

**Appendix C for 5.6GWIFI Test Data**

**Product Name: CR S2**

**Test Model: CR S2**

**Environmental Conditions**

|                    |           |
|--------------------|-----------|
| Temperature:       | 25.4℃     |
| Relative Humidity: | 54.3%     |
| ATM Pressure:      | 101.0 kPa |
| Test Engineer:     | Kimi Lu   |
| Supervised by:     | Baret Wu  |

### C.1 Duty Cycle

| Mode | Frequency (MHz) | Antenna | T <sub>on</sub><br>ms | T <sub>total</sub><br>ms | Duty Cycle (%) | Correction Factor<br>(dB) | 1/T (kHz) |
|------|-----------------|---------|-----------------------|--------------------------|----------------|---------------------------|-----------|
| a    | 5500            | Ant1    | 2.06                  | 2.18                     | 94.52          | 0.24                      | 0.48      |
| a    | 5600            | Ant1    | 2.06                  | 2.14                     | 96.26          | 0.17                      | 0.49      |
| a    | 5700            | Ant1    | 2.07                  | 2.11                     | 98.1           | 0                         | 0.48      |
| n20  | 5500            | Ant1    | 1.92                  | 2.03                     | 94.58          | 0.24                      | 0.52      |
| n20  | 5600            | Ant1    | 1.92                  | 2.05                     | 93.66          | 0.28                      | 0.52      |
| n20  | 5700            | Ant1    | 1.92                  | 2.09                     | 91.87          | 0.37                      | 0.52      |
| n40  | 5510            | Ant1    | 0.94                  | 0.99                     | 94.95          | 0.23                      | 1.06      |
| n40  | 5550            | Ant1    | 0.94                  | 0.99                     | 94.95          | 0.23                      | 1.06      |
| n40  | 5670            | Ant1    | 0.94                  | 1.03                     | 91.26          | 0.4                       | 1.06      |
| ac20 | 5500            | Ant1    | 1.93                  | 2.09                     | 92.34          | 0.35                      | 0.52      |
| ac20 | 5600            | Ant1    | 1.93                  | 2.09                     | 92.34          | 0.35                      | 0.52      |
| ac20 | 5700            | Ant1    | 1.93                  | 1.99                     | 96.98          | 0.13                      | 0.52      |
| ac40 | 5510            | Ant1    | 0.96                  | 1.00                     | 96             | 0.18                      | 1.04      |
| ac40 | 5550            | Ant1    | 0.95                  | 1.04                     | 91.35          | 0.39                      | 1.05      |
| ac40 | 5670            | Ant1    | 0.95                  | 1.02                     | 93.14          | 0.31                      | 1.05      |
| ac80 | 5530            | Ant1    | 0.46                  | 0.55                     | 83.64          | 0.78                      | 2.17      |
| ac80 | 5610            | Ant1    | 0.46                  | 0.50                     | 92             | 0.36                      | 2.17      |

Note:

