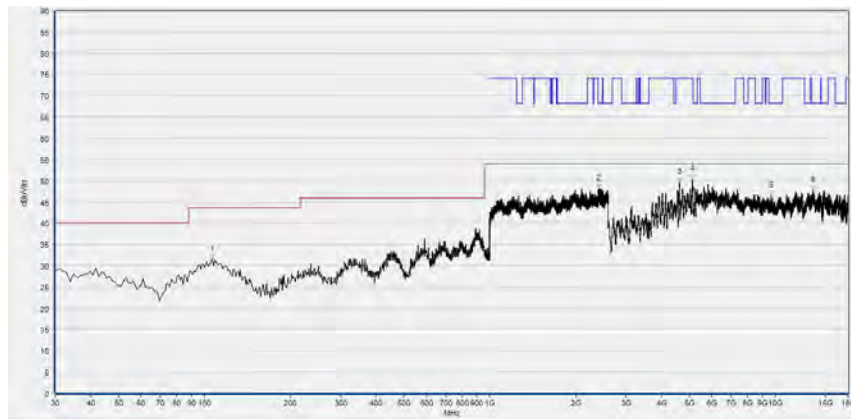
(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 110.510    | 33.03       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2494.400   | 48.96       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 4617.400   | 50.63       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 6031.120   | 49.70       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 8448.920   | 47.97       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 14827.600  | 48.25       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |

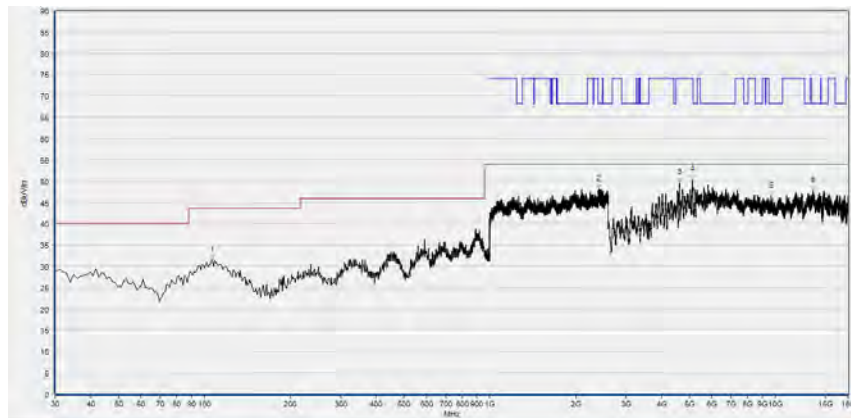
(Antenna Vertical, 30MHz to 18GHz)

## Plot for Channel 157



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 106.630    | 31.35       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2415.467   | 48.08       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 4614.320   | 49.69       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5119.440   | 50.30       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 9640.880   | 46.46       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 13595.600  | 47.82       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)



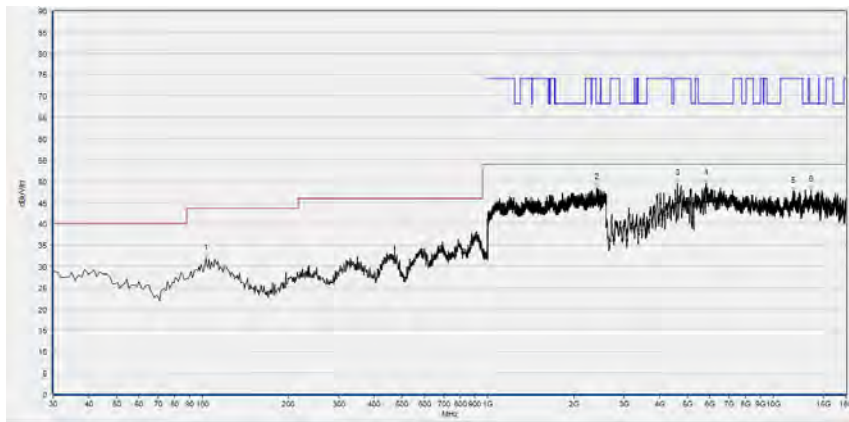
| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 106.630    | 31.35       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2415.467   | 48.08       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 4614.320   | 49.69       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5119.440   | 50.30       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 9640.880   | 46.46       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 13595.600  | 47.82       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)



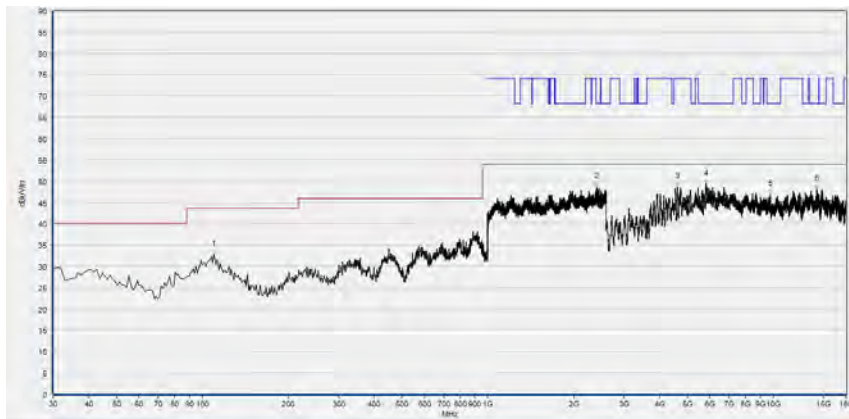
**802.11n (HT40) mode**

Plot for Channel 46



| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna    | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|------------|---------|
| 102.750    | 31.92          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Horizontal | PASS    |
| 2406.400   | 48.38          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 4620.480   | 49.51          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 5815.520   | 49.43          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 11769.160  | 47.66          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 13577.120  | 47.92          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)



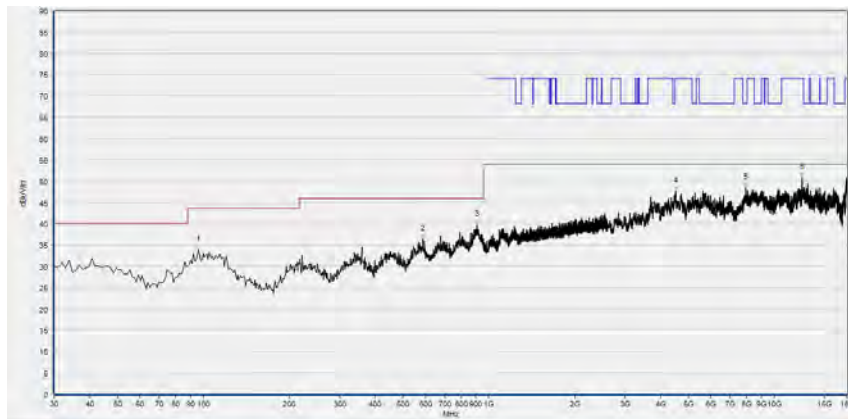
| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna  | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|----------|---------|
| 109.540    | 32.63          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Vertical | PASS    |
| 2415.467   | 48.63          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 4617.400   | 48.63          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 5812.440   | 49.23          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 9764.080   | 46.94          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 14190.040  | 48.12          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)



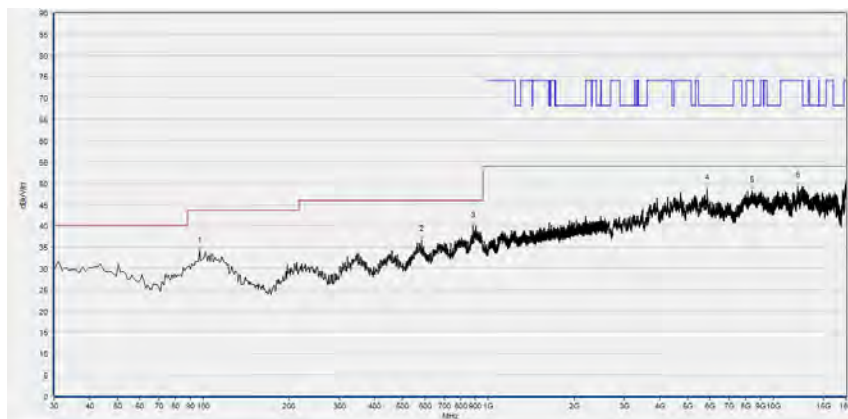


Plot for Channel 54



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 96.026     | 33.79       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 587.337    | 36.40       | N/A         | N/A         | N/A               | 46.00             | N/A               | Horizontal | PASS    |
| 907.758    | 39.70       | N/A         | N/A         | N/A               | 46.00             | N/A               | Horizontal | PASS    |
| 4522.304   | 47.56       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 7963.353   | 48.49       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 12525.745  | 50.85       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |