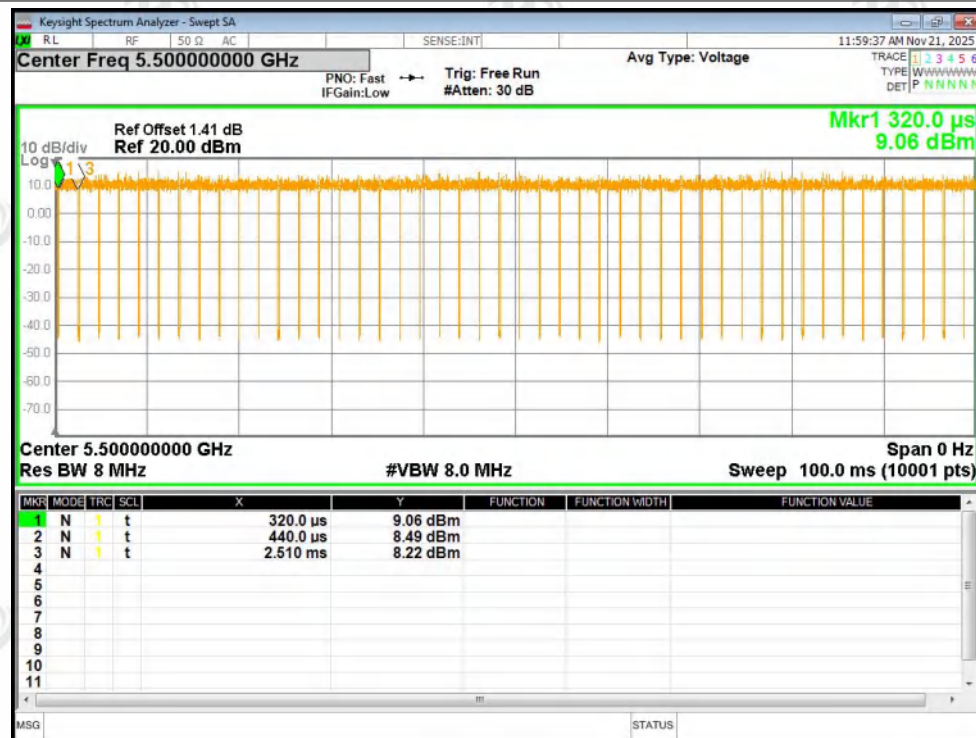
1. Duty Cycle =  $T_{on} / T_{total}$

2. Correction Factor =  $10 \log (1 / \text{Duty Cycle})$ .

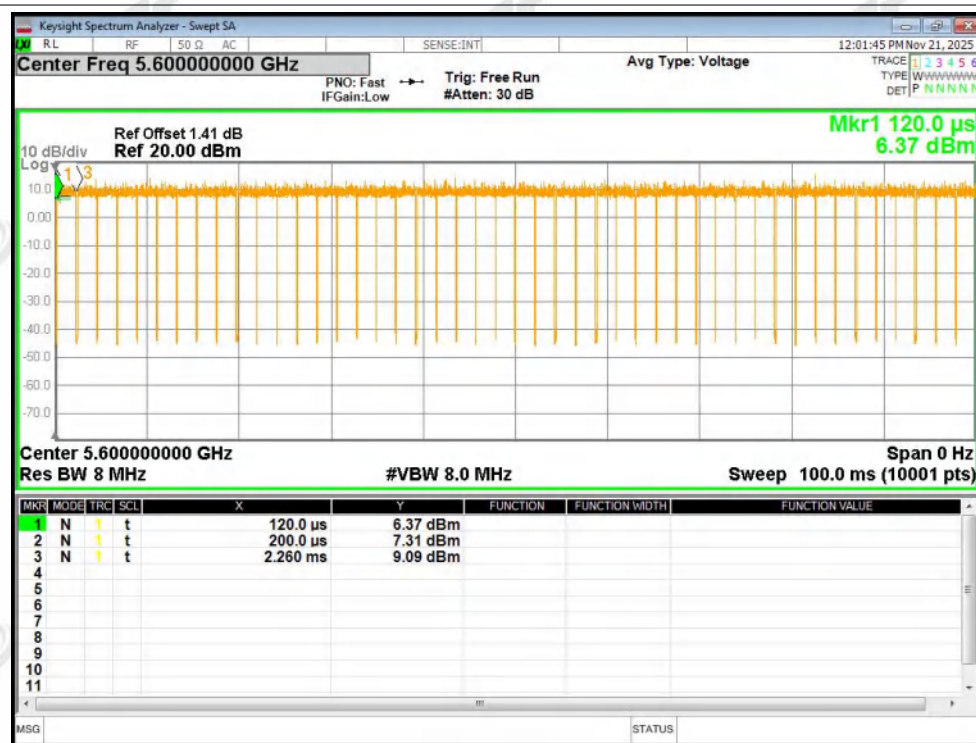
3.  $1/T = 1/T_{on}$

### Test Graphs

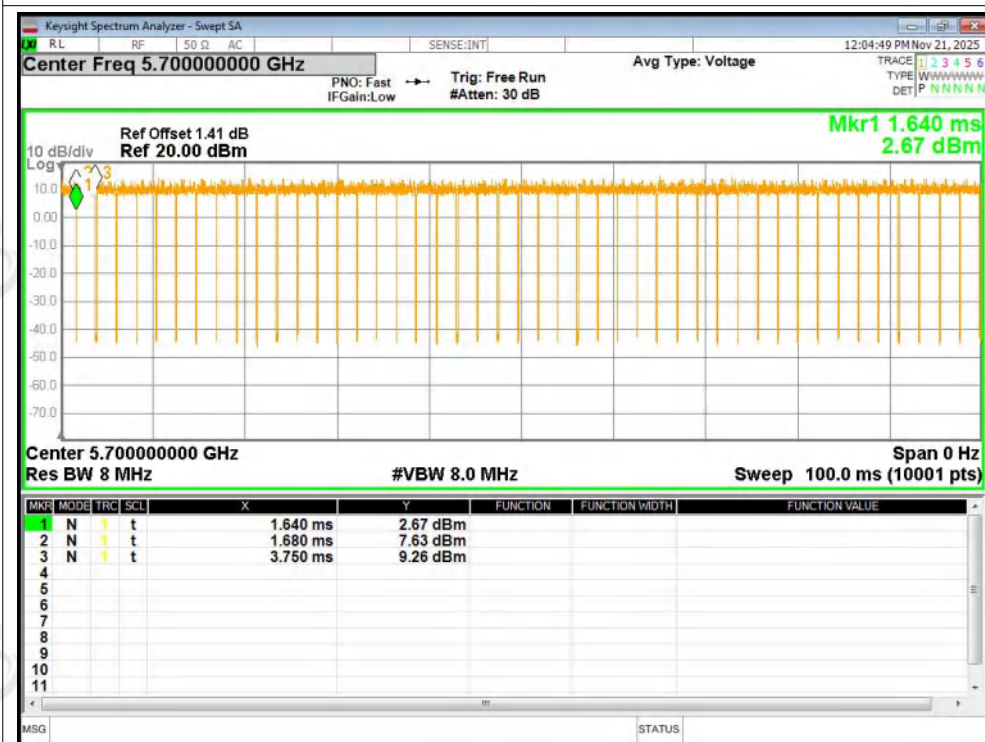
#### Duty Cycle NVNT a 5500MHz Ant1



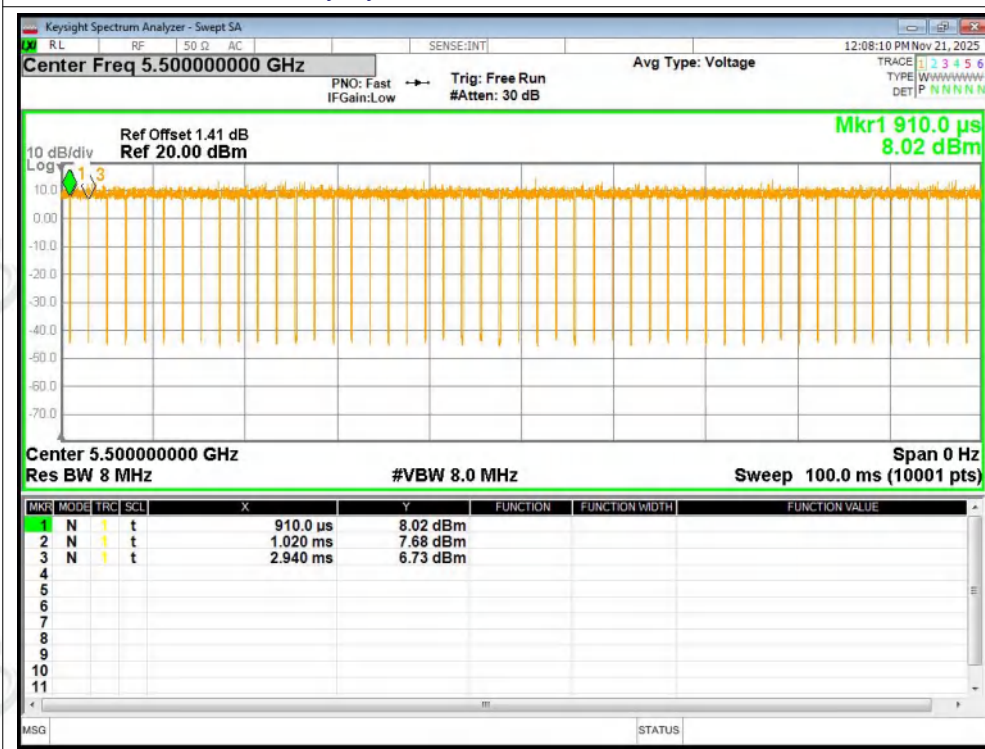
#### Duty Cycle NVNT a 5600MHz Ant1



### Duty Cycle NVNT a 5700MHz Ant1

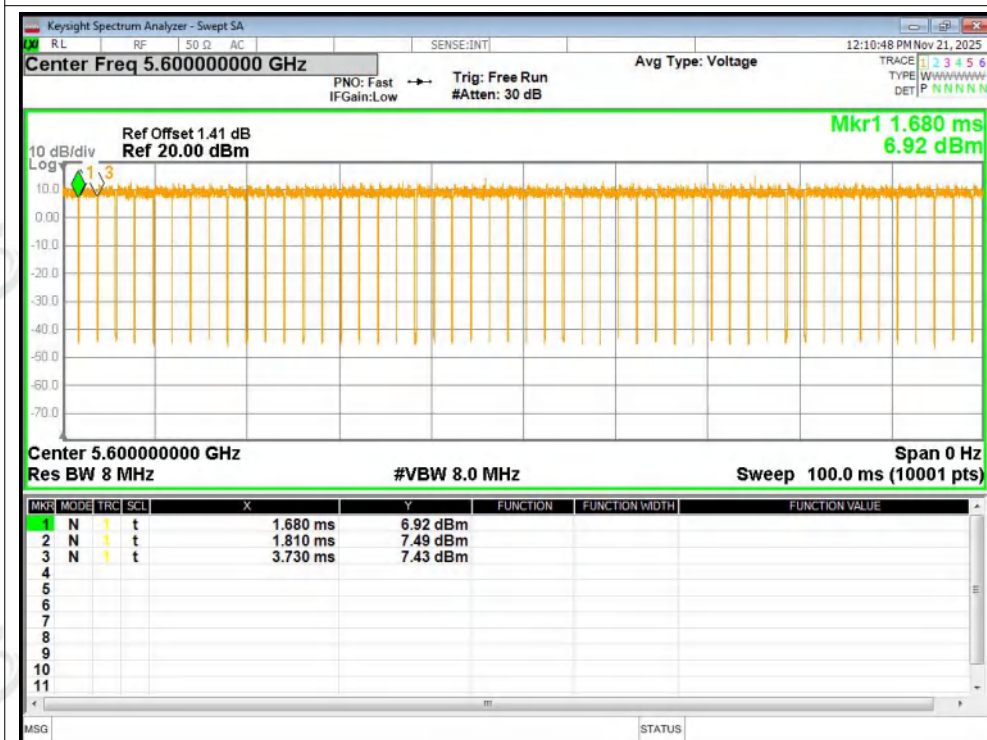


### Duty Cycle NVNT n20 5500MHz Ant1

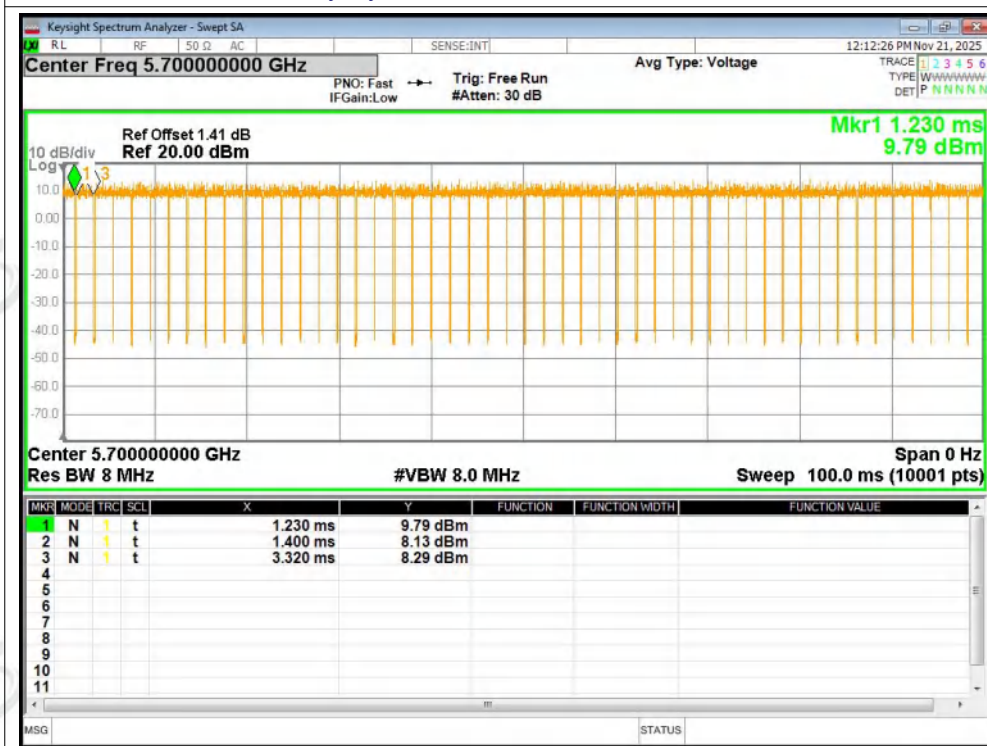




## Duty Cycle NVNT n20 5600MHz Ant1

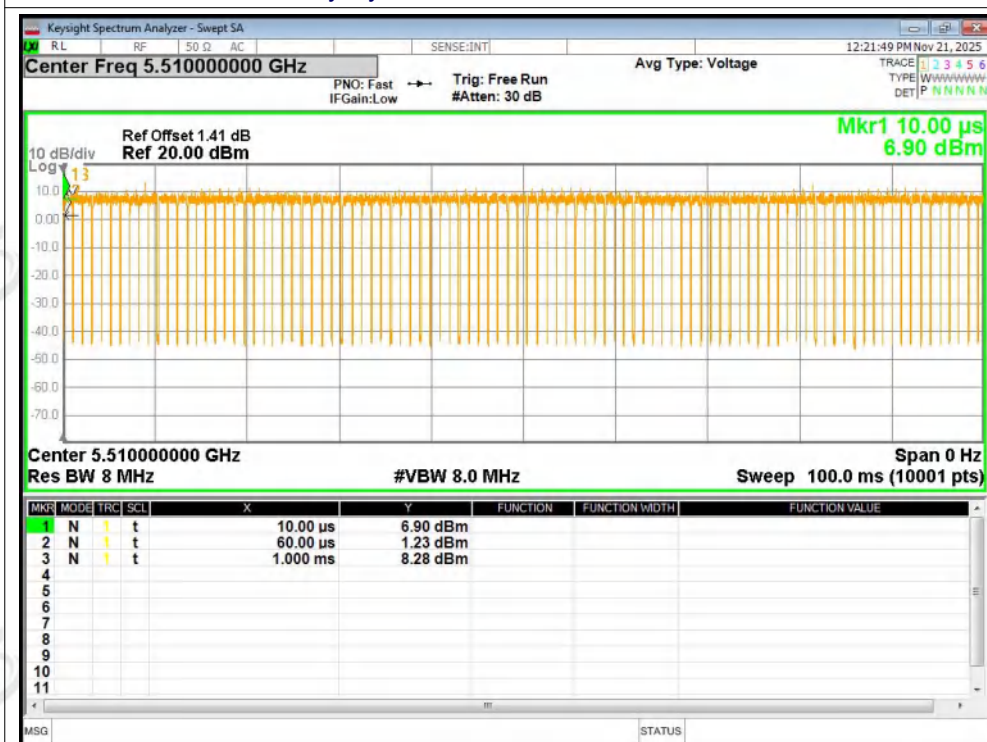


## Duty Cycle NVNT n20 5700MHz Ant1

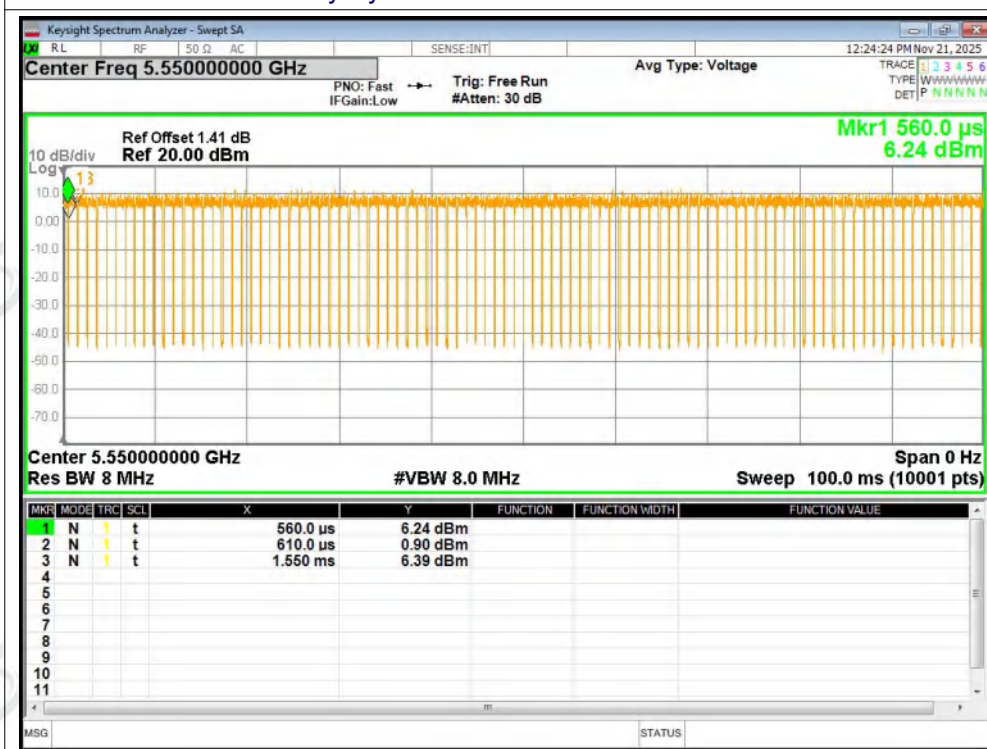




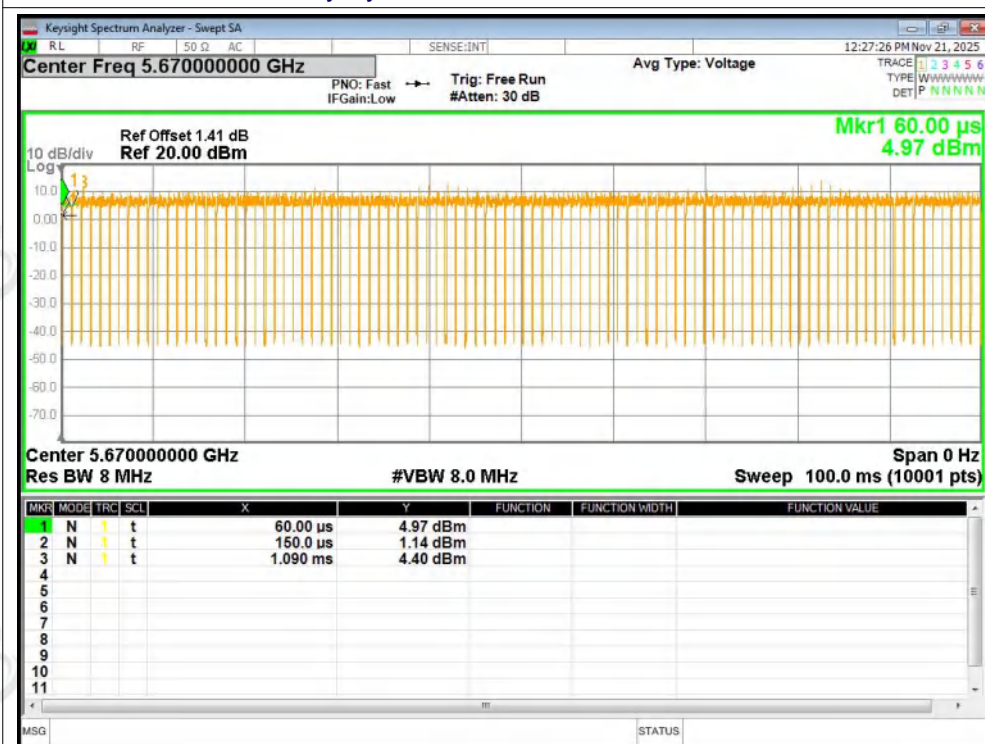
## Duty Cycle NVNT n40 5510MHz Ant1



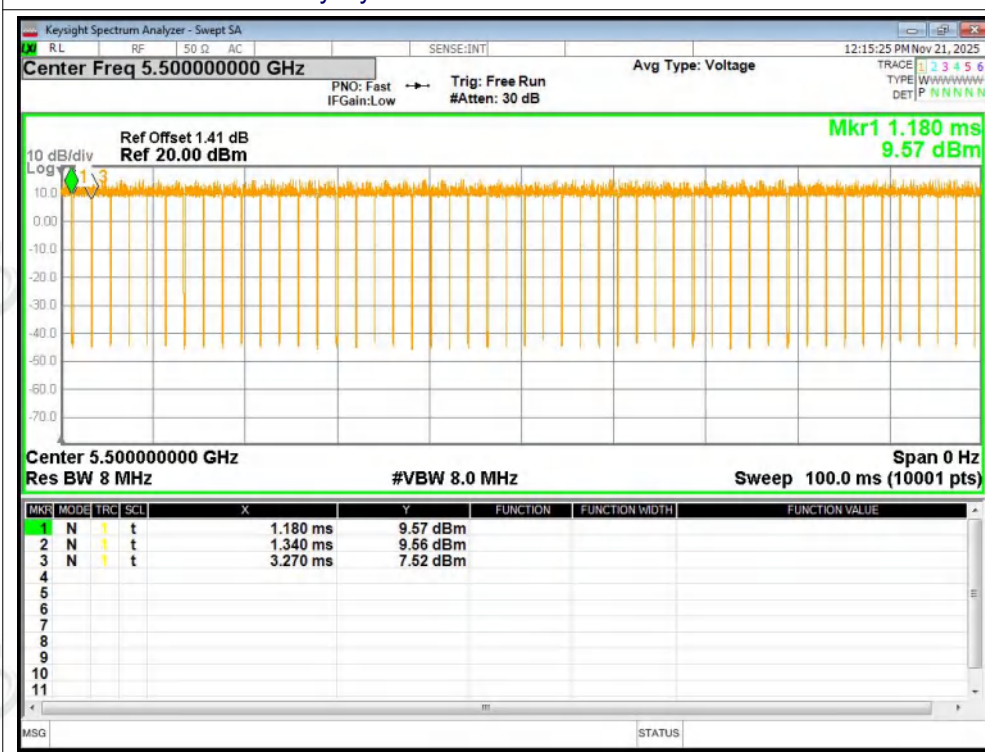
## Duty Cycle NVNT n40 5550MHz Ant1



### Duty Cycle NVNT n40 5670MHz Ant1

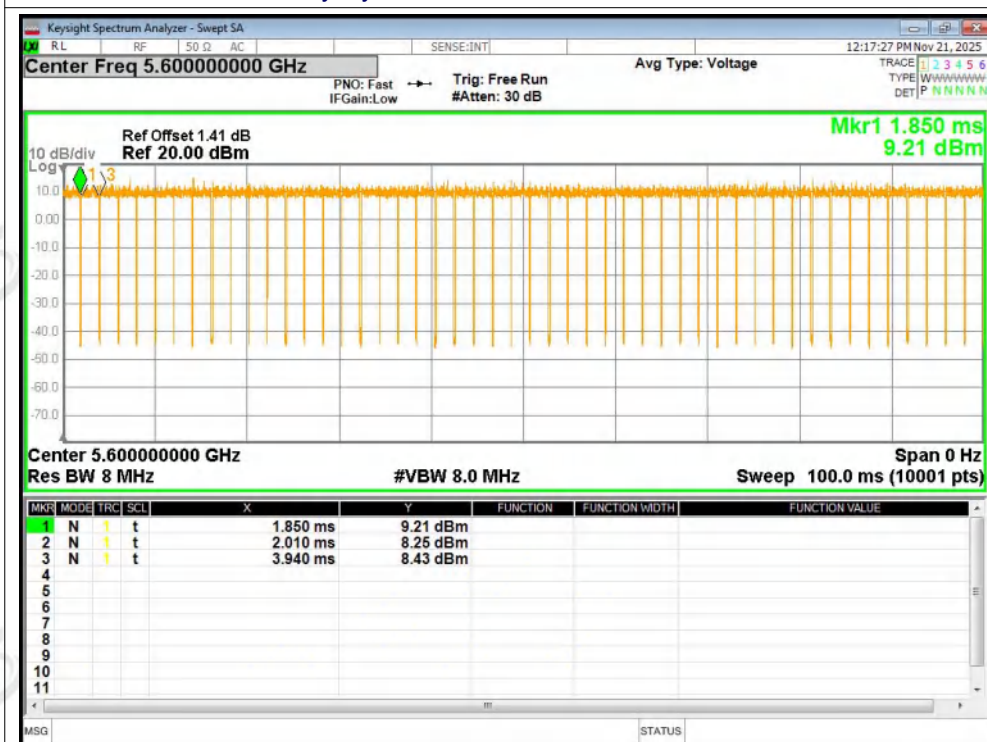


### Duty Cycle NVNT ac20 5500MHz Ant1

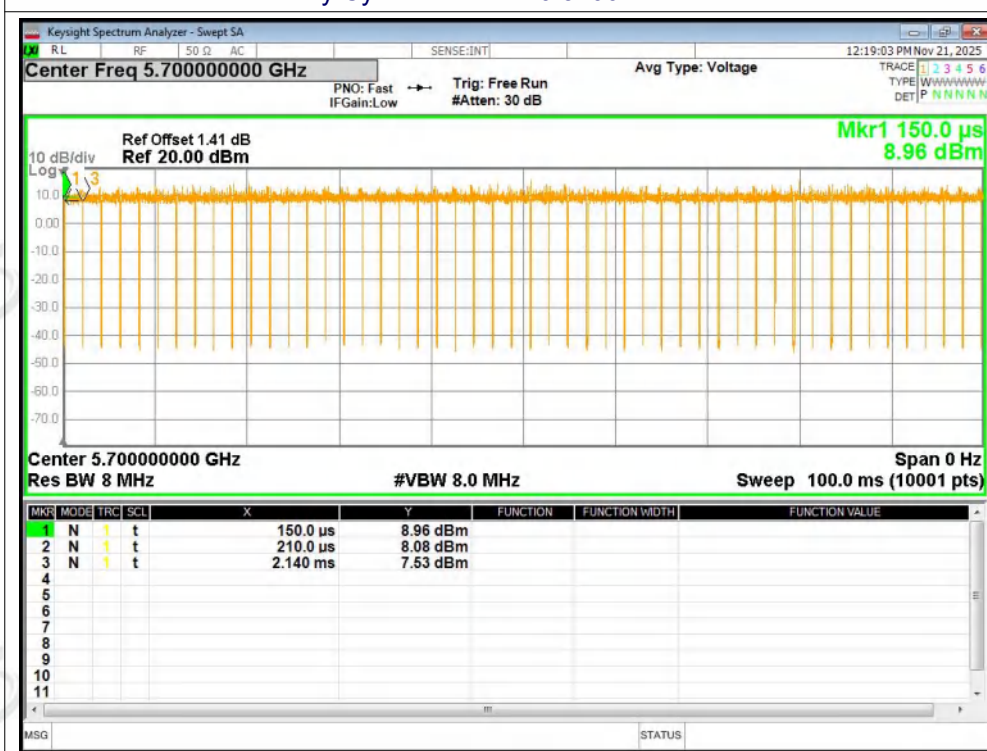




## Duty Cycle NVNT ac20 5600MHz Ant1

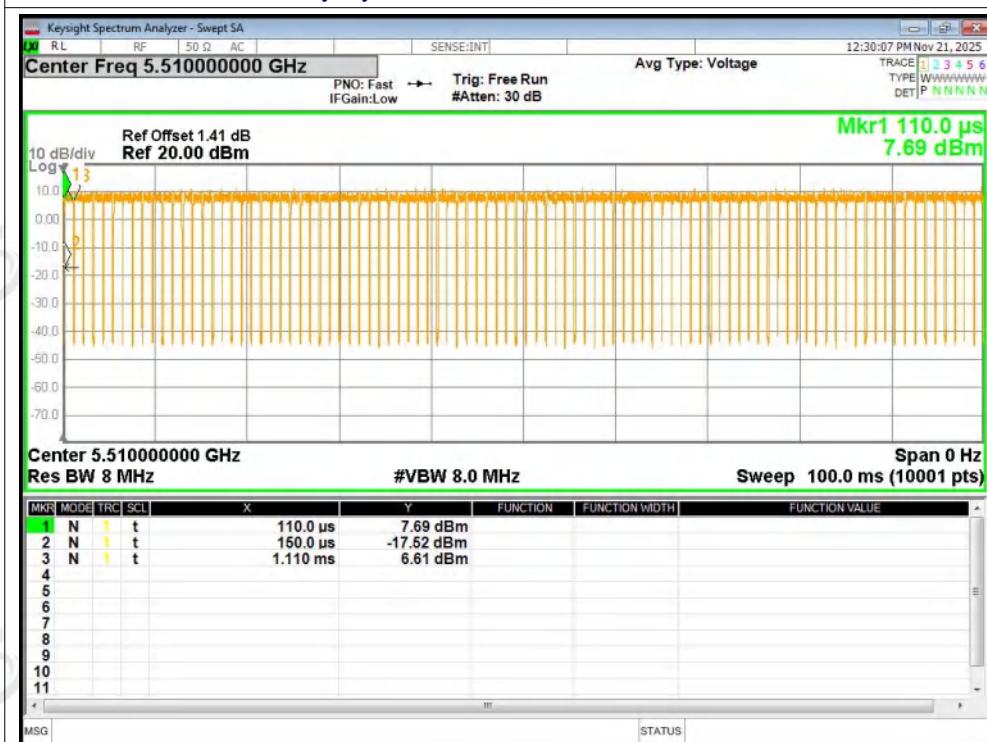


## Duty Cycle NVNT ac20 5700MHz Ant1

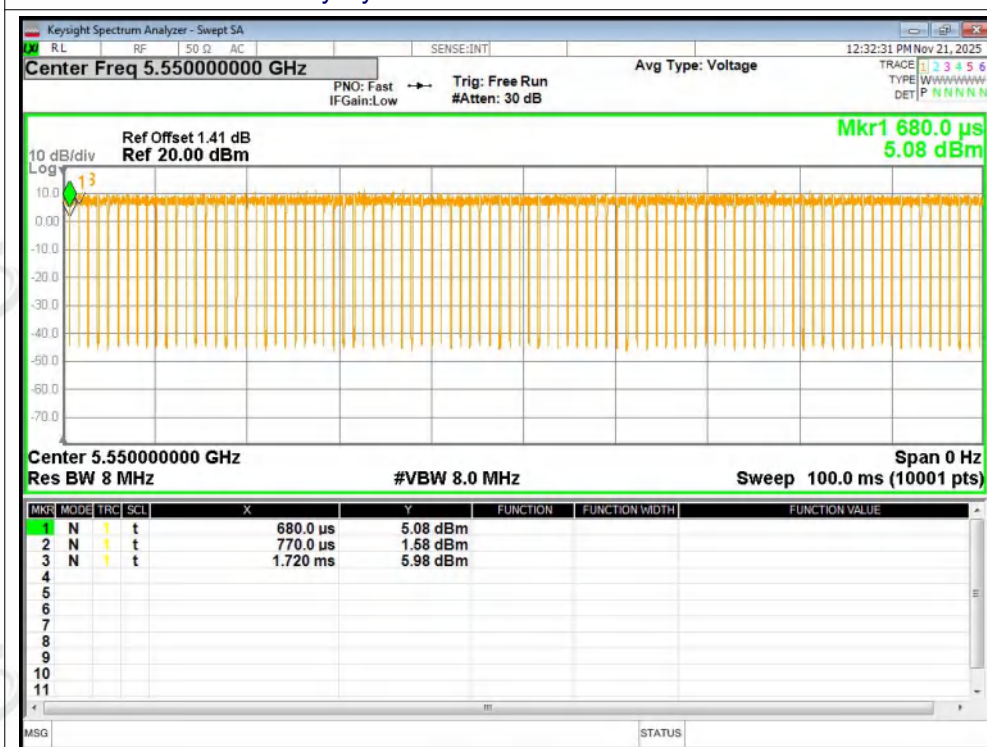




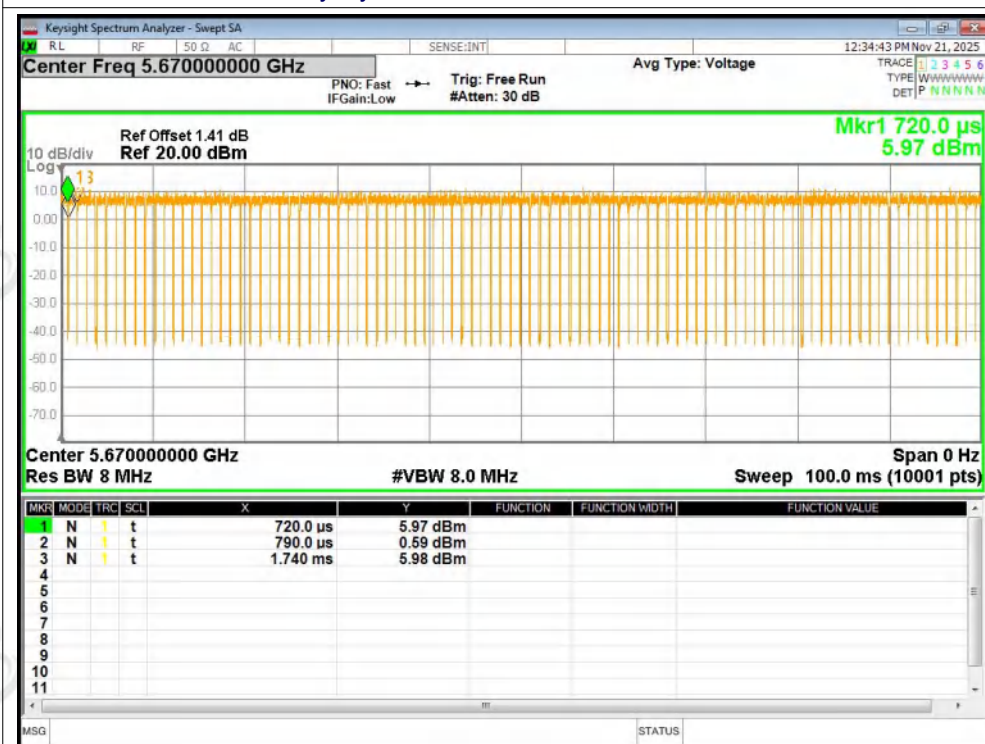
## Duty Cycle NVNT ac40 5510MHz Ant1



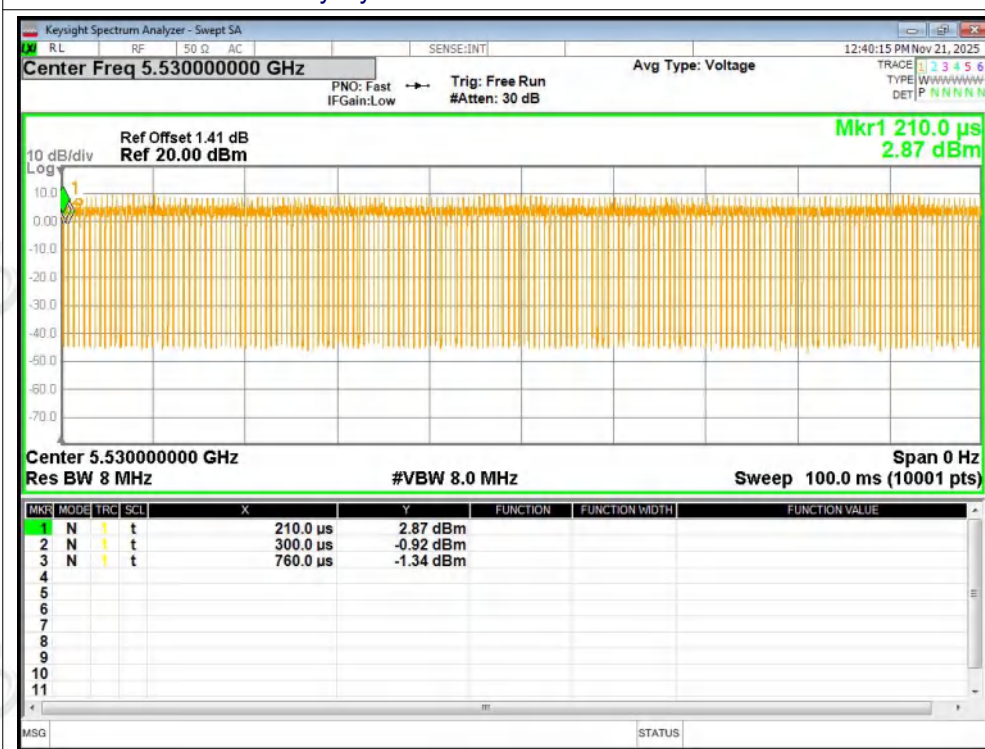
## Duty Cycle NVNT ac40 5550MHz Ant1



### Duty Cycle NVNT ac40 5670MHz Ant1

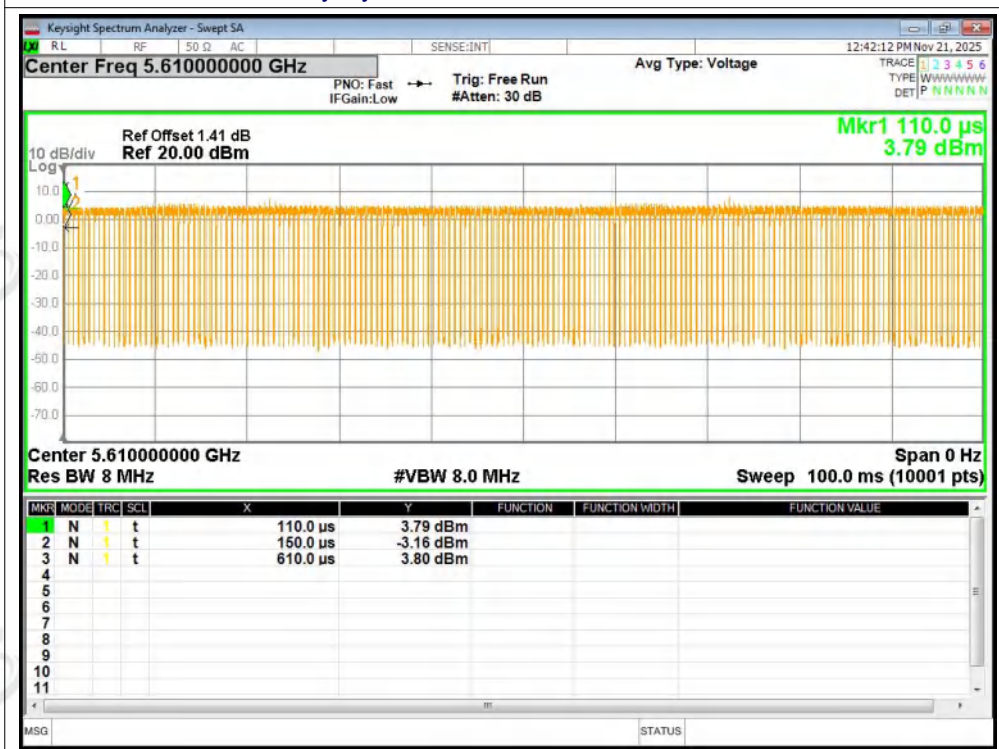


### Duty Cycle NVNT ac80 5530MHz Ant1





Duty Cycle NVNT ac80 5610MHz Ant1

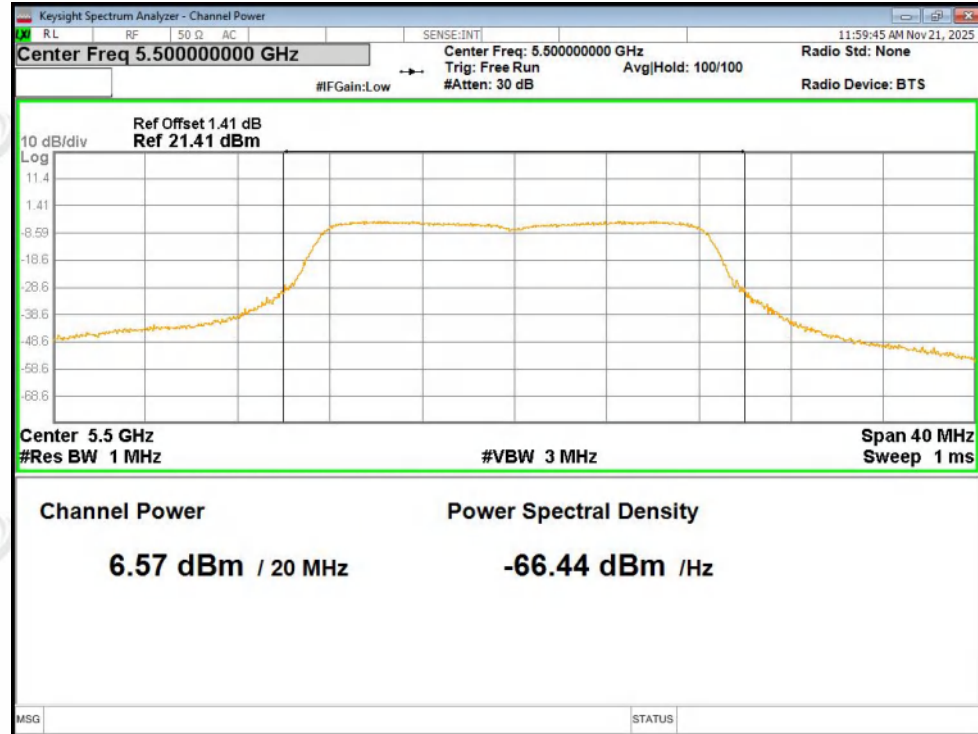


**C.2 Maximum Conducted Output Power**

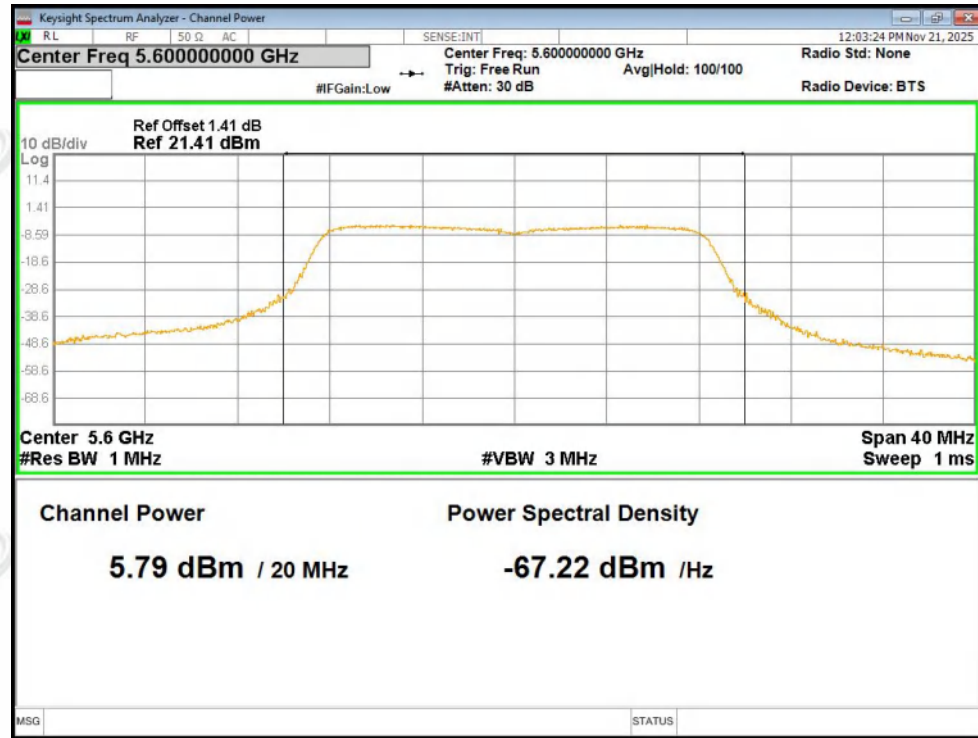
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|-----------------------|------------------|-------------------|-------------|---------|
| NVNT      | a    | 5500            | Ant1    | 6.57                  | 0.24             | 6.81              | 24          | Pass    |
| NVNT      | a    | 5600            | Ant1    | 5.79                  | 0.17             | 5.96              | 24          | Pass    |