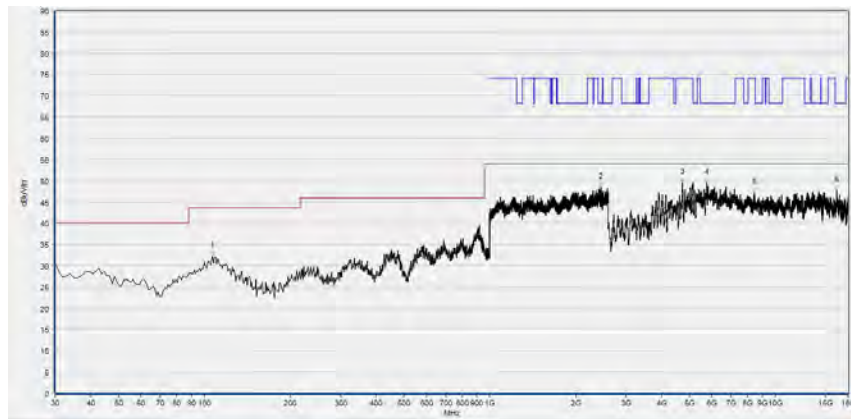
(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 96.997     | 34.06       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 583.453    | 36.65       | N/A         | N/A         | N/A               | 46.00             | N/A               | Vertical | PASS    |
| 882.513    | 39.91       | N/A         | N/A         | N/A               | 46.00             | N/A               | Vertical | PASS    |
| 5862.372   | 48.70       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 8434.687   | 48.19       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 12152.991  | 49.21       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |

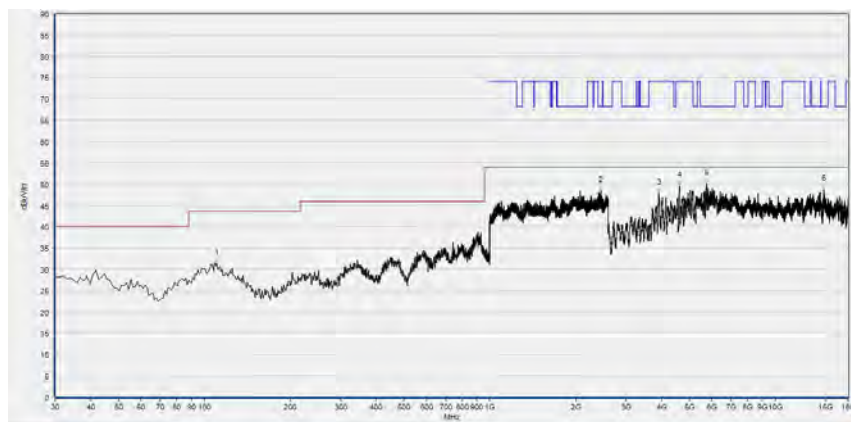
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 62



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 106.630    | 32.26       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2449.600   | 48.36       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 4731.360   | 49.58       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5753.920   | 49.42       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 8436.600   | 47.07       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 16447.680  | 47.74       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)

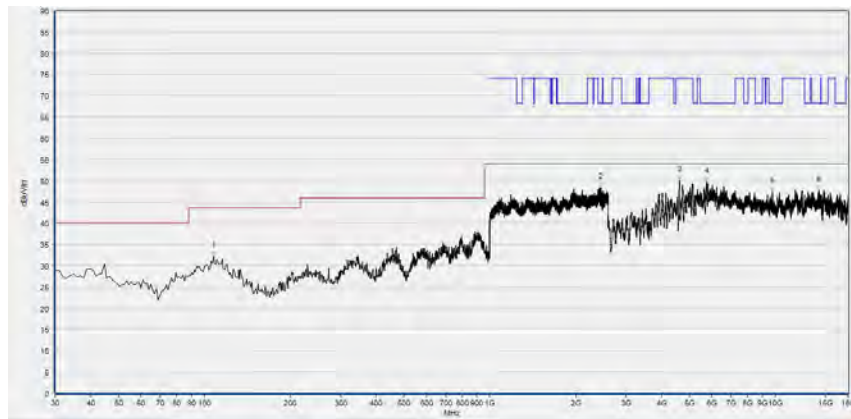


| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 110.510    | 31.26       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2443.733   | 48.50       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 3905.920   | 47.94       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 4611.240   | 49.53       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5747.760   | 50.13       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 14762.920  | 48.78       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)