| NVNT      | a    | 5700            | Ant1    | 6.26                  | 0                | 6.26              | 24          | Pass    |
| NVNT      | n20  | 5500            | Ant1    | 6.85                  | 0.24             | 7.09              | 24          | Pass    |
| NVNT      | n20  | 5600            | Ant1    | 5.38                  | 0.28             | 5.66              | 24          | Pass    |
| NVNT      | n20  | 5700            | Ant1    | 6.57                  | 0.37             | 6.94              | 24          | Pass    |
| NVNT      | n40  | 5510            | Ant1    | 6.47                  | 0.23             | 6.7               | 24          | Pass    |
| NVNT      | n40  | 5550            | Ant1    | 6.26                  | 0.23             | 6.49              | 24          | Pass    |
| NVNT      | n40  | 5670            | Ant1    | 5.63                  | 0.4              | 6.03              | 24          | Pass    |
| NVNT      | ac20 | 5500            | Ant1    | 7.36                  | 0.35             | 7.71              | 24          | Pass    |
| NVNT      | ac20 | 5600            | Ant1    | 6.25                  | 0.35             | 6.6               | 24          | Pass    |
| NVNT      | ac20 | 5700            | Ant1    | 5.79                  | 0.13             | 5.92              | 24          | Pass    |
| NVNT      | ac40 | 5510            | Ant1    | 7.04                  | 0.18             | 7.22              | 24          | Pass    |
| NVNT      | ac40 | 5550            | Ant1    | 6.83                  | 0.39             | 7.22              | 24          | Pass    |
| NVNT      | ac40 | 5670            | Ant1    | 5.93                  | 0.31             | 6.24              | 24          | Pass    |
| NVNT      | ac80 | 5530            | Ant1    | 6.9                   | 0.78             | 7.68              | 24          | Pass    |
| NVNT      | ac80 | 5610            | Ant1    | 6.16                  | 0.36             | 6.52              | 24          | Pass    |

### Test Graphs

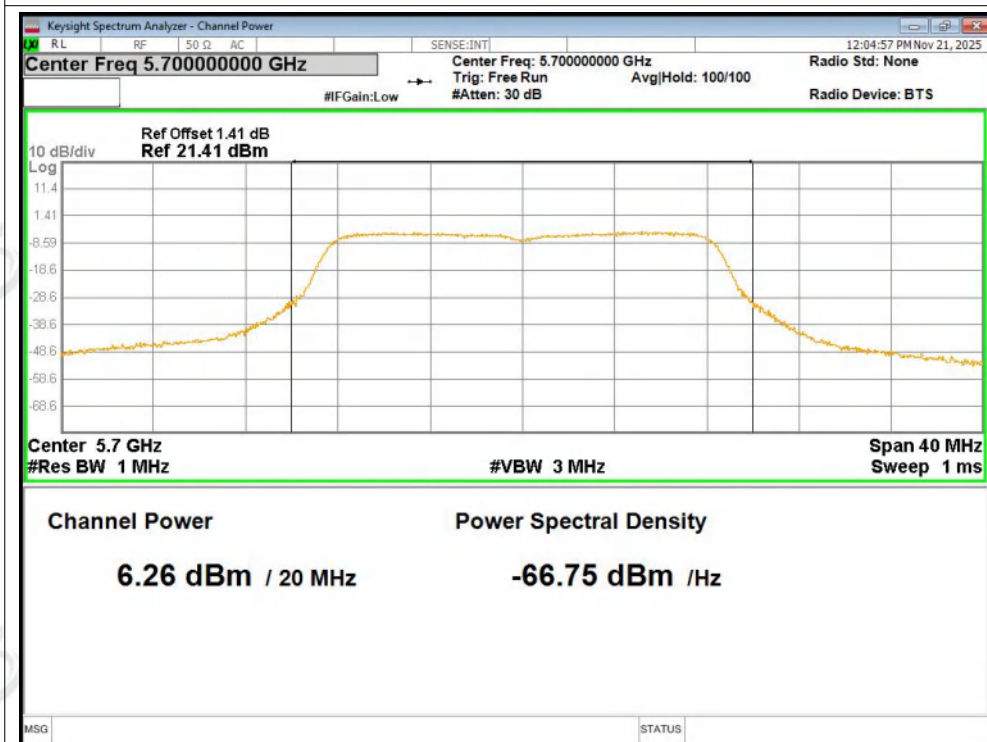
#### Power NVNT a 5500MHz Ant1



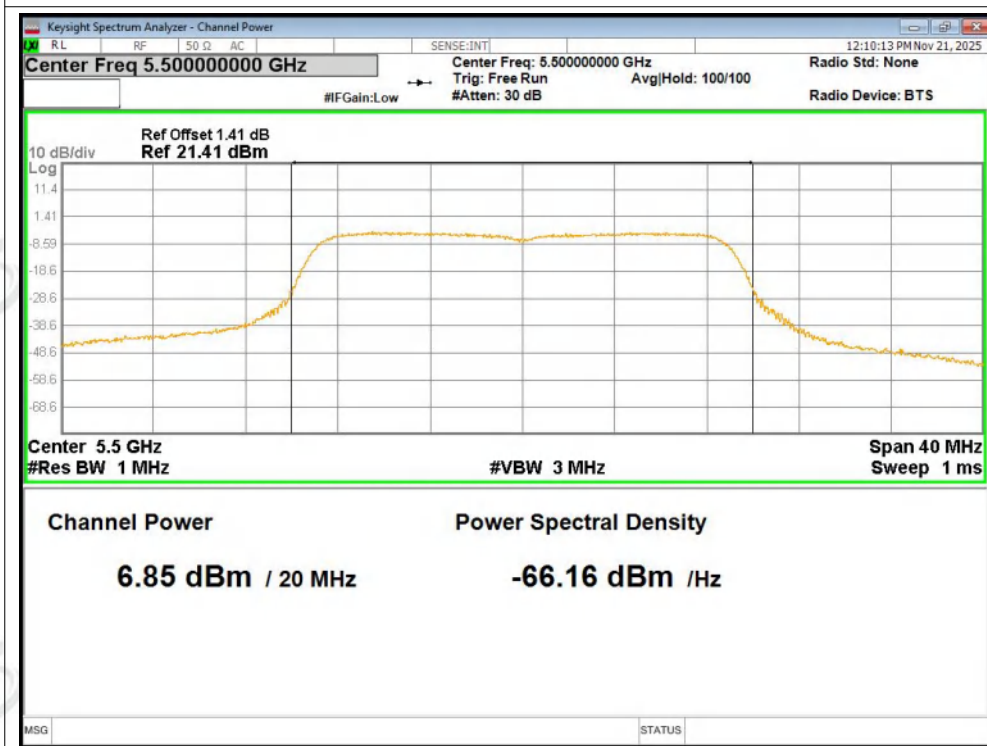
#### Power NVNT a 5600MHz Ant1



Power NVNT a 5700MHz Ant1

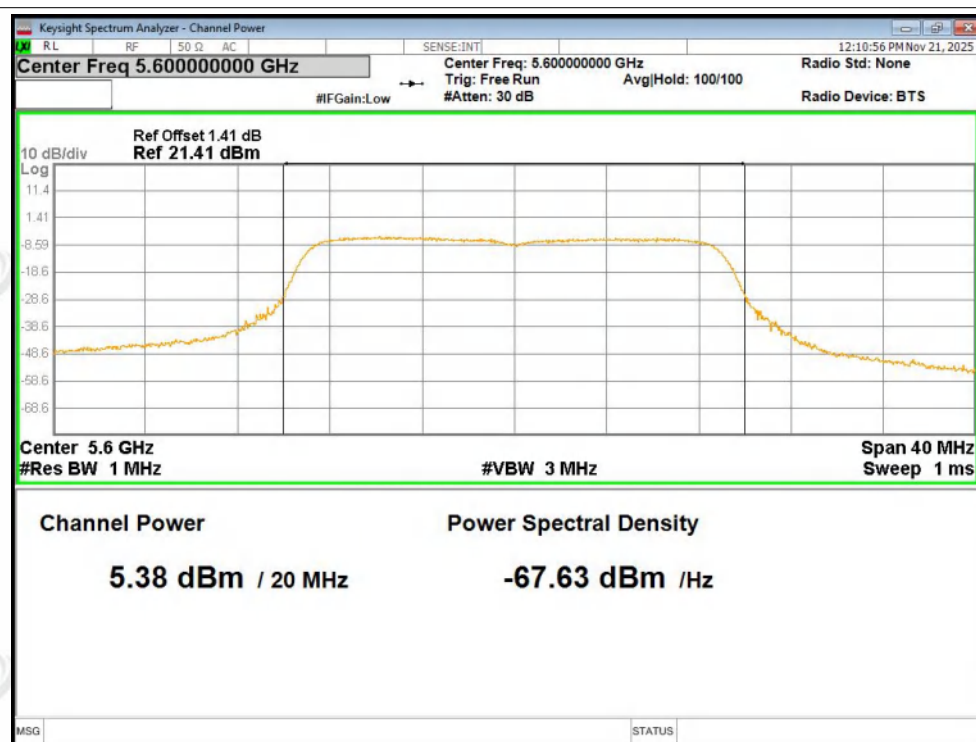


Power NVNT n20 5500MHz Ant1





Power NVNT n20 5600MHz Ant1

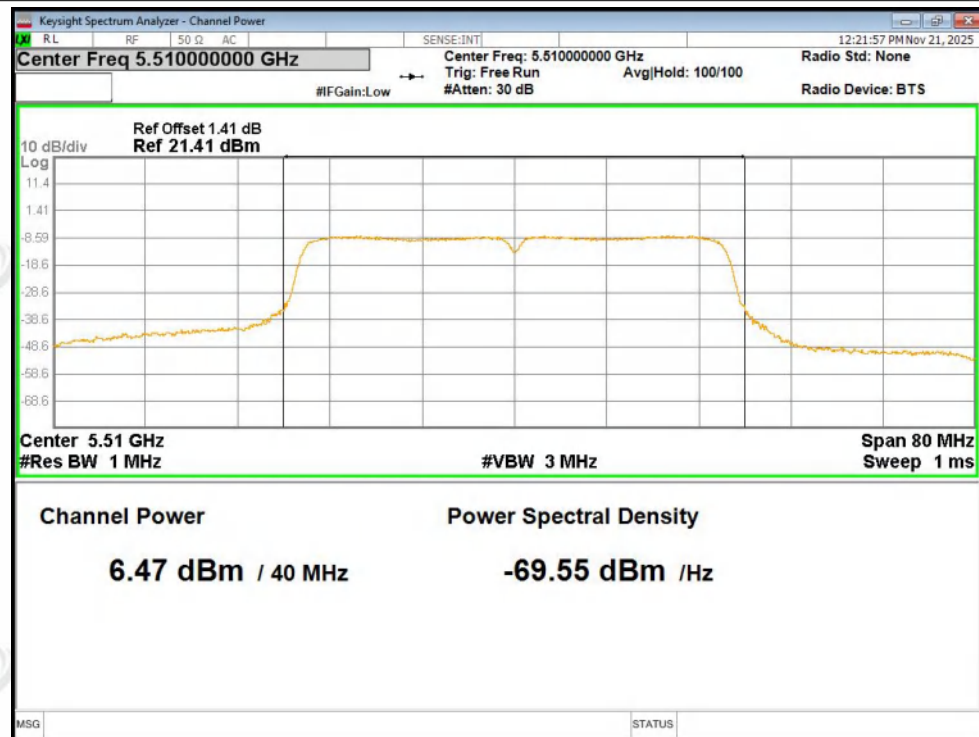


Power NVNT n20 5700MHz Ant1

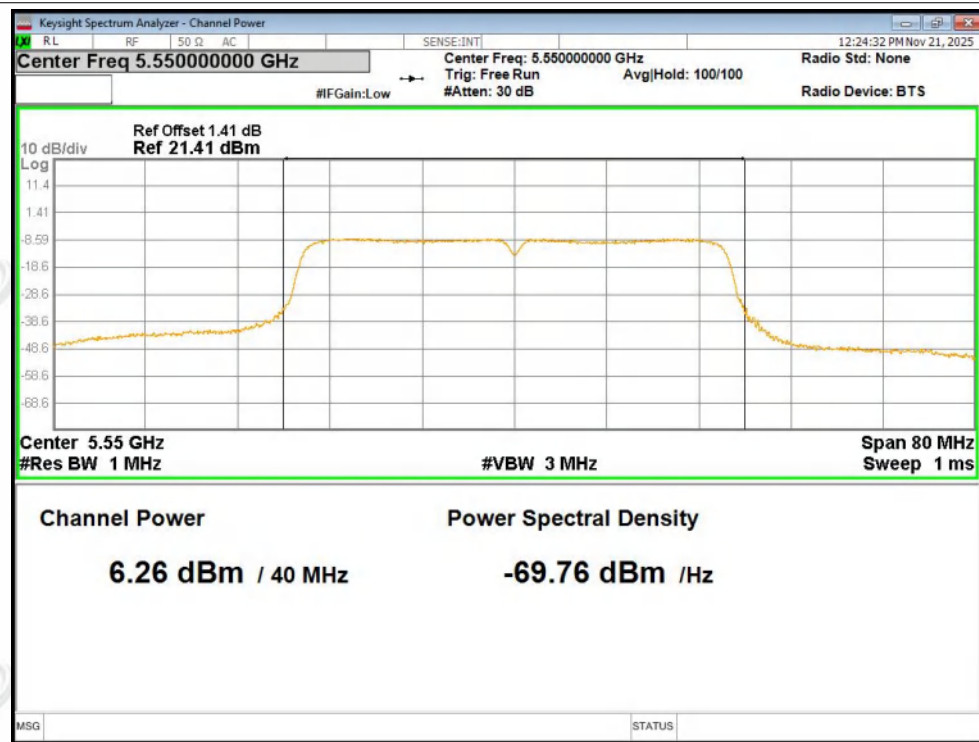




Power NVNT n40 5510MHz Ant1

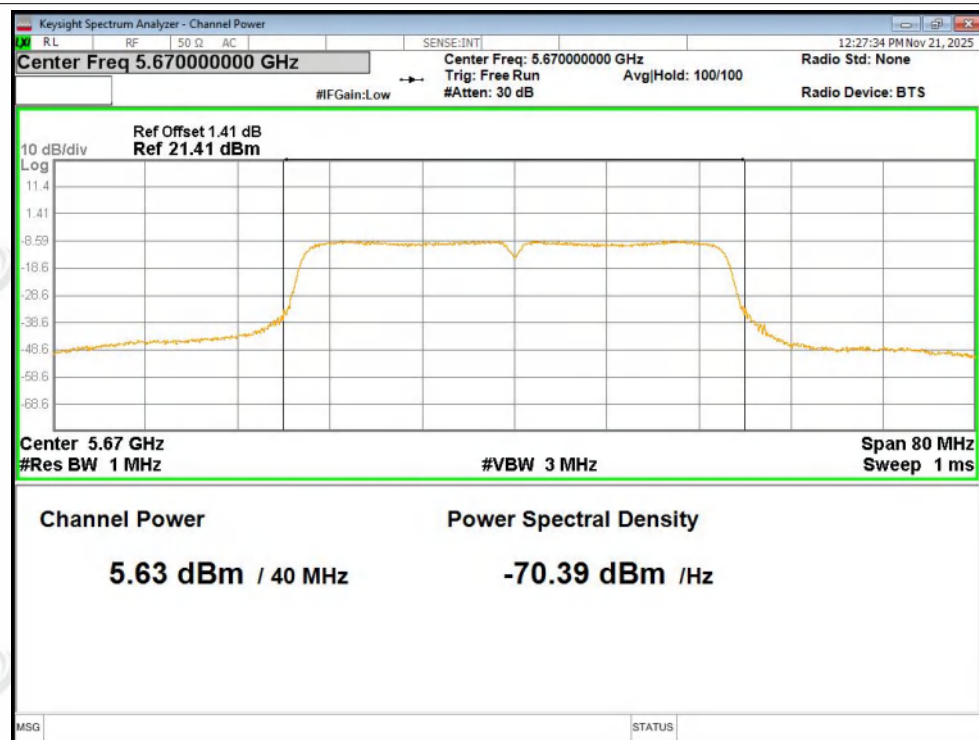


Power NVNT n40 5550MHz Ant1





Power NVNT n40 5670MHz Ant1



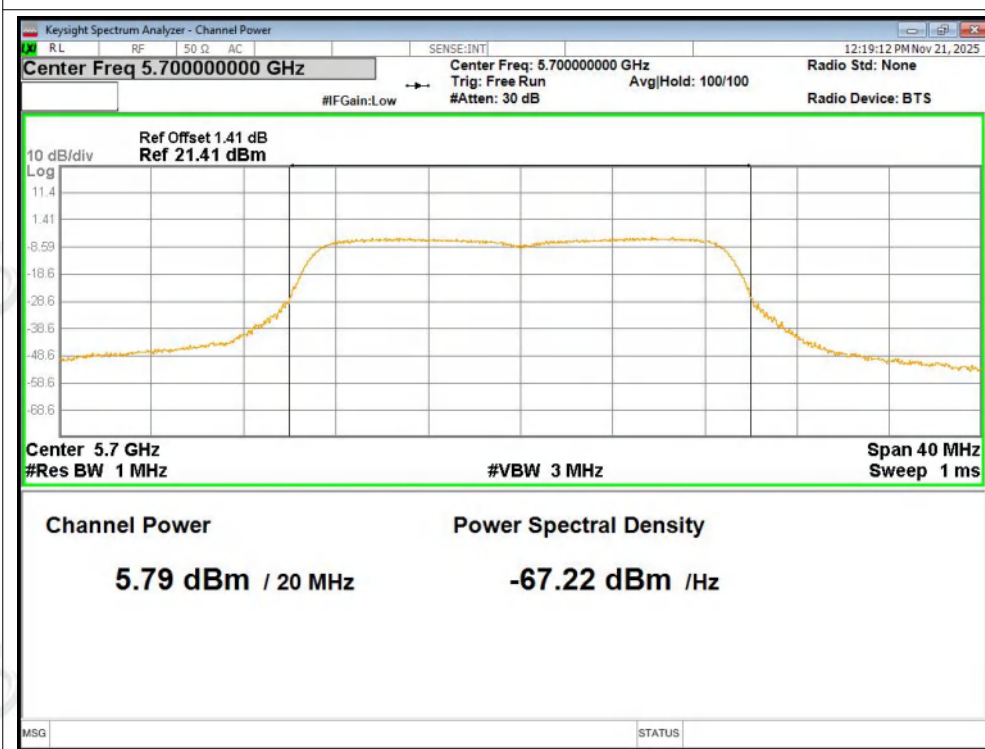
Power NVNT ac20 5500MHz Ant1



Power NVNT ac20 5600MHz Ant1

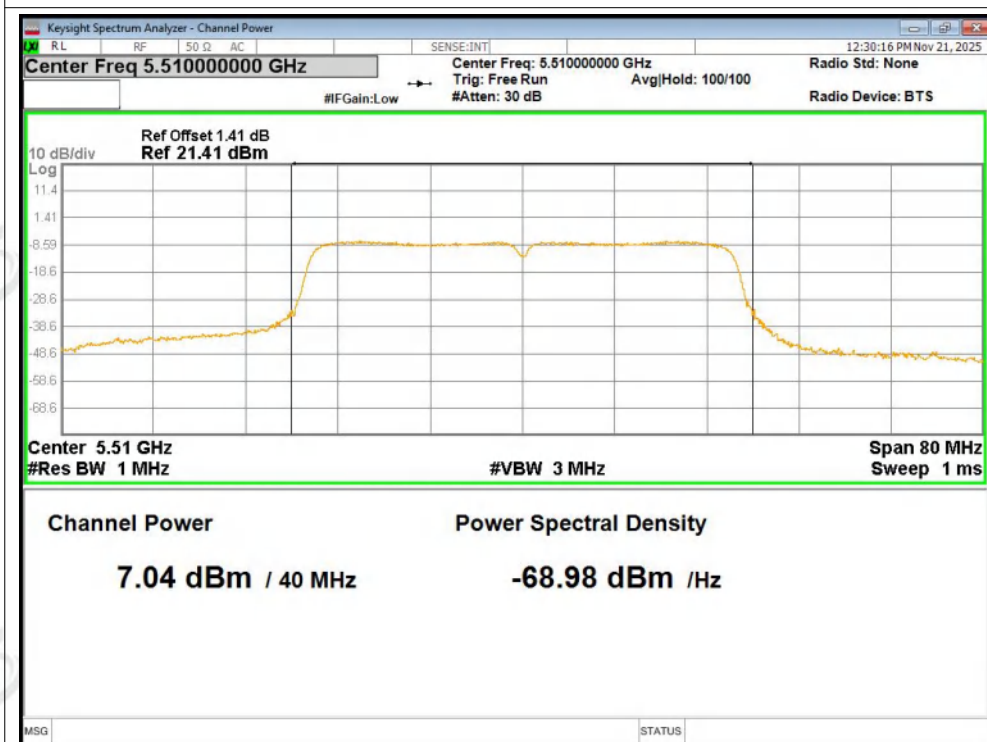


Power NVNT ac20 5700MHz Ant1





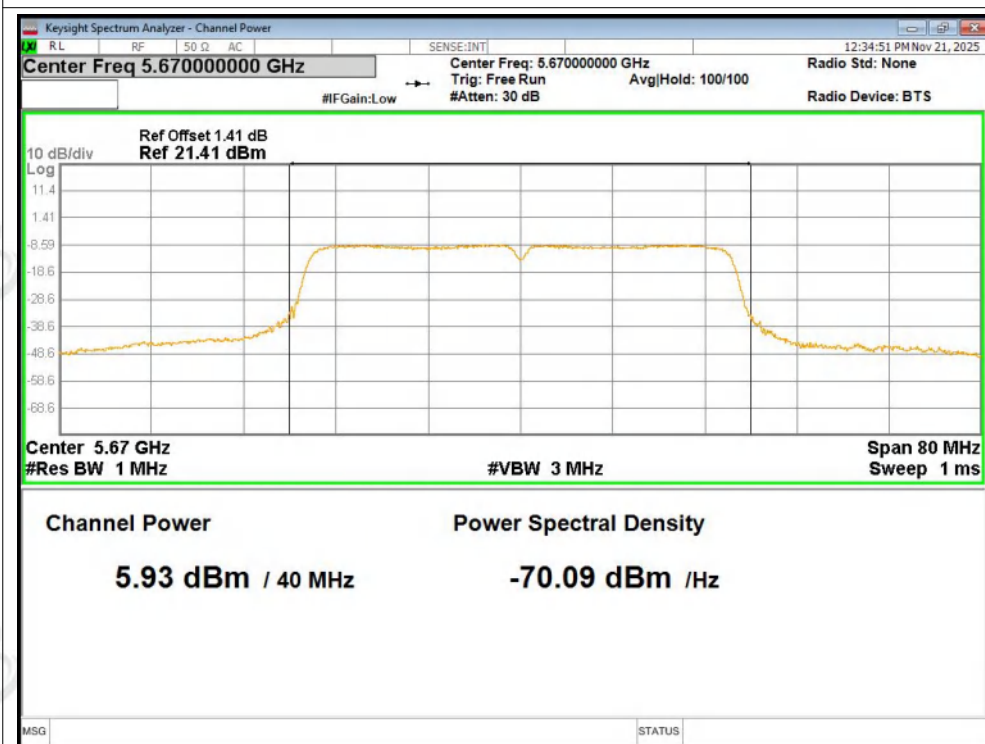
Power NVNT ac40 5510MHz Ant1



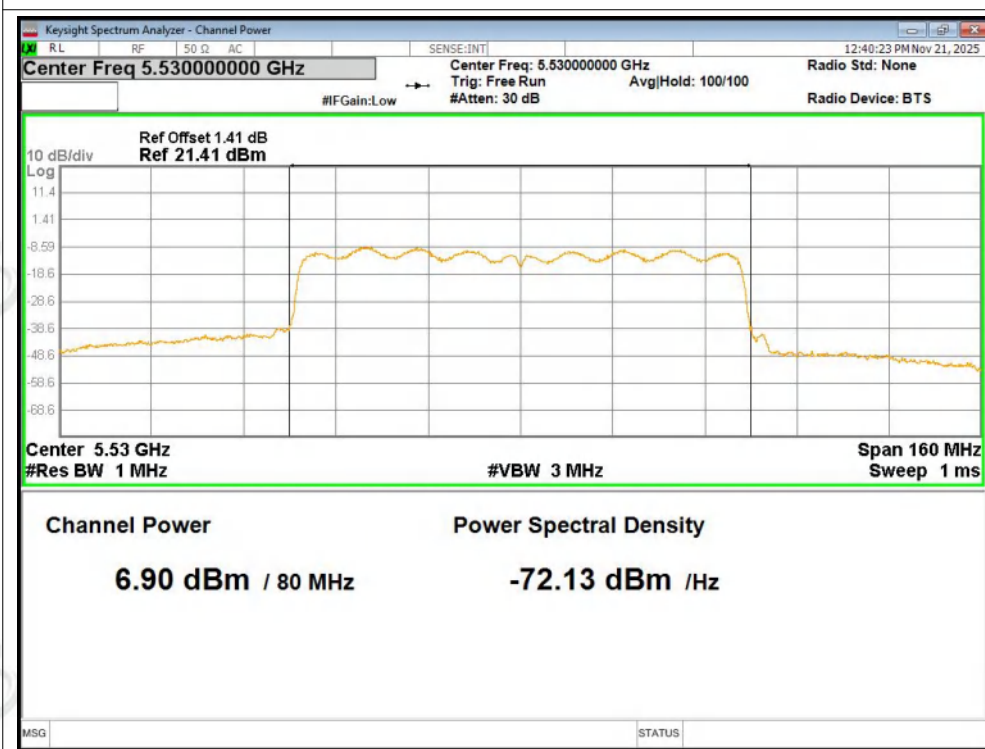
Power NVNT ac40 5550MHz Ant1



Power NVNT ac40 5670MHz Ant1

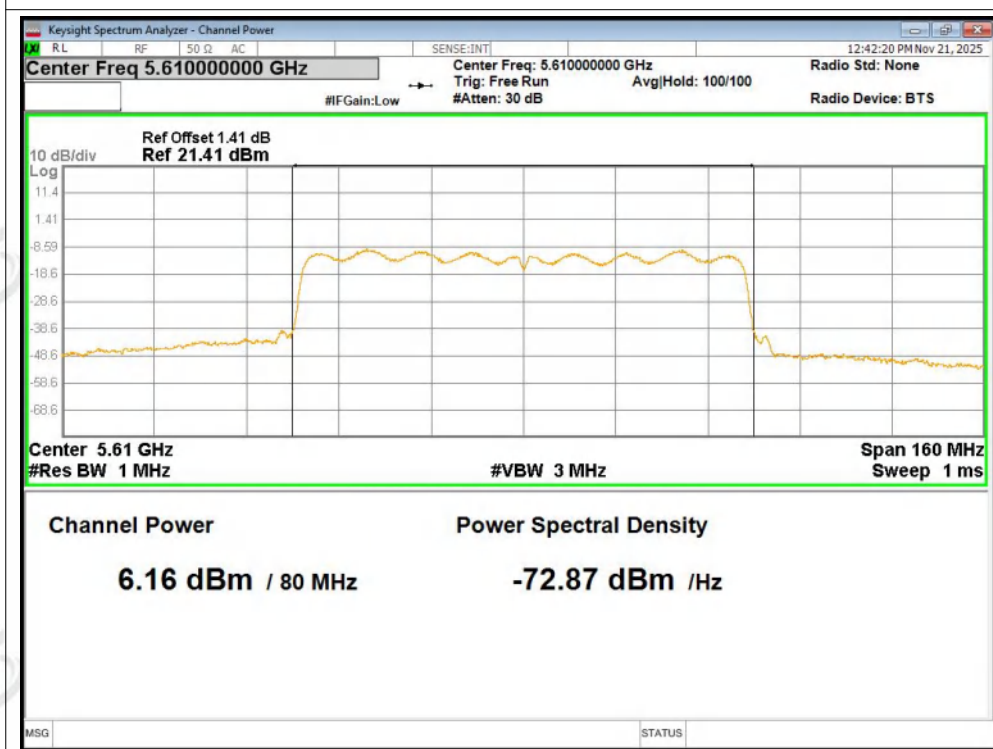


Power NVNT ac80 5530MHz Ant1





## Power NVNT ac80 5610MHz Ant1



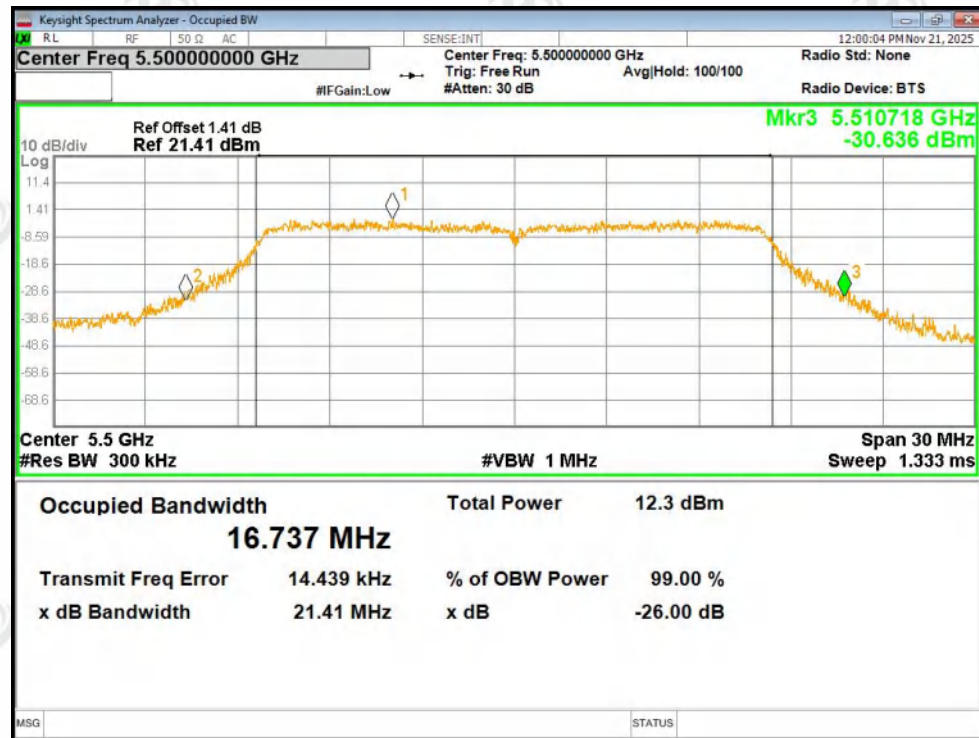


## C.3 -26dB Bandwidth

| Condition | Mode | Frequency (MHz) | Antenna | -26 dB Bandwidth (MHz) | Limit -26 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|---------|------------------------|------------------------------|---------|
| NVNT      | a    | 5500            | Ant1    | 21.406                 | 0.5                          | Pass    |
| NVNT      | a    | 5600            | Ant1    | 20.951                 | 0.5                          | Pass    |
| NVNT      | a    | 5700            | Ant1    | 20.93                  | 0.5                          | Pass    |
| NVNT      | n20  | 5500            | Ant1    | 21.437                 | 0.5                          | Pass    |
| NVNT      | n20  | 5600            | Ant1    | 21.314                 | 0.5                          | Pass    |
| NVNT      | n20  | 5700            | Ant1    | 21.533                 | 0.5                          | Pass    |
| NVNT      | n40  | 5510            | Ant1    | 41.014                 | 0.5                          | Pass    |
| NVNT      | n40  | 5550            | Ant1    | 40.965                 | 0.5                          | Pass    |
| NVNT      | n40  | 5670            | Ant1    | 41.088                 | 0.5                          | Pass    |
| NVNT      | ac20 | 5500            | Ant1    | 21.995                 | 0.5                          | Pass    |
| NVNT      | ac20 | 5600            | Ant1    | 21.354                 | 0.5                          | Pass    |
| NVNT      | ac20 | 5700            | Ant1    | 21.306                 | 0.5                          | Pass    |
| NVNT      | ac40 | 5510            | Ant1    | 40.71                  | 0.5                          | Pass    |
| NVNT      | ac40 | 5550            | Ant1    | 40.534                 | 0.5                          | Pass    |
| NVNT      | ac40 | 5670            | Ant1    | 40.772                 | 0.5                          | Pass    |
| NVNT      | ac80 | 5530            | Ant1    | 79.305                 | 0.5                          | Pass    |
| NVNT      | ac80 | 5610            | Ant1    | 79.267                 | 0.5                          | Pass    |

### Test Graphs

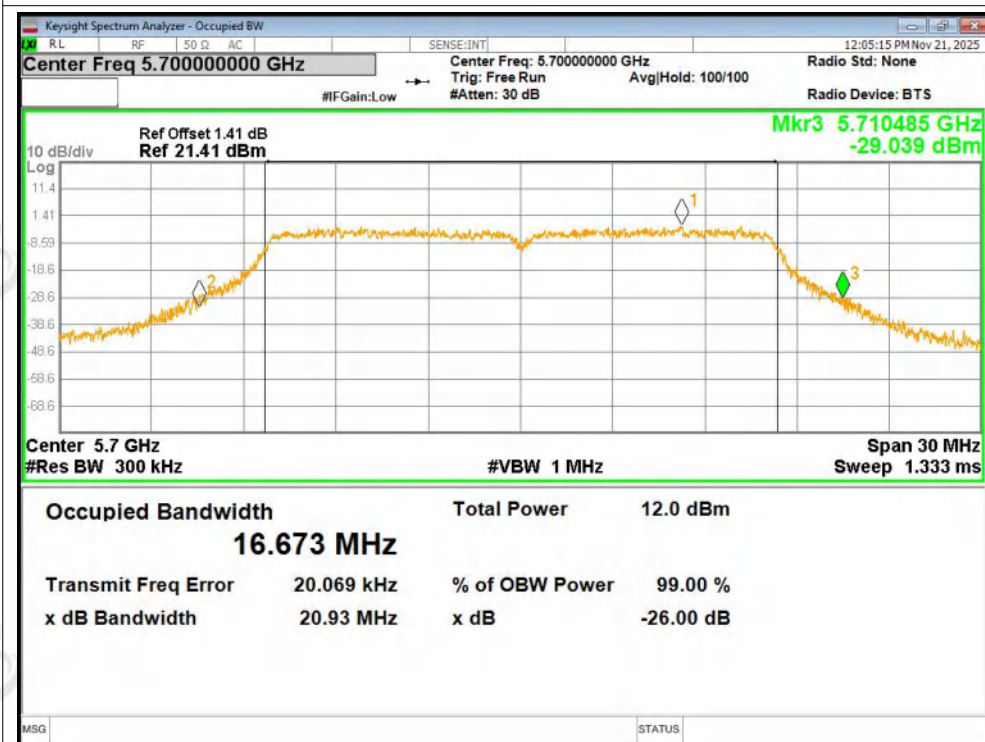
#### -26dB Bandwidth NVNT a 5500MHz Ant1



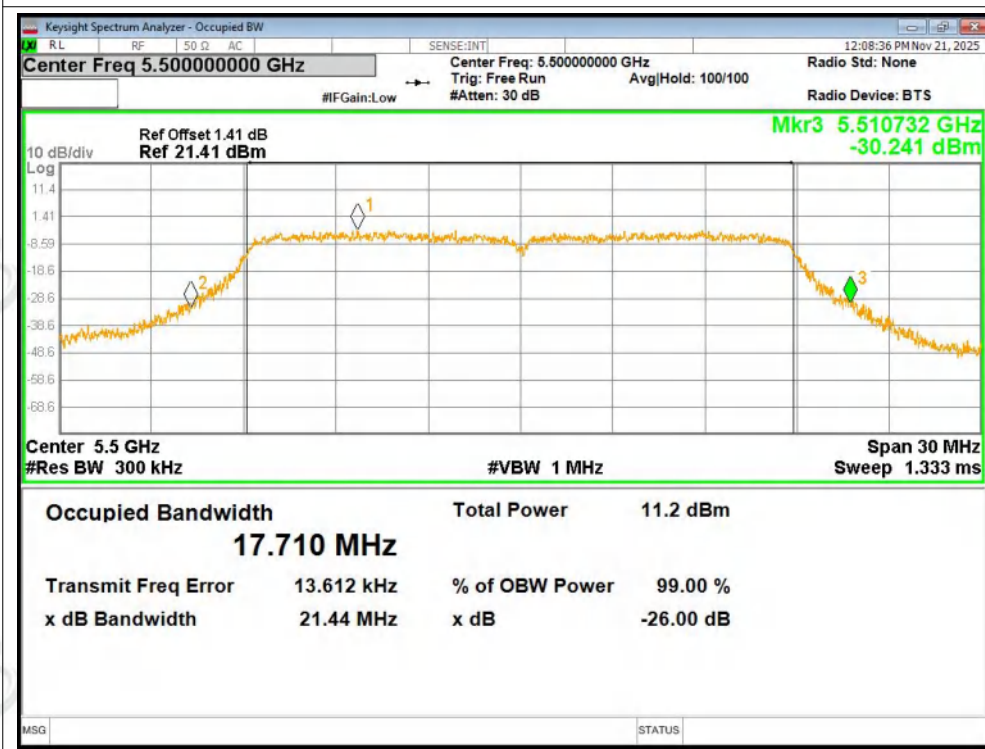
#### -26dB Bandwidth NVNT a 5600MHz Ant1