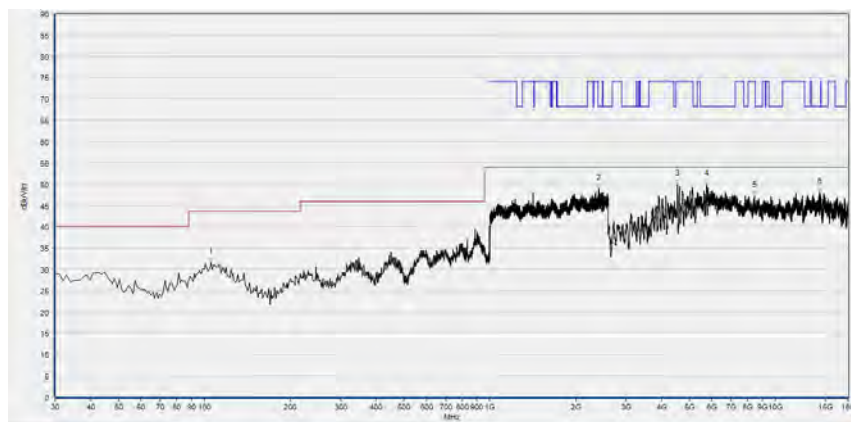


Plot for Channel 126



| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna    | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|------------|---------|
| 107.600    | 32.10          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Horizontal | PASS    |
| 2450.667   | 48.48          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 4617.400   | 50.14          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 5753.920   | 49.70          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 9751.760   | 47.48          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 14211.600  | 47.77          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |

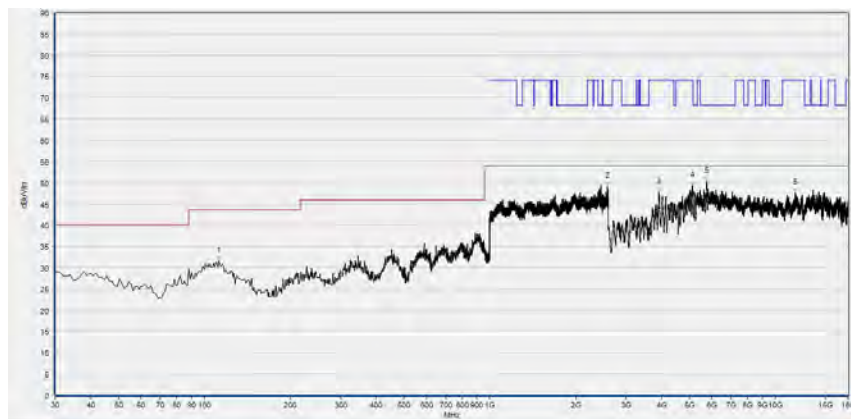
(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna  | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|----------|---------|
| 105.660    | 31.67          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Vertical | PASS    |
| 2411.200   | 48.97          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 4543.480   | 49.89          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 5750.840   | 49.90          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |
| 8461.240   | 47.19          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 14254.720  | 48.15          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Vertical | PASS    |

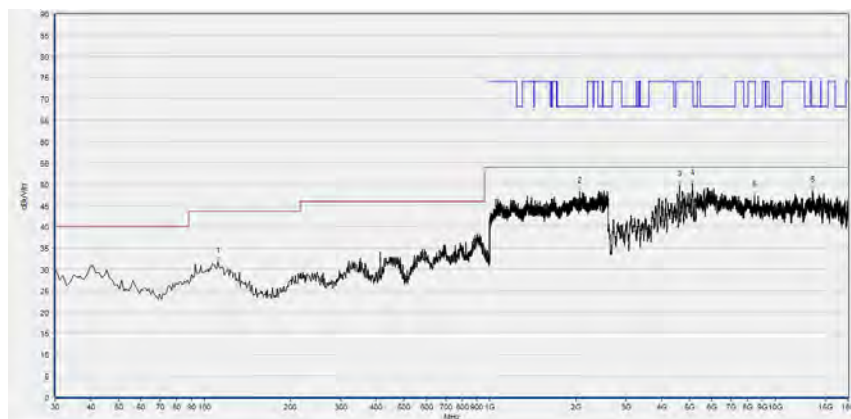
(Antenna Vertical, 30MHz to 18GHz)