-26dB Bandwidth NVNT a 5700MHz Ant1

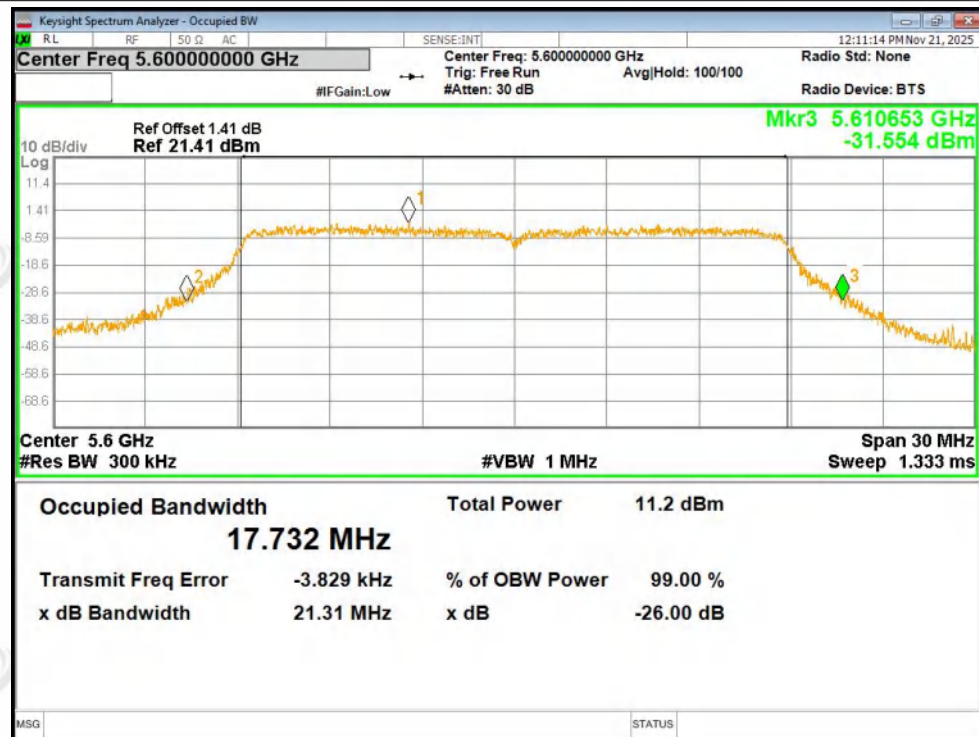


-26dB Bandwidth NVNT n20 5500MHz Ant1

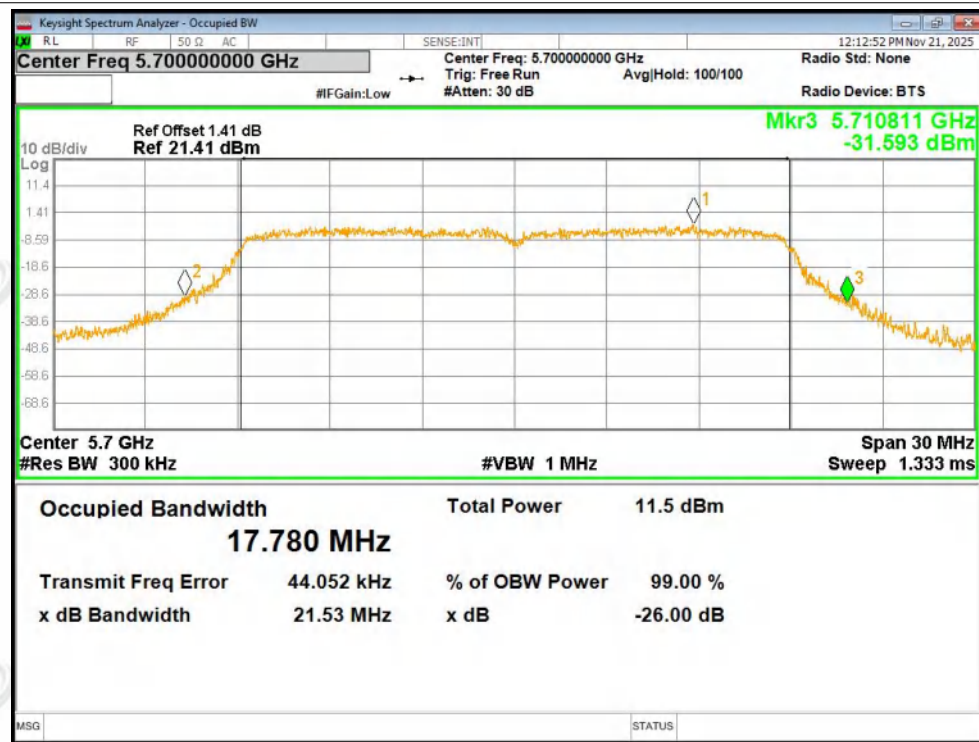




## -26dB Bandwidth NVNT n20 5600MHz Ant1

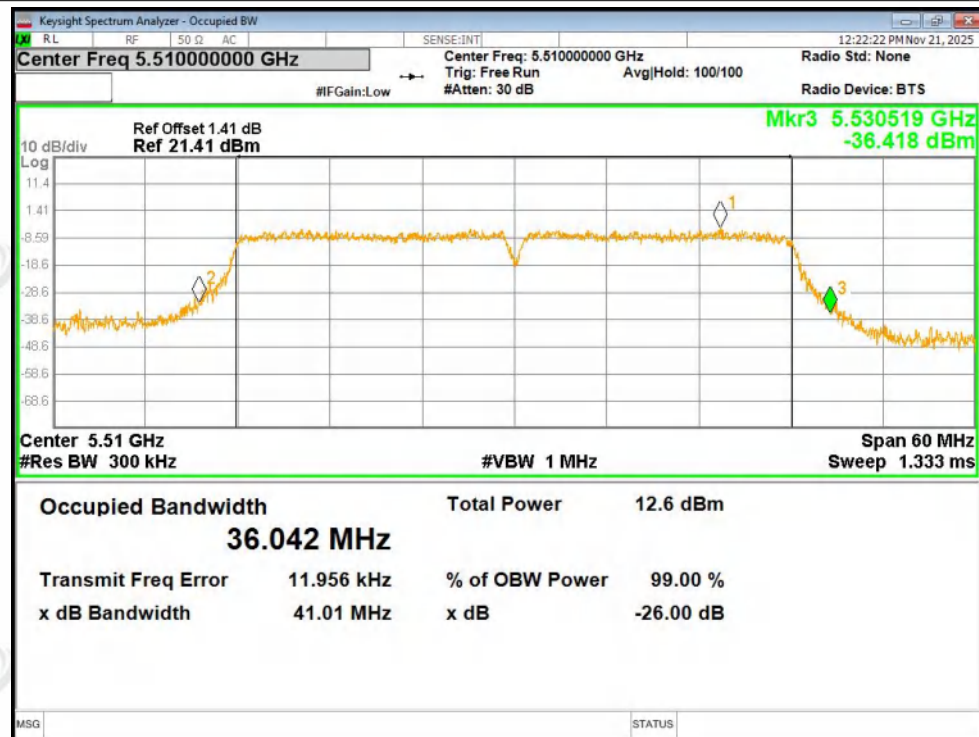


## -26dB Bandwidth NVNT n20 5700MHz Ant1

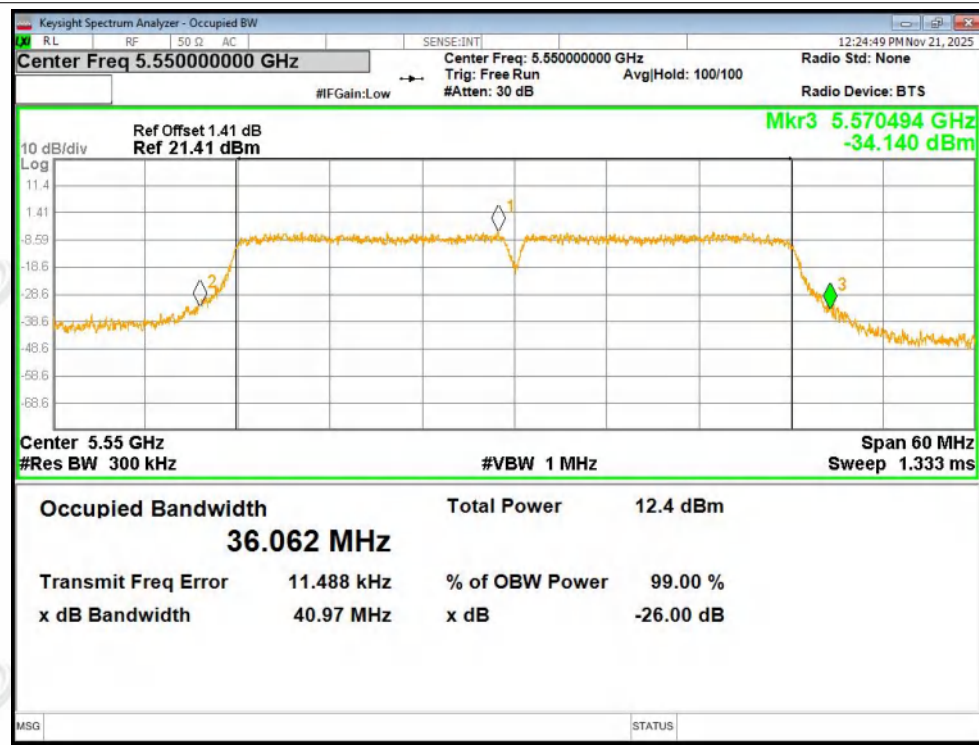




## -26dB Bandwidth NVNT n40 5510MHz Ant1

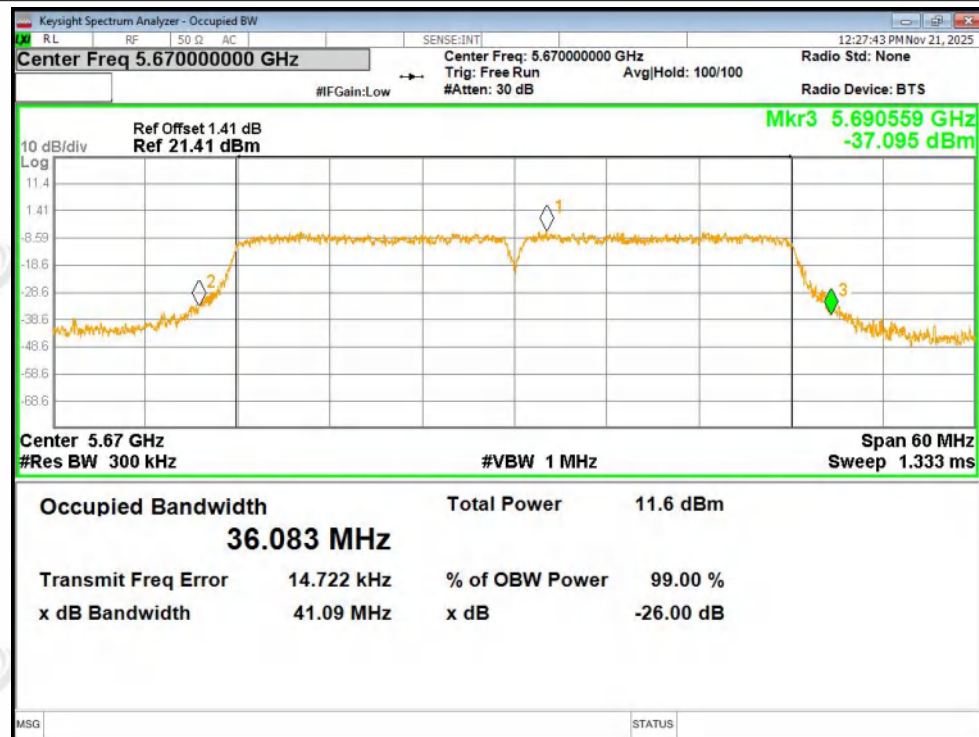


## -26dB Bandwidth NVNT n40 5550MHz Ant1

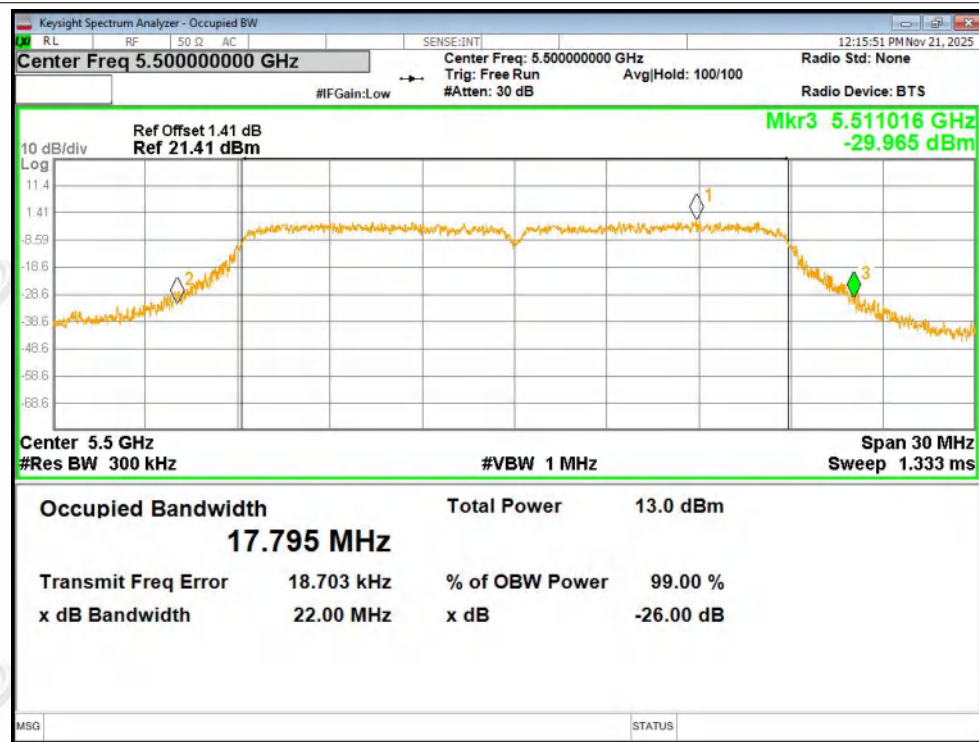




## -26dB Bandwidth NVNT n40 5670MHz Ant1

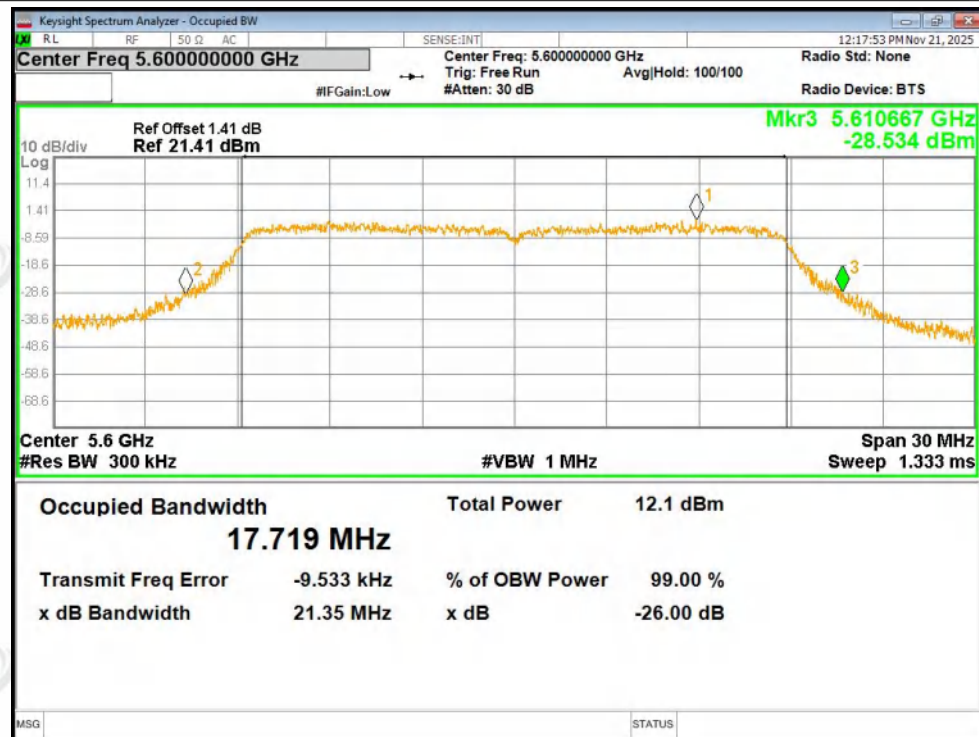


## -26dB Bandwidth NVNT ac20 5500MHz Ant1

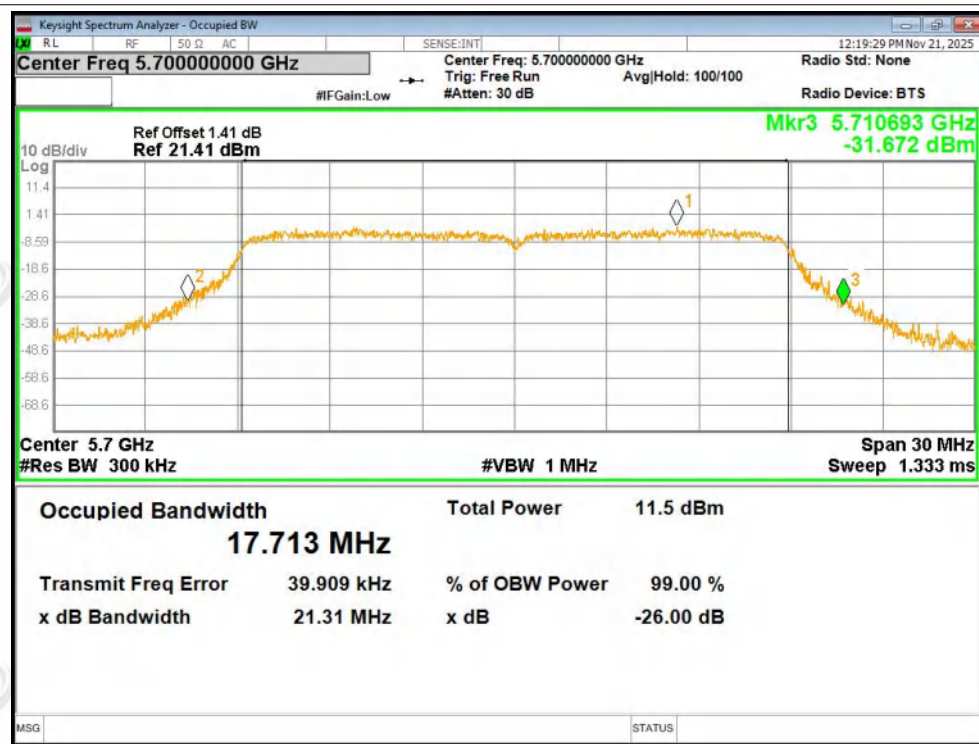




## -26dB Bandwidth NVNT ac20 5600MHz Ant1

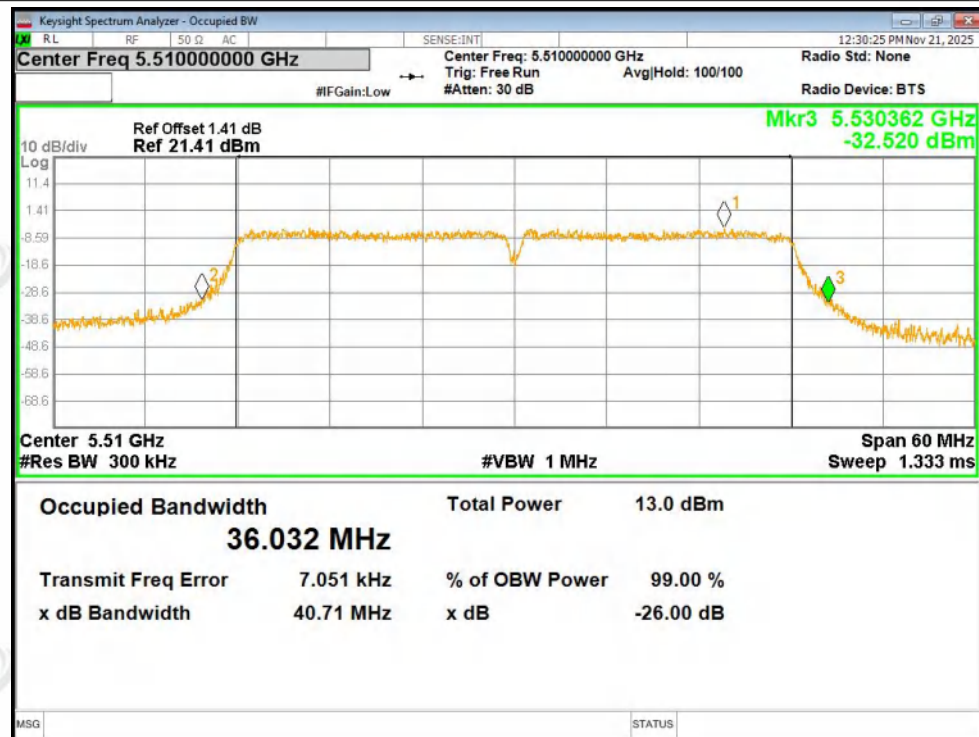


## -26dB Bandwidth NVNT ac20 5700MHz Ant1

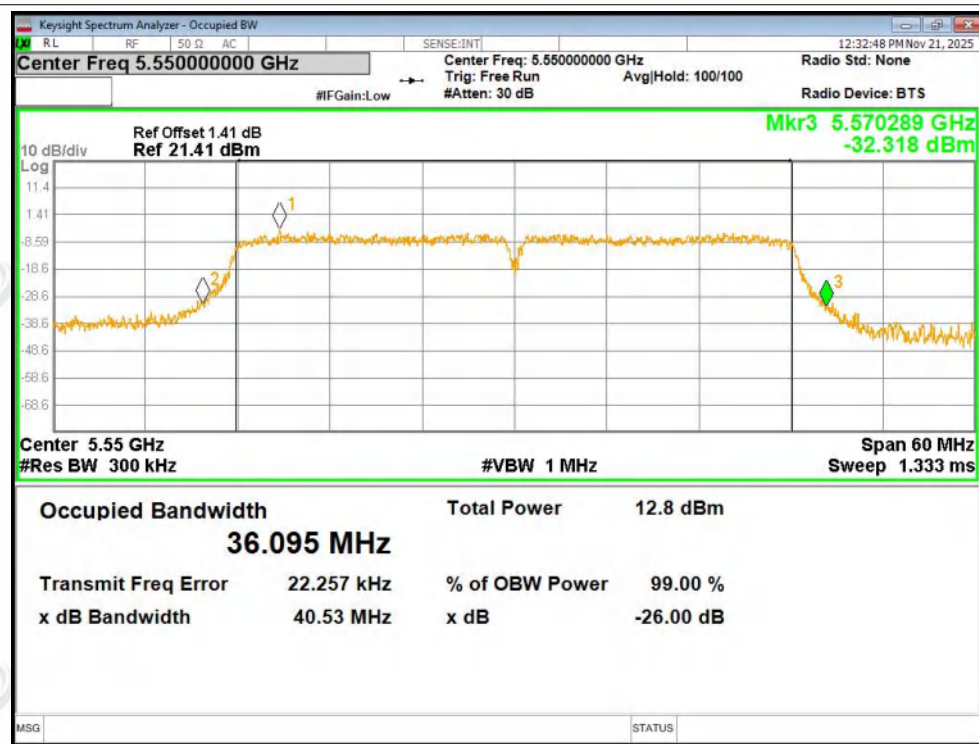




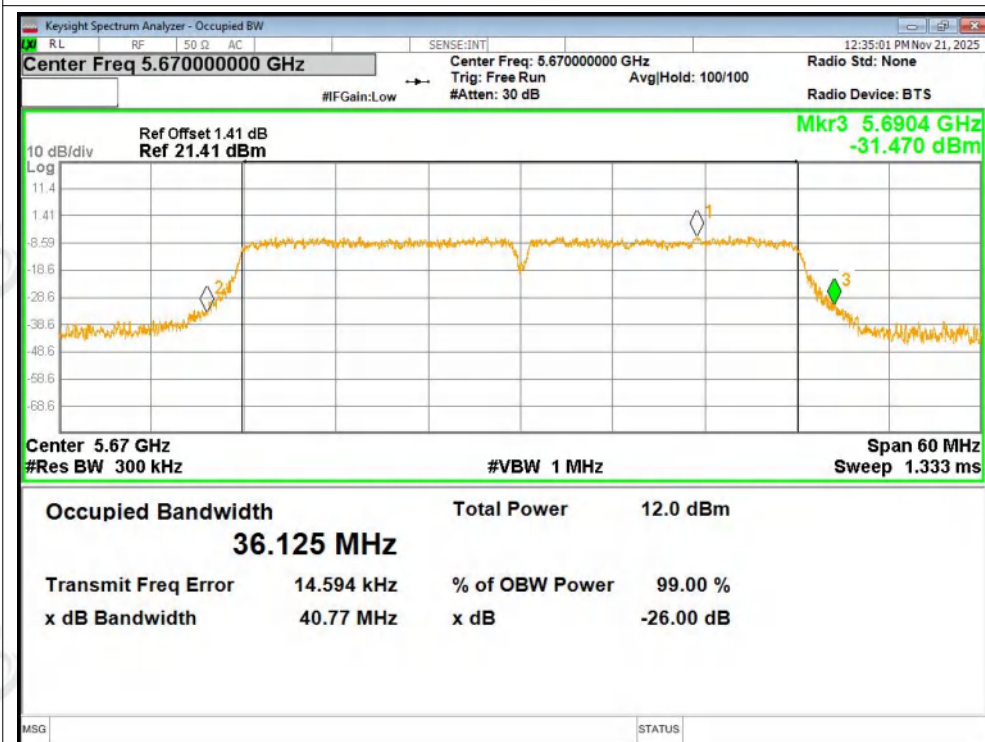
## -26dB Bandwidth NVNT ac40 5510MHz Ant1



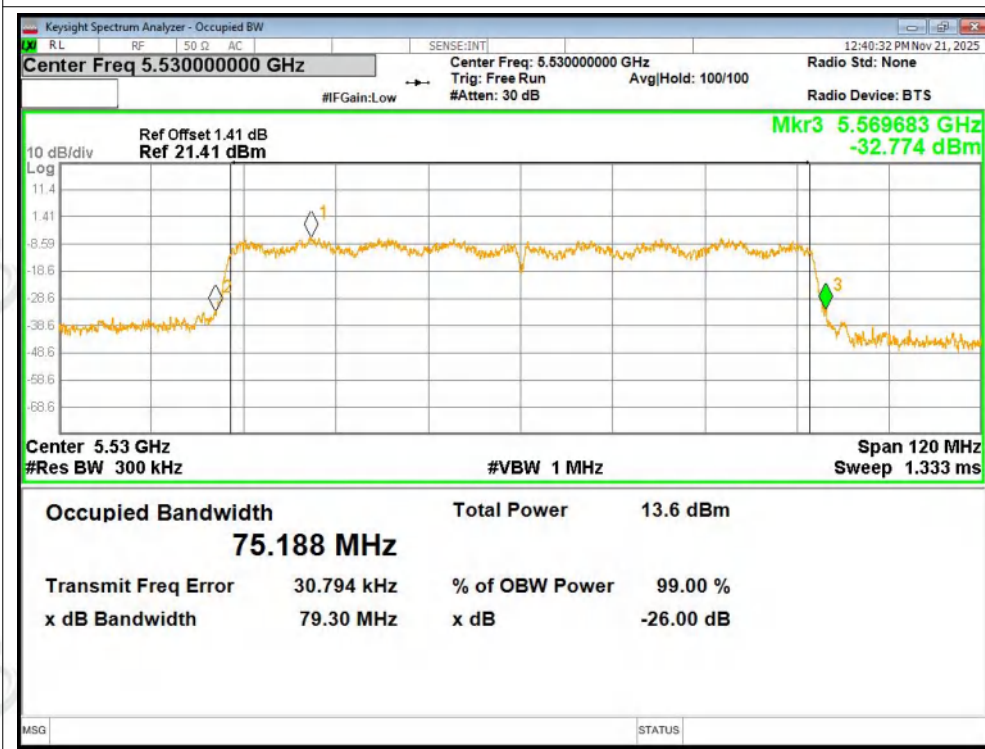
## -26dB Bandwidth NVNT ac40 5550MHz Ant1