## Plot for Channel 159



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 112.450    | 31.44       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2582.400   | 49.14       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 3909.000   | 47.75       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5137.920   | 49.20       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5750.840   | 50.26       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 11778.400  | 47.57       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)



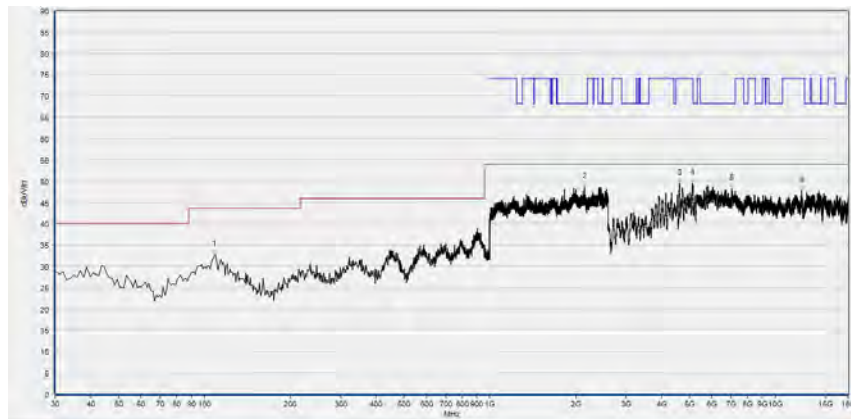
| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 111.480    | 31.87       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2067.200   | 48.25       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 4611.240   | 49.86       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5119.440   | 50.07       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 8442.760   | 47.35       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 13475.480  | 48.42       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)



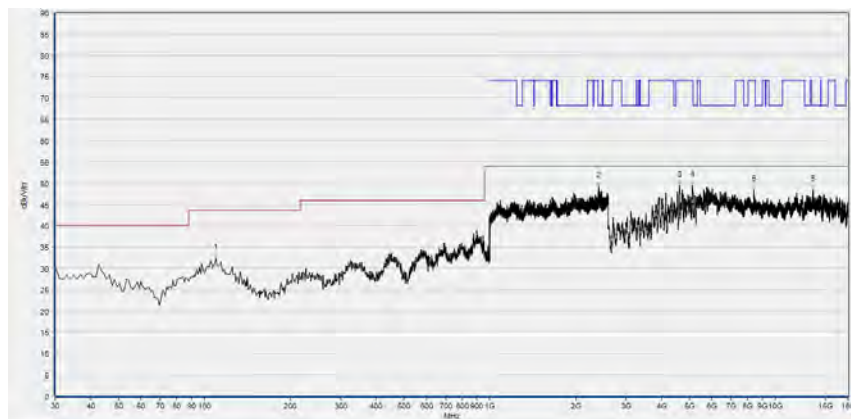
**802.11ac (VHT80) Mode**

Plot for Channel 42



| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna    | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|------------|---------|
| 108.570    | 32.71          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Horizontal | PASS    |
| 2152.533   | 48.56          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Horizontal | PASS    |
| 4614.320   | 49.47          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 5134.840   | 49.47          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |
| 7041.360   | 48.29          | N/A            | N/A            | 68.23                | N/A                  | N/A                  | Horizontal | PASS    |
| 12406.720  | 47.70          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Horizontal | PASS    |

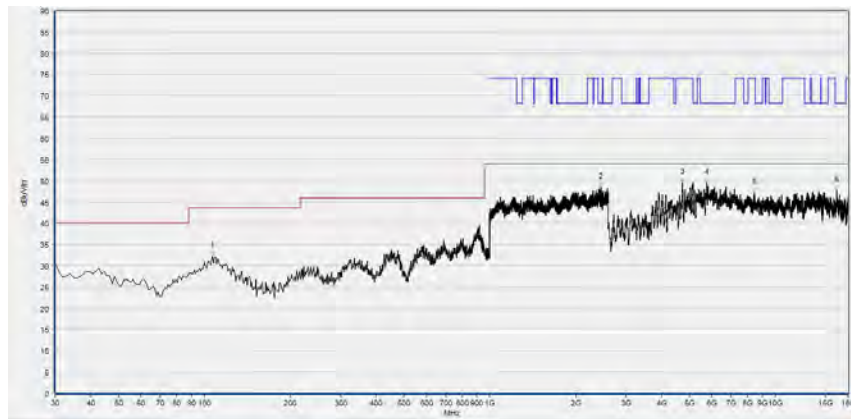
(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK<br>(dBμV/m) | QP<br>(dBμV/m) | AV<br>(dBμV/m) | Limit-PK<br>(dBμV/m) | Limit-QP<br>(dBμV/m) | Limit-AV<br>(dBμV/m) | Antenna  | Verdict |
|------------|----------------|----------------|----------------|----------------------|----------------------|----------------------|----------|---------|
| 109.540    | 32.41          | N/A            | N/A            | N/A                  | 43.50                | N/A                  | Vertical | PASS    |
| 2408.000   | 49.31          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 4614.320   | 49.43          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 5131.760   | 49.45          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 8396.560   | 48.35          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |
| 13558.640  | 48.42          | N/A            | N/A            | 74.00                | N/A                  | 54.00                | Vertical | PASS    |