-26dB Bandwidth NVNT ac40 5670MHz Ant1

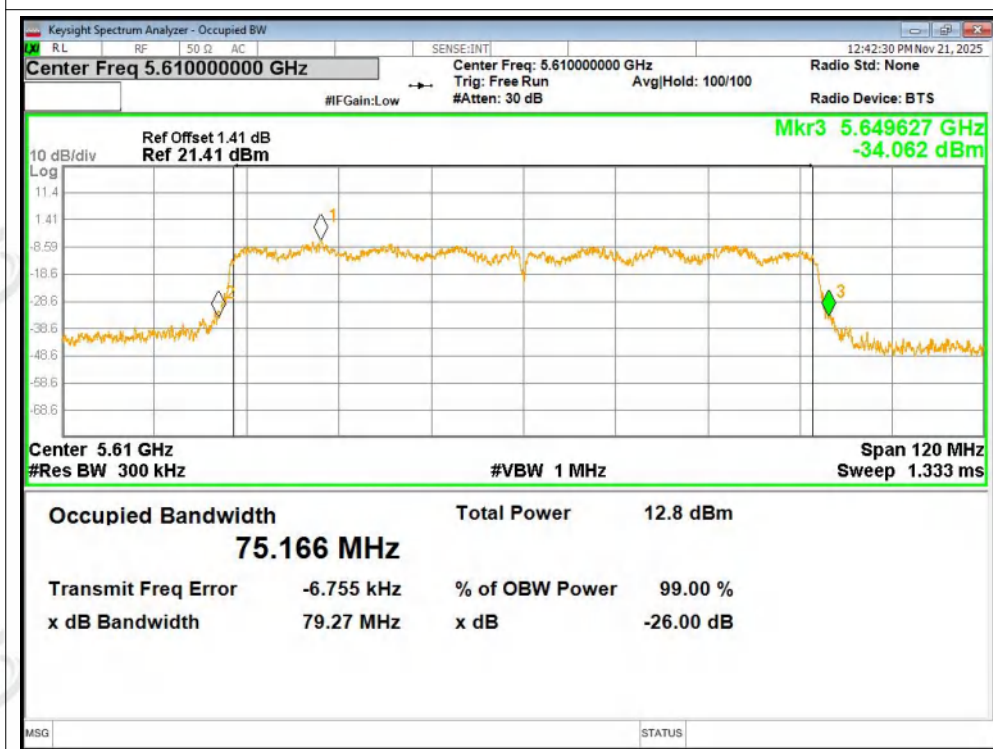


-26dB Bandwidth NVNT ac80 5530MHz Ant1





## -26dB Bandwidth NVNT ac80 5610MHz Ant1

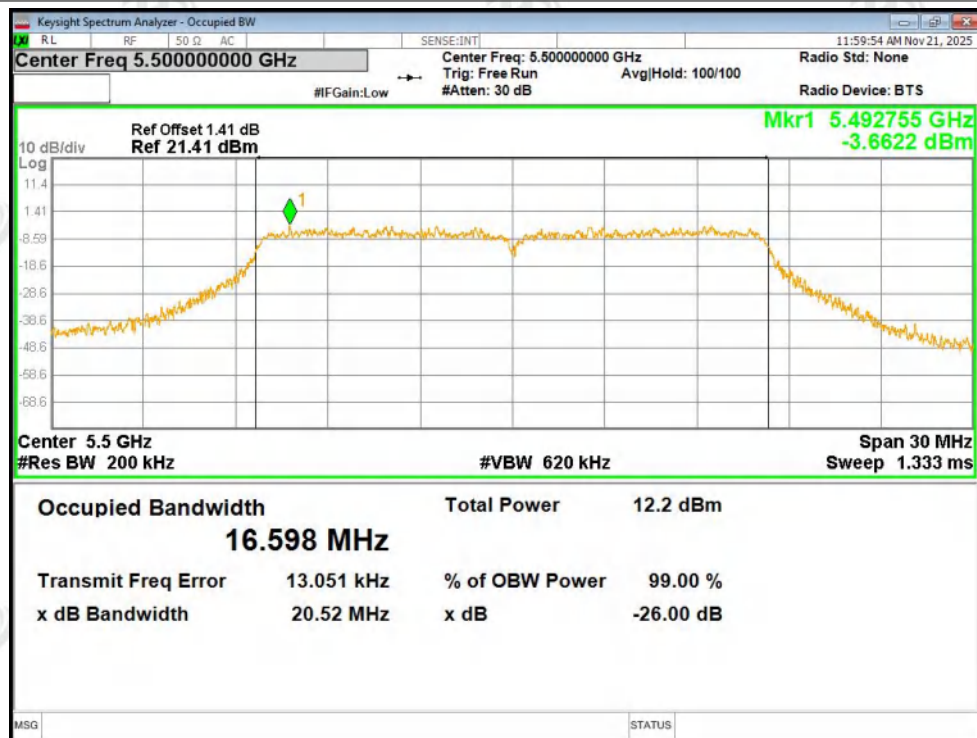


**C.4 Occupied Channel Bandwidth**

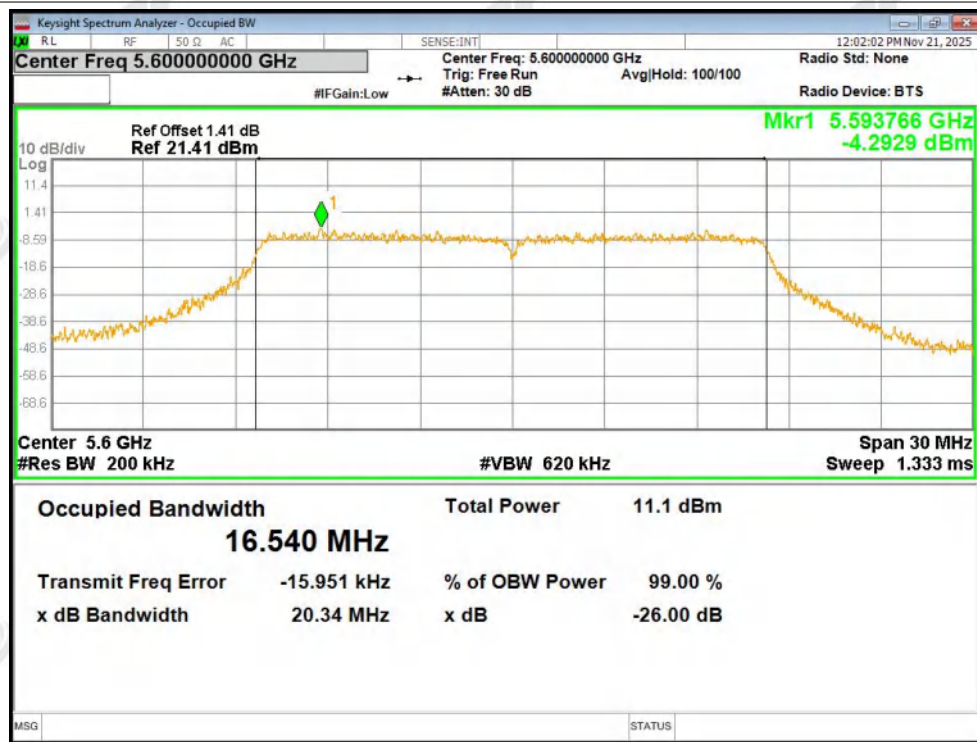
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|------|-----------------|---------|---------------|
| NVNT      | a    | 5500            | Ant1    | 16.598        |
| NVNT      | a    | 5600            | Ant1    | 16.54         |
| NVNT      | a    | 5700            | Ant1    | 16.517        |
| NVNT      | n20  | 5500            | Ant1    | 17.633        |
| NVNT      | n20  | 5600            | Ant1    | 17.619        |
| NVNT      | n20  | 5700            | Ant1    | 17.659        |
| NVNT      | n40  | 5510            | Ant1    | 36.193        |
| NVNT      | n40  | 5550            | Ant1    | 36.143        |
| NVNT      | n40  | 5670            | Ant1    | 36.16         |
| NVNT      | ac20 | 5500            | Ant1    | 17.657        |
| NVNT      | ac20 | 5600            | Ant1    | 17.628        |
| NVNT      | ac20 | 5700            | Ant1    | 17.63         |
| NVNT      | ac40 | 5510            | Ant1    | 36.123        |
| NVNT      | ac40 | 5550            | Ant1    | 36.152        |
| NVNT      | ac40 | 5670            | Ant1    | 36.2          |
| NVNT      | ac80 | 5530            | Ant1    | 75.253        |
| NVNT      | ac80 | 5610            | Ant1    | 75.288        |