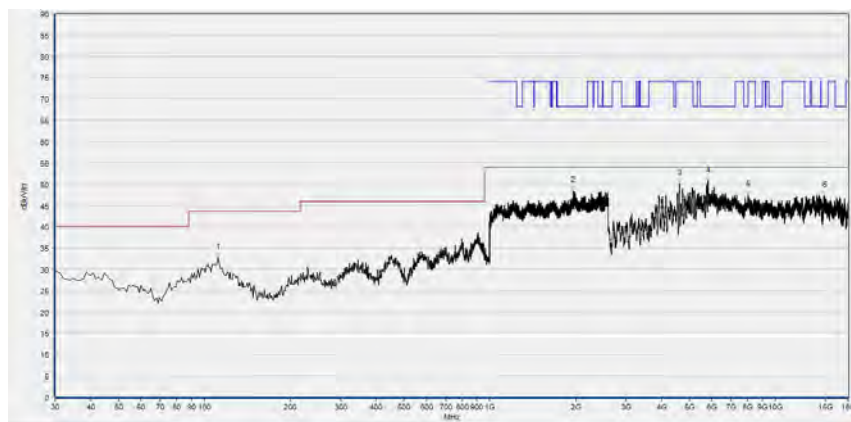
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 58



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 106.630    | 32.26       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2449.600   | 48.36       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 4731.360   | 49.58       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5753.920   | 49.42       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 8436.600   | 47.07       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 16447.680  | 47.74       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)

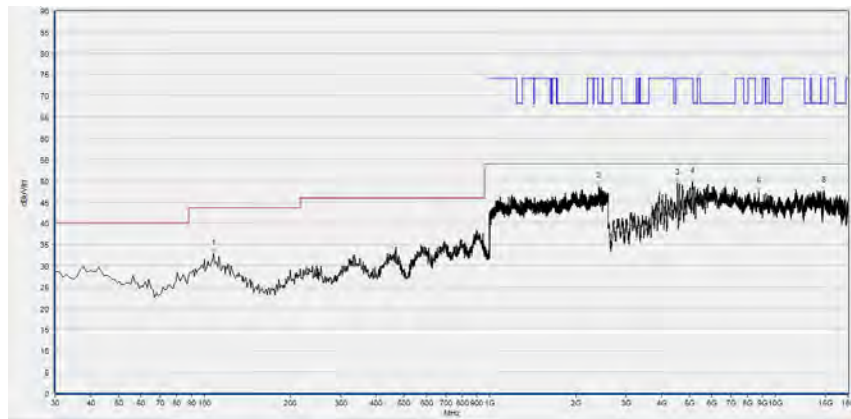


| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 111.480    | 32.61       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 1962.667   | 48.43       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 4611.240   | 50.19       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5803.200   | 50.57       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 8026.960   | 47.51       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 14846.080  | 47.25       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)