### Test Graphs

#### OBW NVNT a 5500MHz Ant1

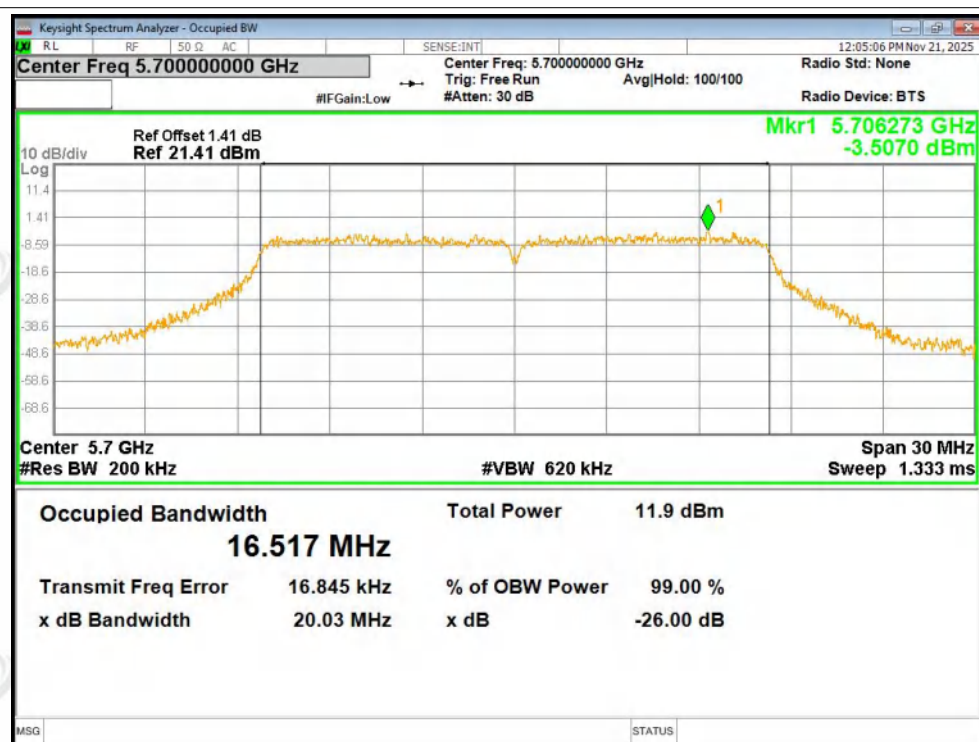


#### OBW NVNT a 5600MHz Ant1

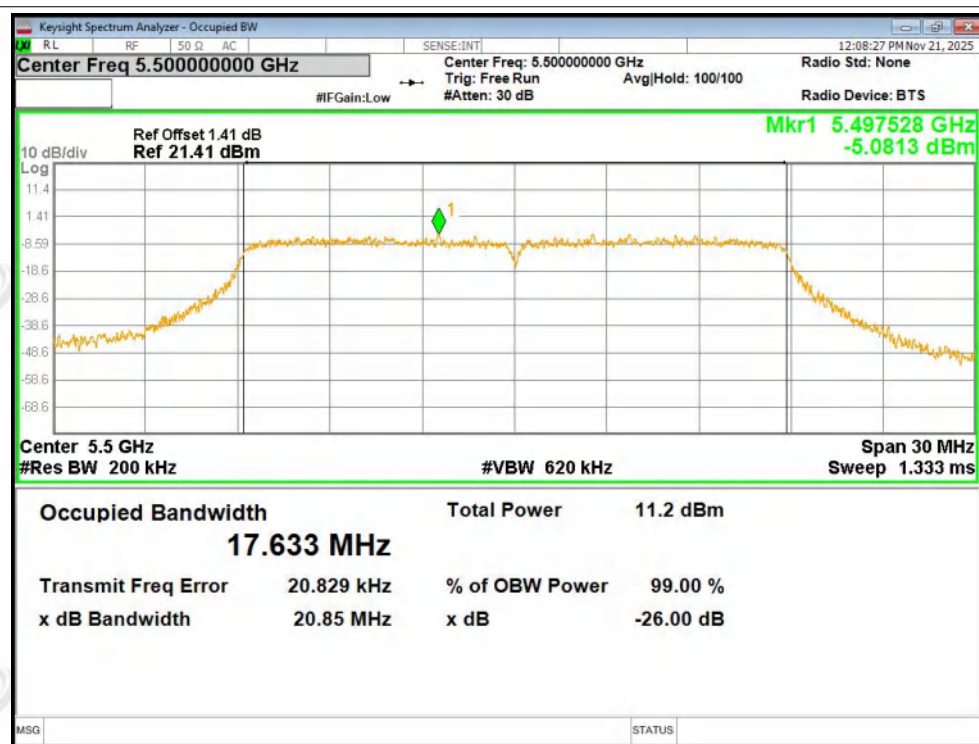




## OBW NVNT a 5700MHz Ant1

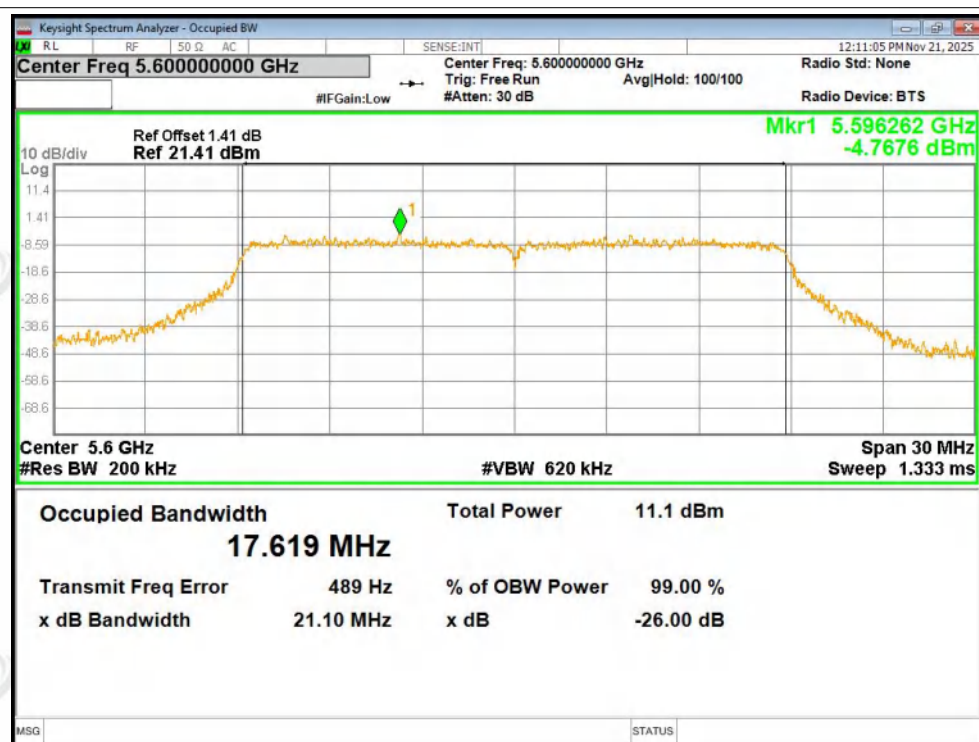


## OBW NVNT n20 5500MHz Ant1

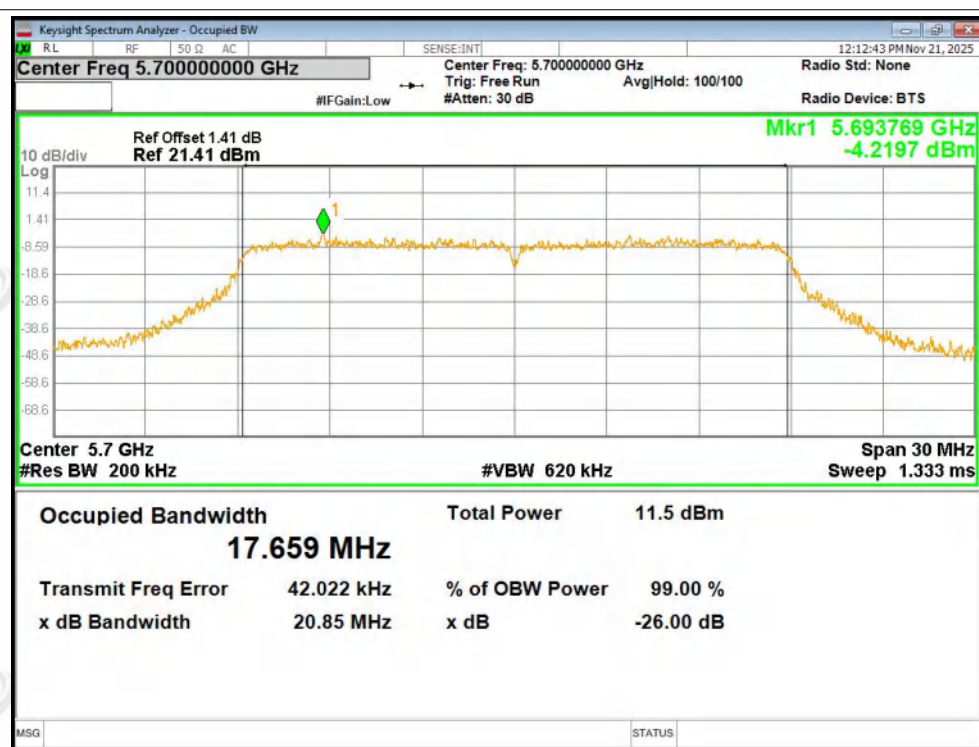




## OBW NVNT n20 5600MHz Ant1

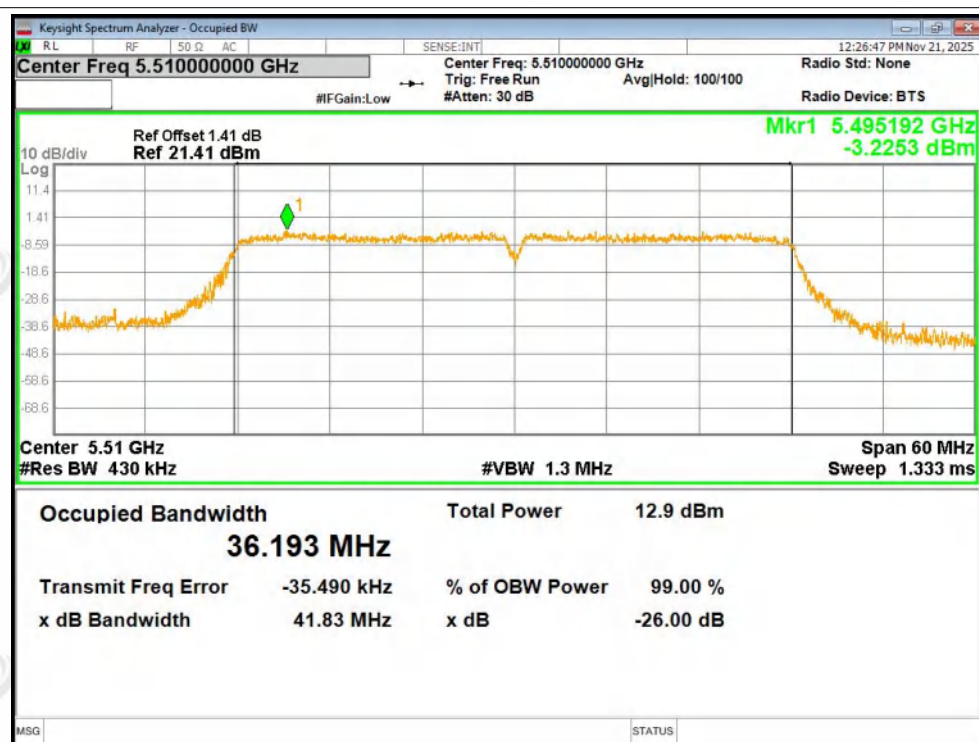


## OBW NVNT n20 5700MHz Ant1

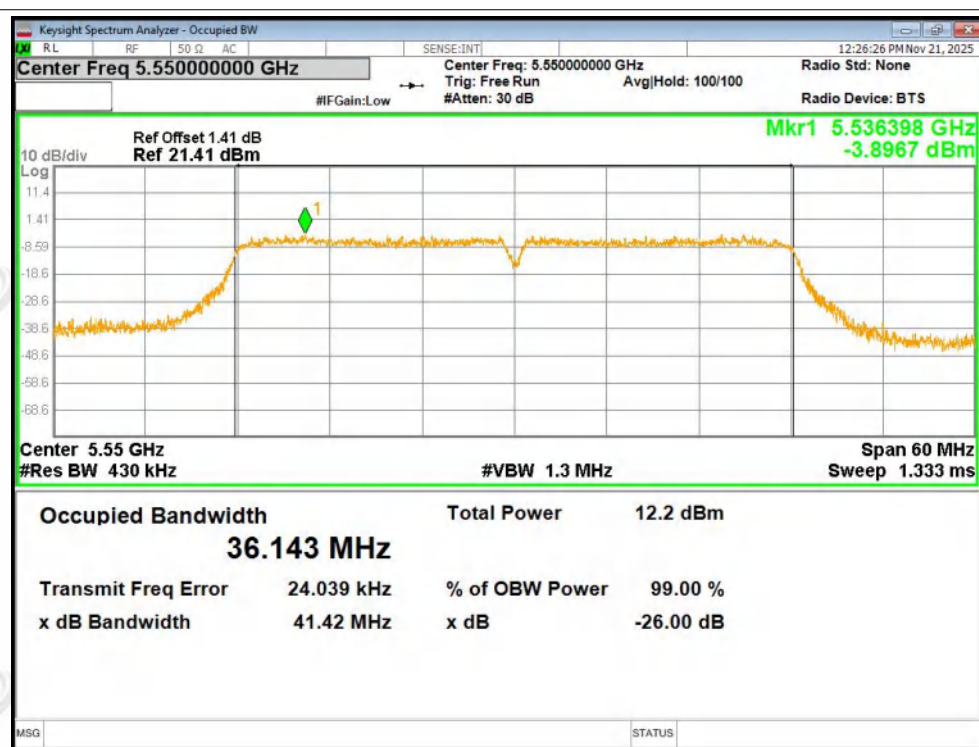




## OBW NVNT n40 5510MHz Ant1

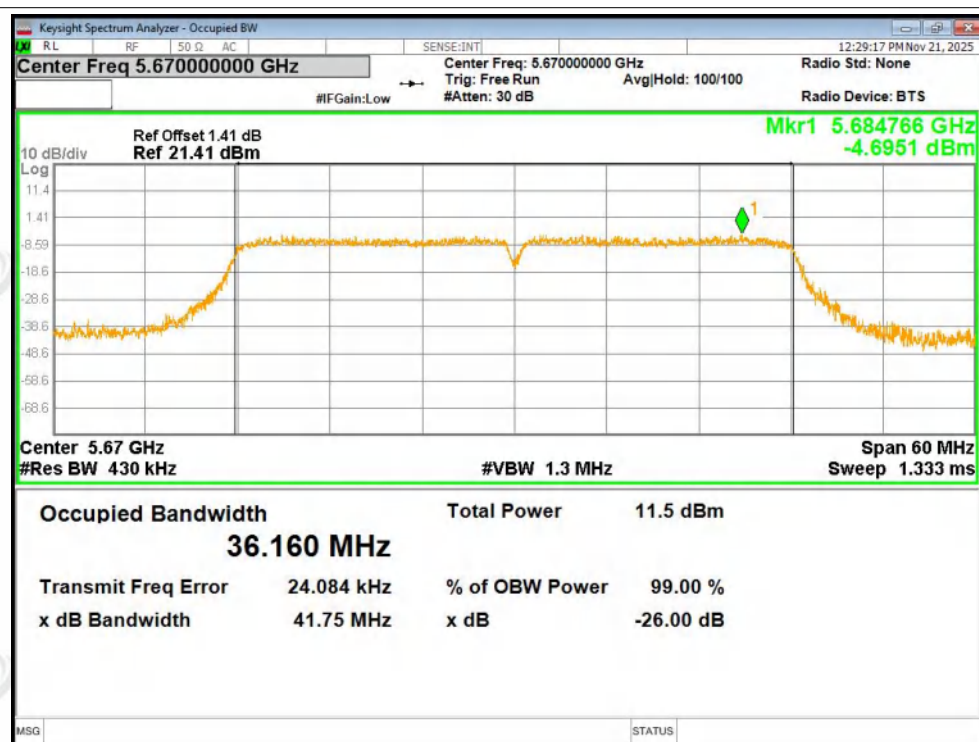


## OBW NVNT n40 5550MHz Ant1

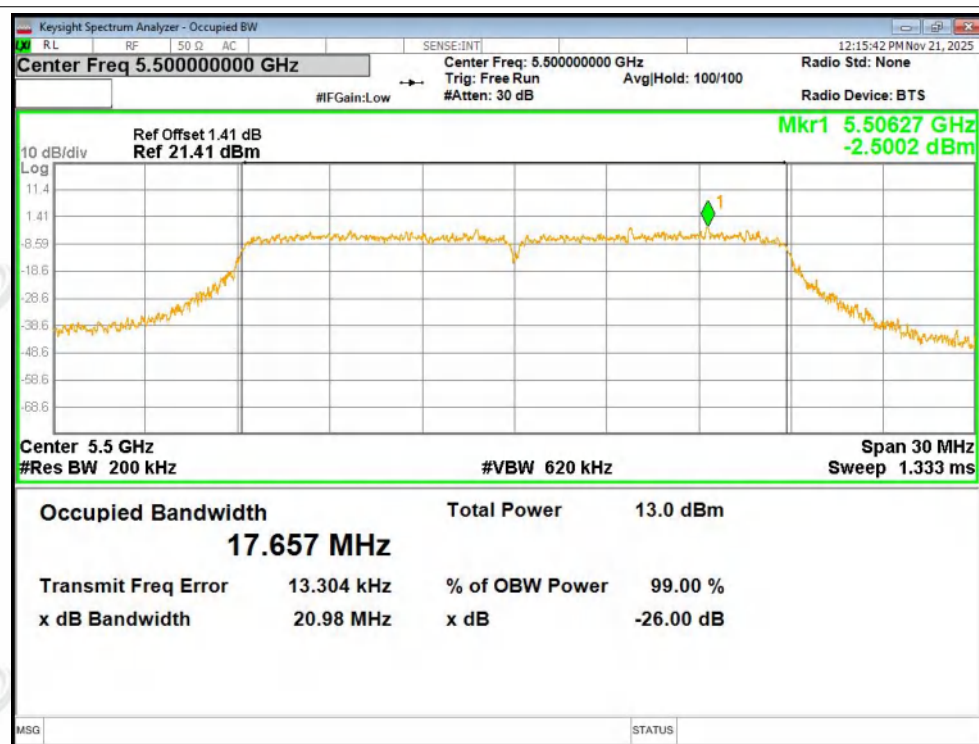




## OBW NVNT n40 5670MHz Ant1

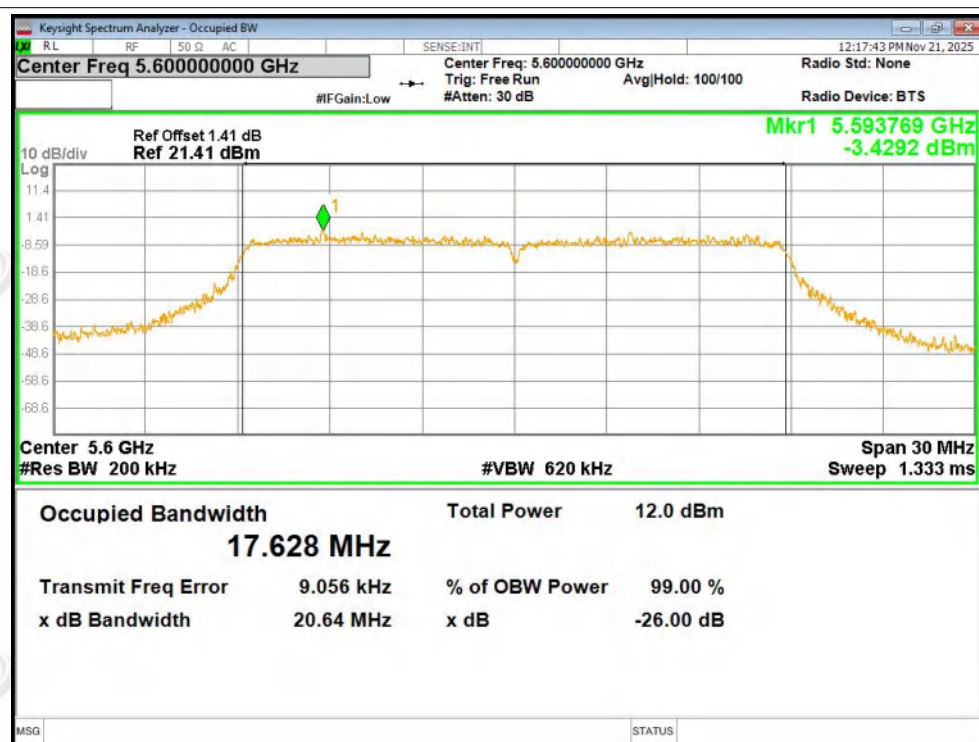


## OBW NVNT ac20 5500MHz Ant1

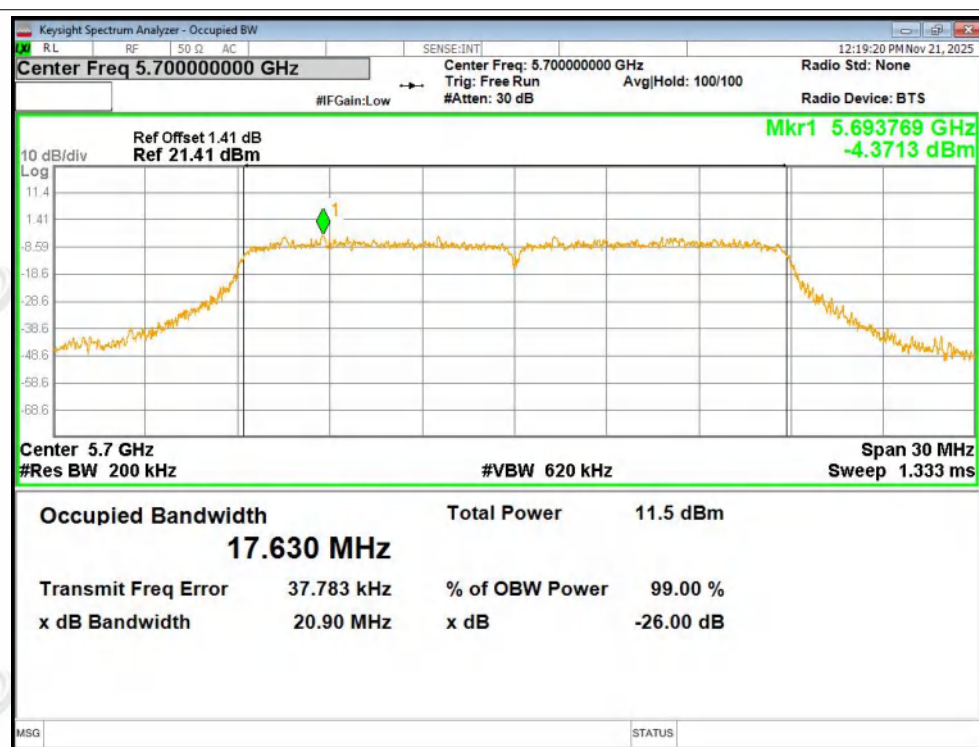




## OBW NVNT ac20 5600MHz Ant1

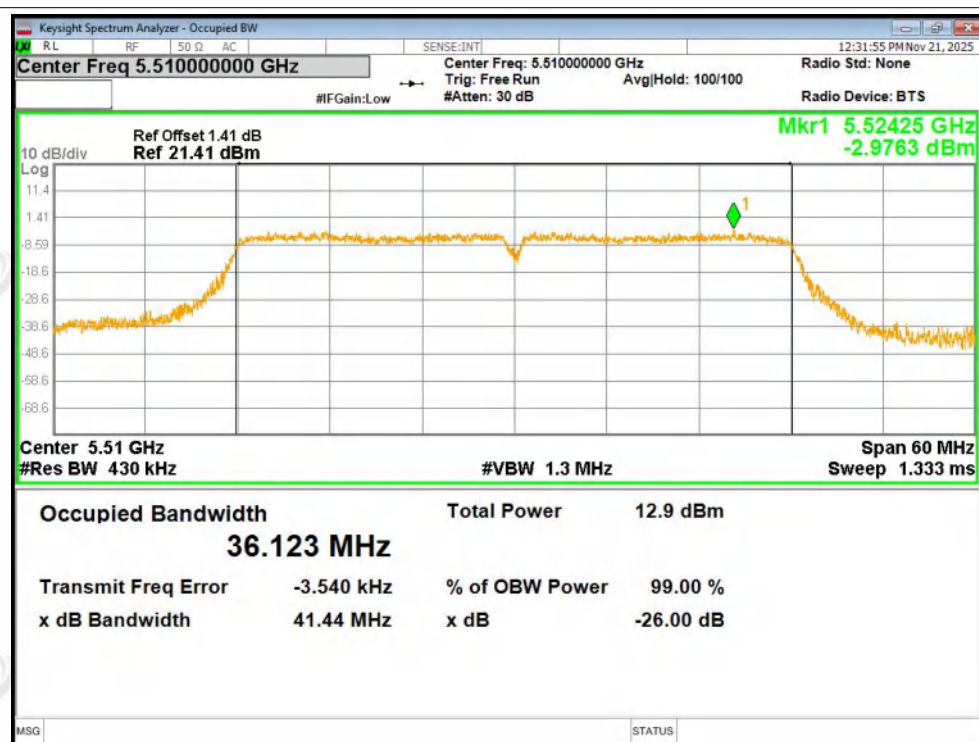


## OBW NVNT ac20 5700MHz Ant1

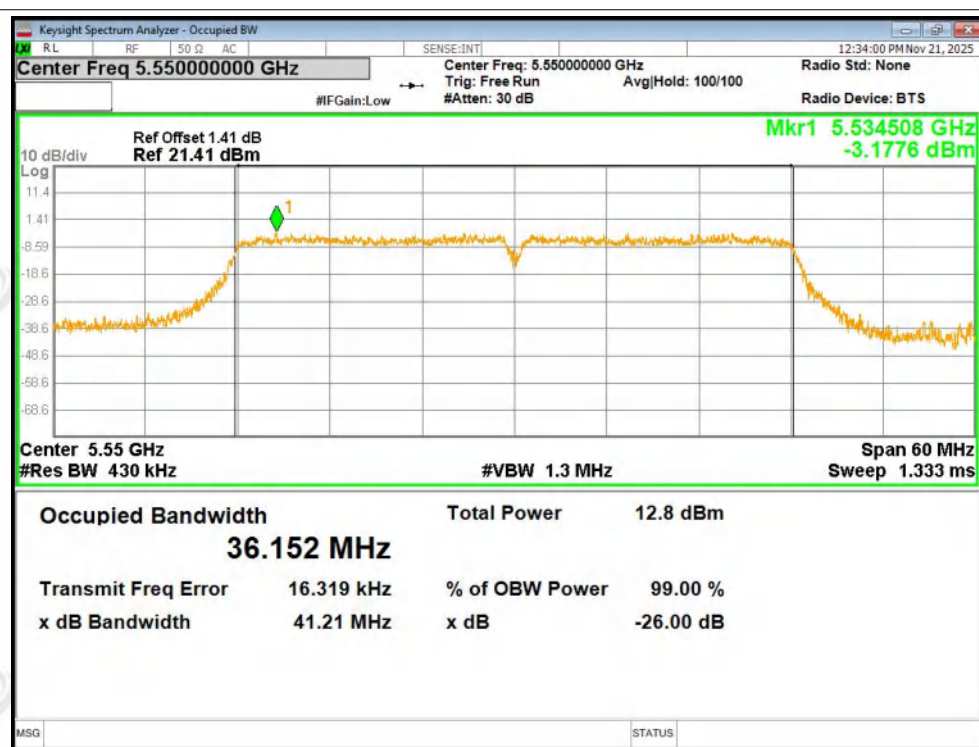




## OBW NVNT ac40 5510MHz Ant1

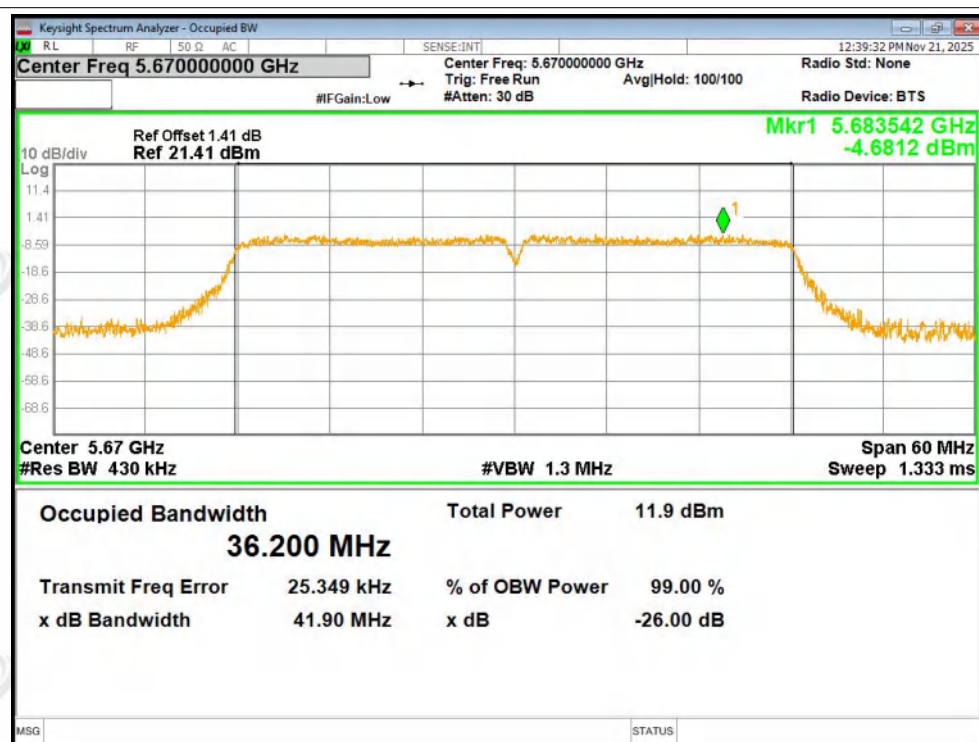


## OBW NVNT ac40 5550MHz Ant1

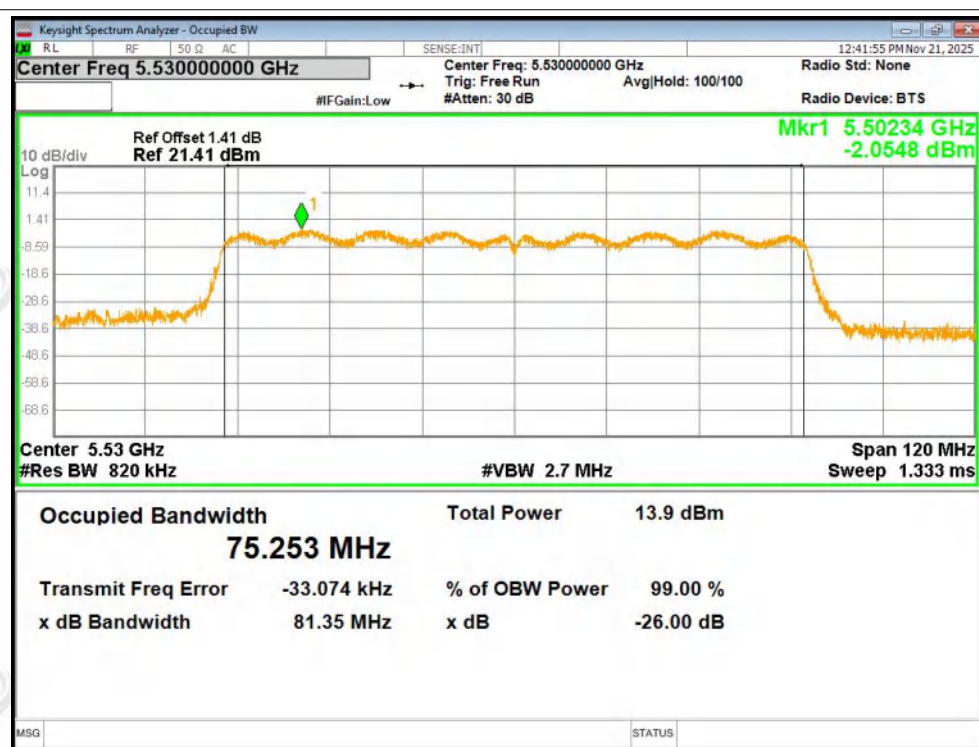




## OBW NVNT ac40 5670MHz Ant1

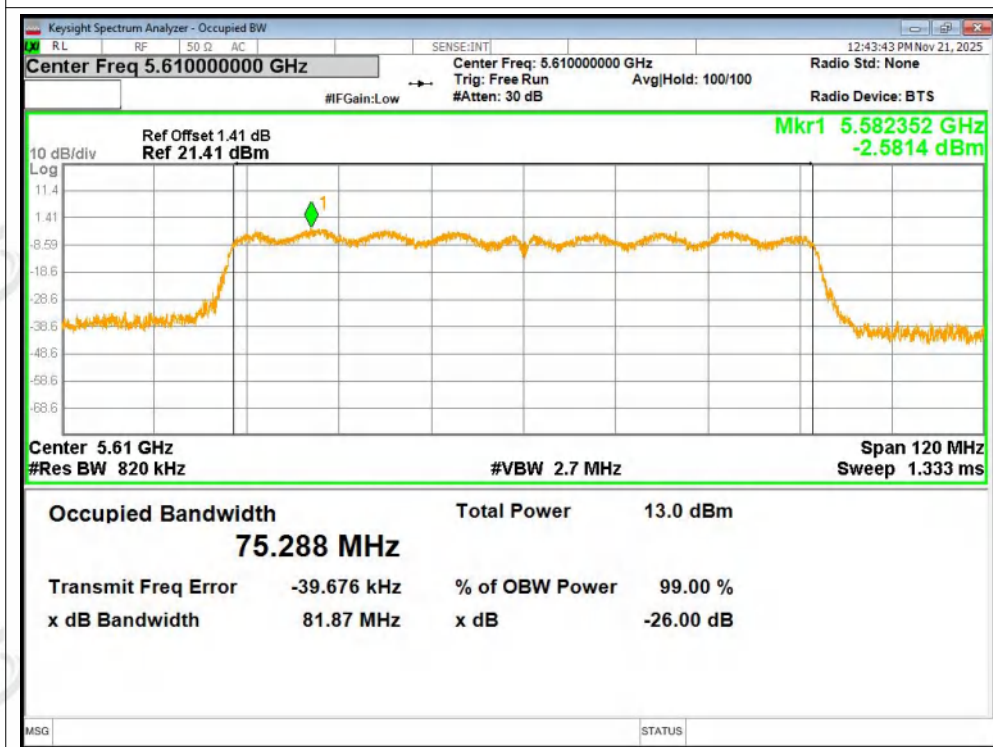


## OBW NVNT ac80 5530MHz Ant1





## OBW NVNT ac80 5610MHz Ant1



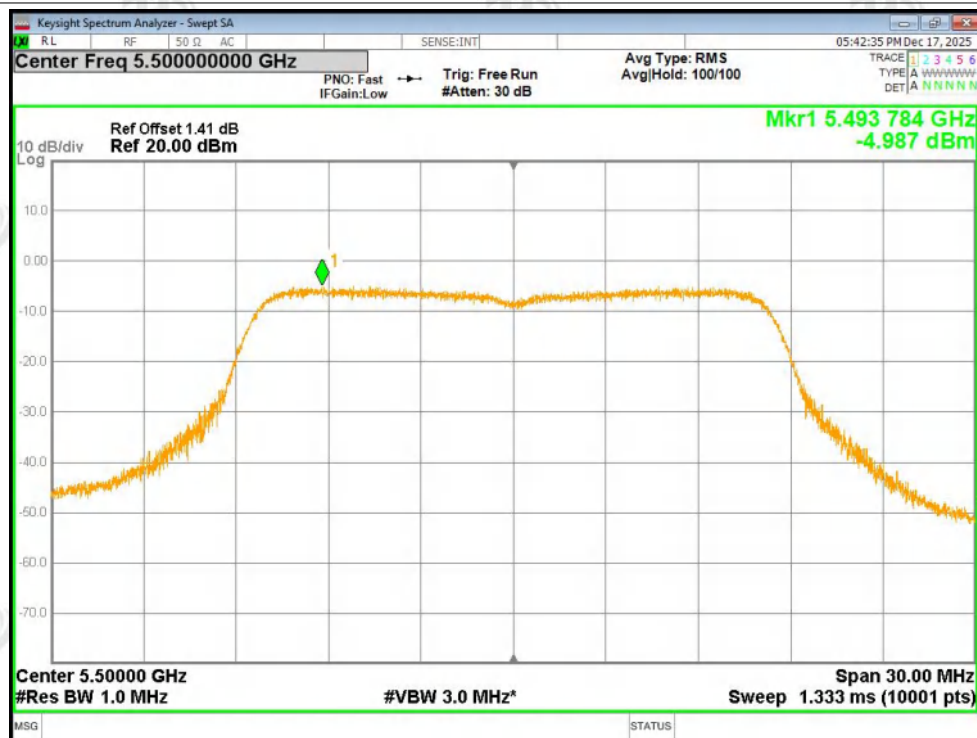


## C.5 Maximum Power Spectral Density Level

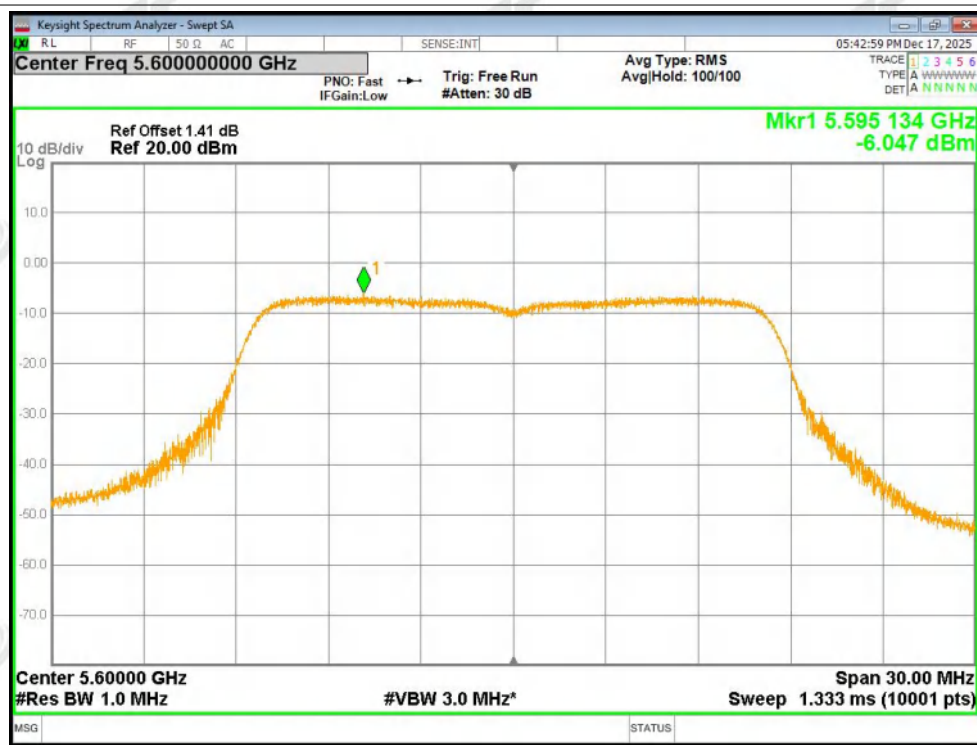
| Condition | Mode | Frequency (MHz) | Antenna | Conducted PSD (dBm) | Duty Factor (dB) | Total PSD (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|---------------------|------------------|-----------------|-------------|---------|
| NVNT      | a    | 5500            | Ant1    | -4.99               | 0.24             | -4.75           | 11          | Pass    |
| NVNT      | a    | 5600            | Ant1    | -6.05               | 0.17             | -5.88           | 11          | Pass    |
| NVNT      | a    | 5700            | Ant1    | -6.51               | 0                | -6.51           | 11          | Pass    |
| NVNT      | n20  | 5500            | Ant1    | -4.83               | 0.24             | -4.59           | 11          | Pass    |
| NVNT      | n20  | 5600            | Ant1    | -6                  | 0.28             | -5.72           | 11          | Pass    |
| NVNT      | n20  | 5700            | Ant1    | -6.37               | 0.37             | -6              | 11          | Pass    |
| NVNT      | n40  | 5510            | Ant1    | -9.69               | 0.23             | -9.46           | 11          | Pass    |
| NVNT      | n40  | 5550            | Ant1    | -10.27              | 0.23             | -10.04          | 11          | Pass    |
| NVNT      | n40  | 5670            | Ant1    | -11.83              | 0.4              | -11.43          | 11          | Pass    |
| NVNT      | ac20 | 5500            | Ant1    | -5.55               | 0.35             | -5.2            | 11          | Pass    |
| NVNT      | ac20 | 5600            | Ant1    | -6.58               | 0.35             | -6.23           | 11          | Pass    |
| NVNT      | ac20 | 5700            | Ant1    | -6.81               | 0.13             | -6.68           | 11          | Pass    |
| NVNT      | ac40 | 5510            | Ant1    | -10.57              | 0.18             | -10.39          | 11          | Pass    |
| NVNT      | ac40 | 5550            | Ant1    | -11.32              | 0.39             | -10.93          | 11          | Pass    |
| NVNT      | ac40 | 5670            | Ant1    | -12.31              | 0.31             | -12             | 11          | Pass    |
| NVNT      | ac80 | 5530            | Ant1    | -13.9               | 0.78             | -13.12          | 11          | Pass    |
| NVNT      | ac80 | 5610            | Ant1    | -14.28              | 0.36             | -13.92          | 11          | Pass    |

### Test Graphs

PSD NVNT a 5500MHz Ant1

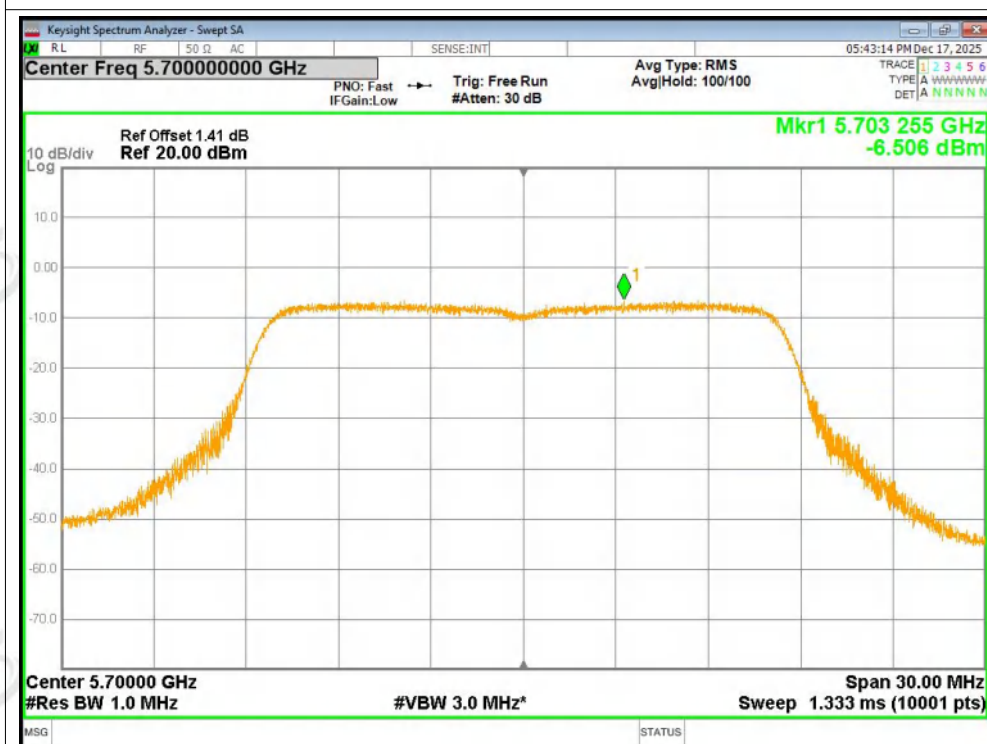


PSD NVNT a 5600MHz Ant1

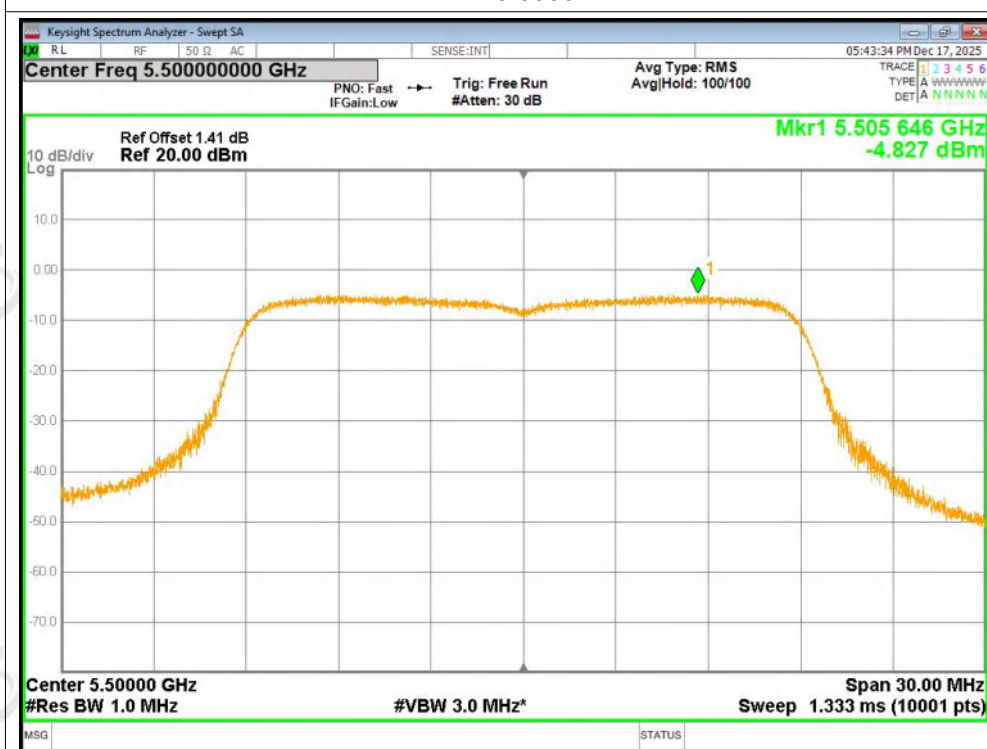




PSD NVNT a 5700MHz Ant1

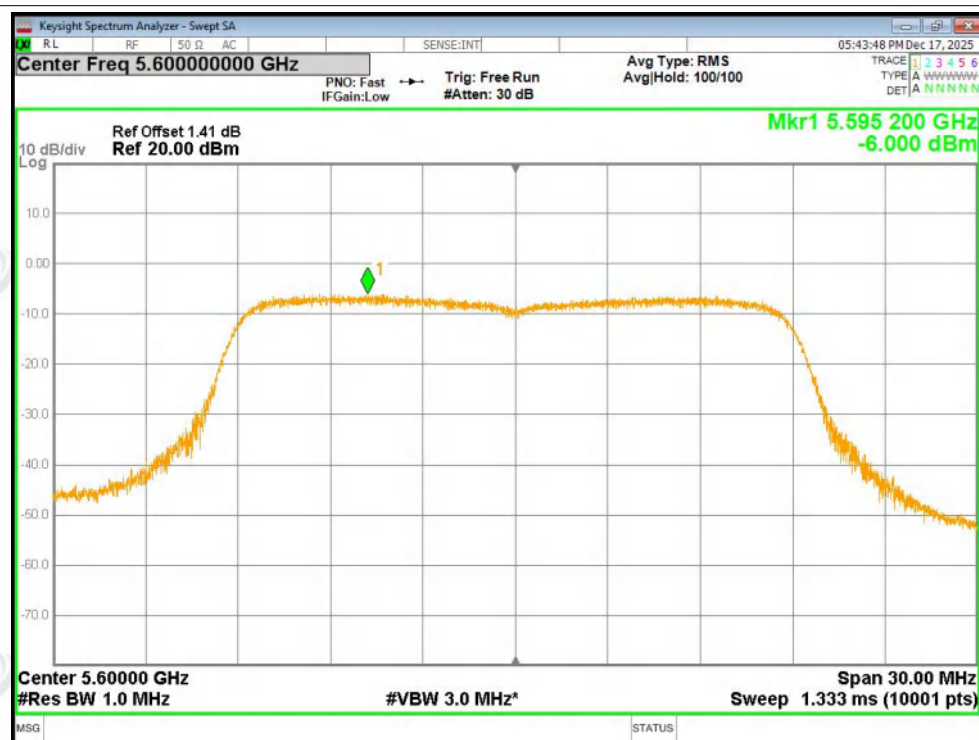


PSD NVNT n20 5500MHz Ant1

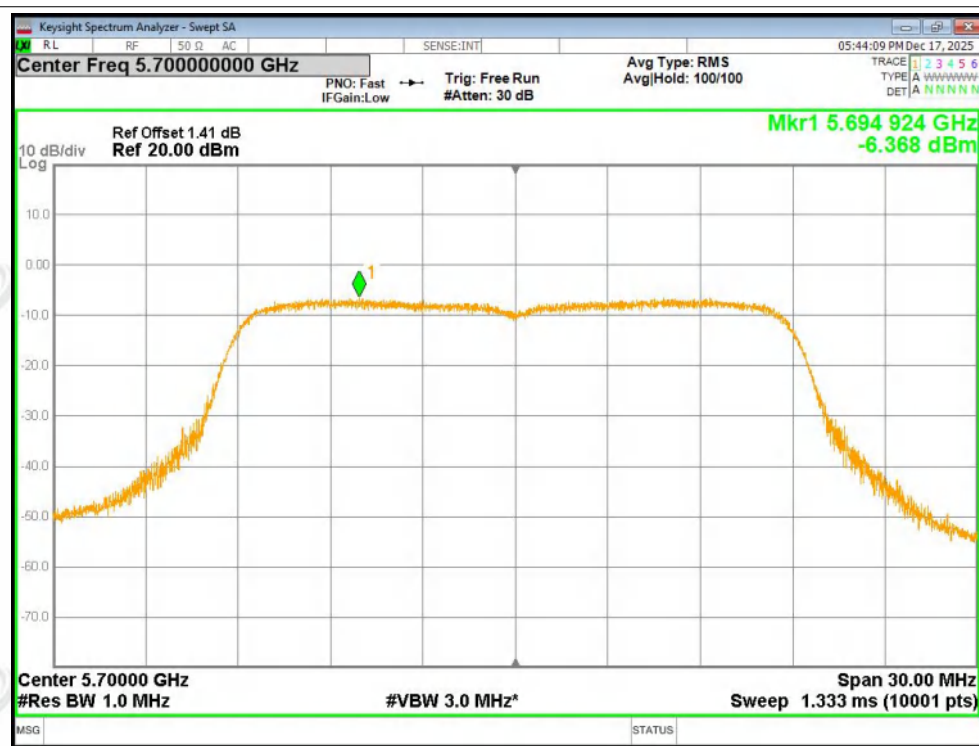




PSD NVNT n20 5600MHz Ant1

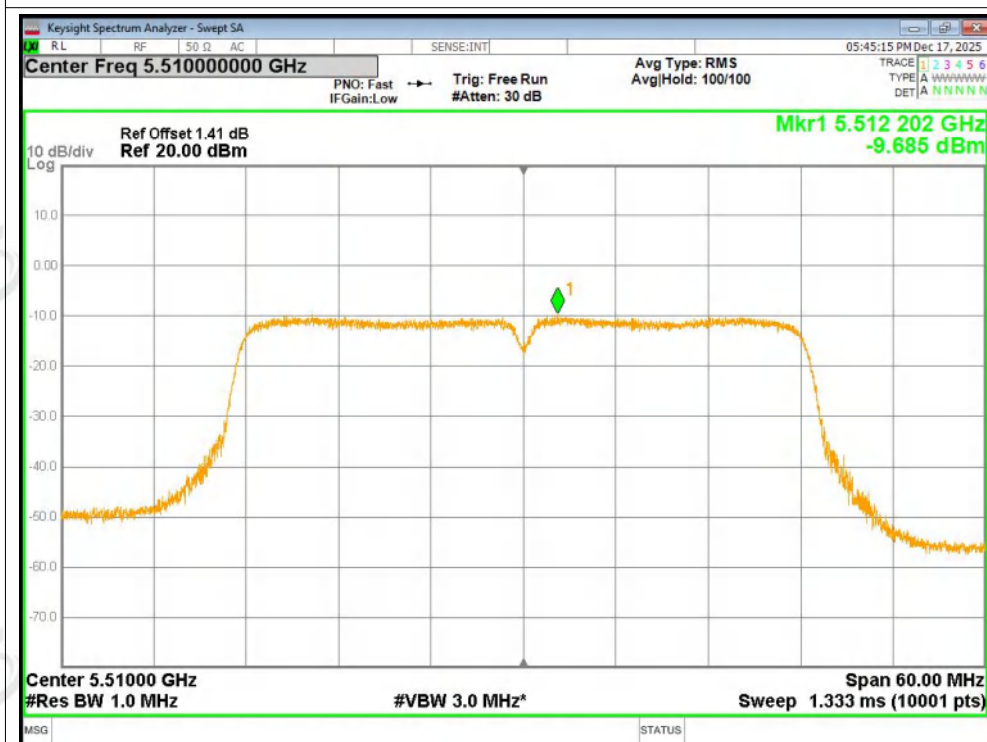


PSD NVNT n20 5700MHz Ant1

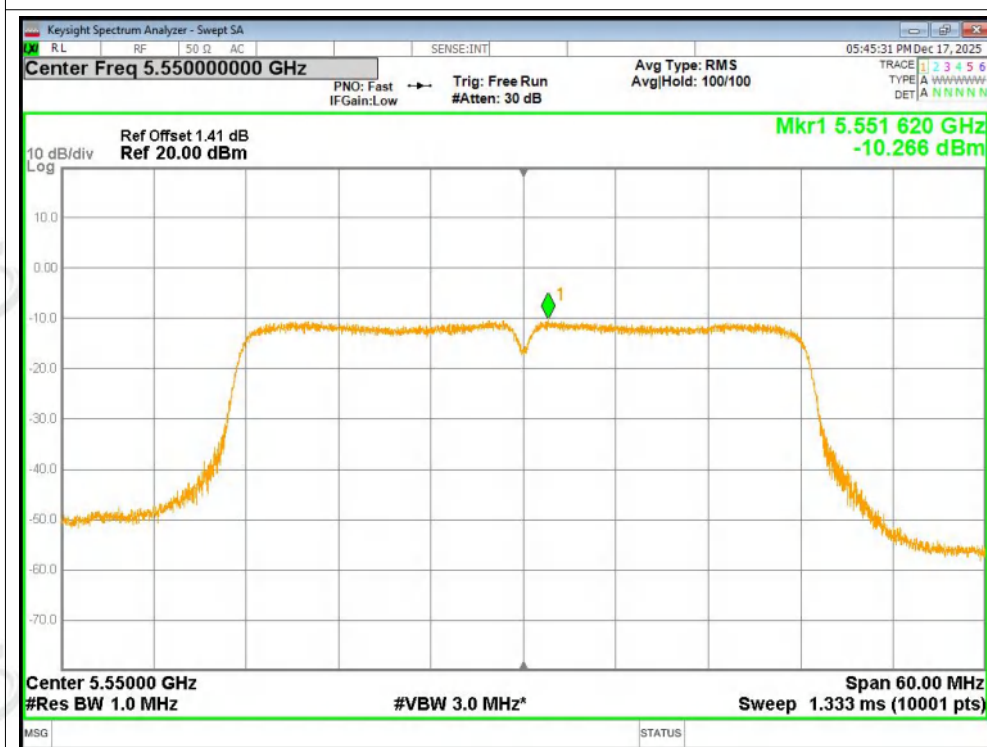




PSD NVNT n40 5510MHz Ant1

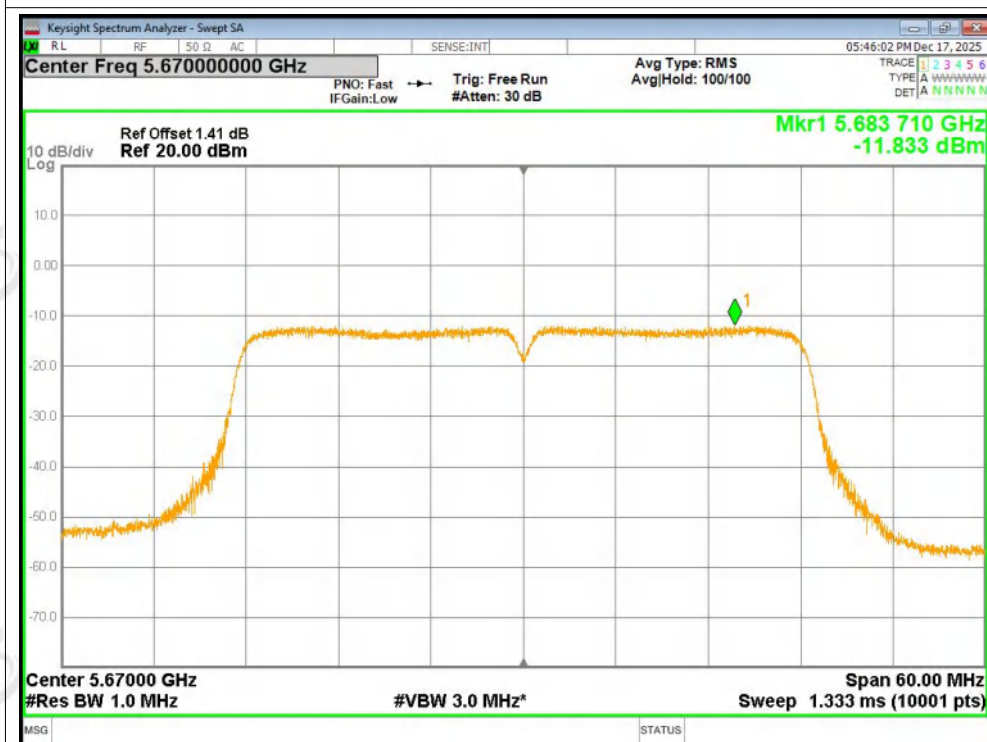


PSD NVNT n40 5550MHz Ant1