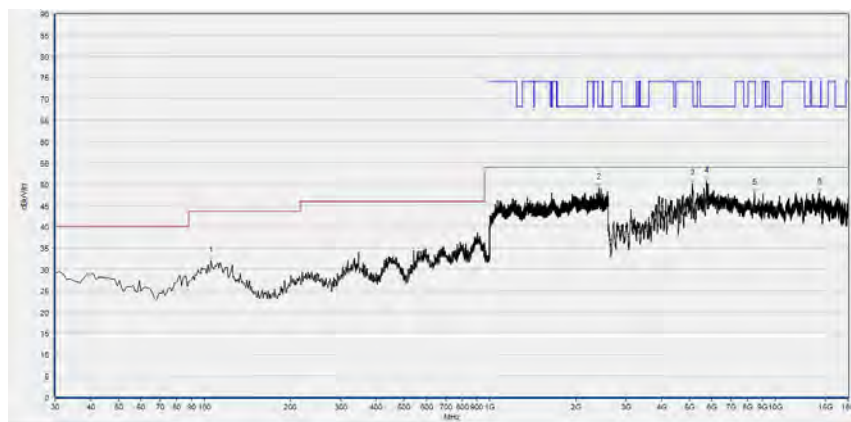


Plot for Channel 122



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 107.600    | 32.88       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2408.533   | 48.58       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 4543.480   | 49.46       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5122.520   | 49.74       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 8769.240   | 47.35       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 14809.120  | 47.58       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |

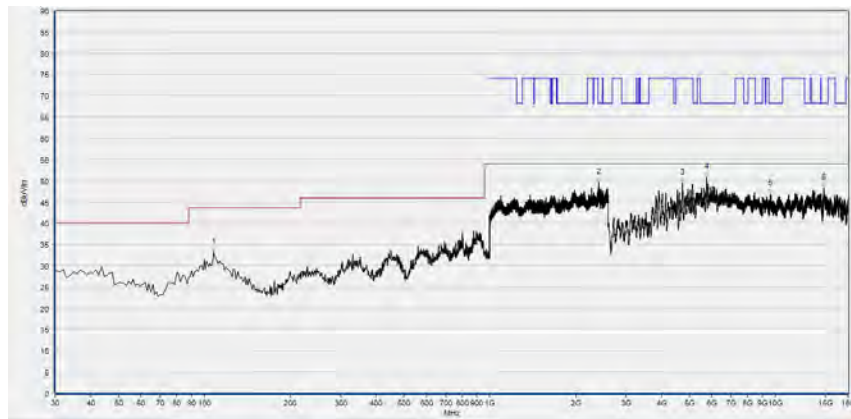
(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 105.660    | 31.95       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2411.200   | 49.04       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 5119.440   | 50.18       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5738.520   | 50.66       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 8445.840   | 47.95       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 14260.880  | 48.04       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |

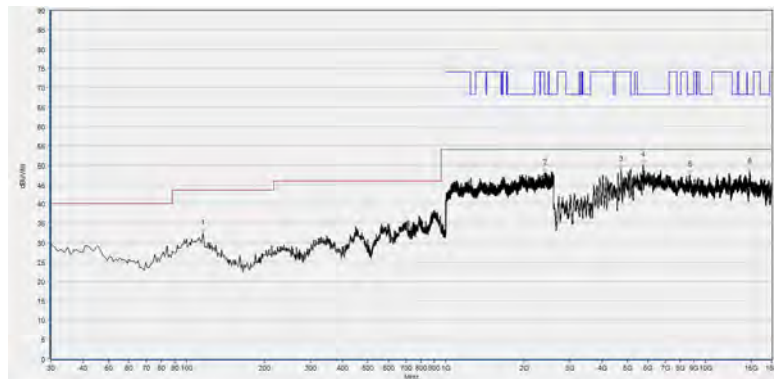
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 155



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna    | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|------------|---------|
| 107.600    | 33.10       | N/A         | N/A         | N/A               | 43.50             | N/A               | Horizontal | PASS    |
| 2405.867   | 49.56       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 4737.520   | 49.39       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Horizontal | PASS    |
| 5738.520   | 50.85       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 9628.560   | 46.95       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |
| 14806.040  | 48.34       | N/A         | N/A         | 68.23             | N/A               | N/A               | Horizontal | PASS    |

(Antenna Horizontal, 30MHz to 18GHz)



| Fre. (MHz) | PK (dBμV/m) | QP (dBμV/m) | AV (dBμV/m) | Limit-PK (dBμV/m) | Limit-QP (dBμV/m) | Limit-AV (dBμV/m) | Antenna  | Verdict |
|------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------|---------|
| 115.360    | 32.59       | N/A         | N/A         | N/A               | 43.50             | N/A               | Vertical | PASS    |
| 2405.867   | 48.02       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 4737.520   | 48.88       | N/A         | N/A         | 74.00             | N/A               | 54.00             | Vertical | PASS    |
| 5753.920   | 50.10       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 8701.480   | 47.53       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |
| 14790.640  | 48.38       | N/A         | N/A         | 68.23             | N/A               | N/A               | Vertical | PASS    |

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT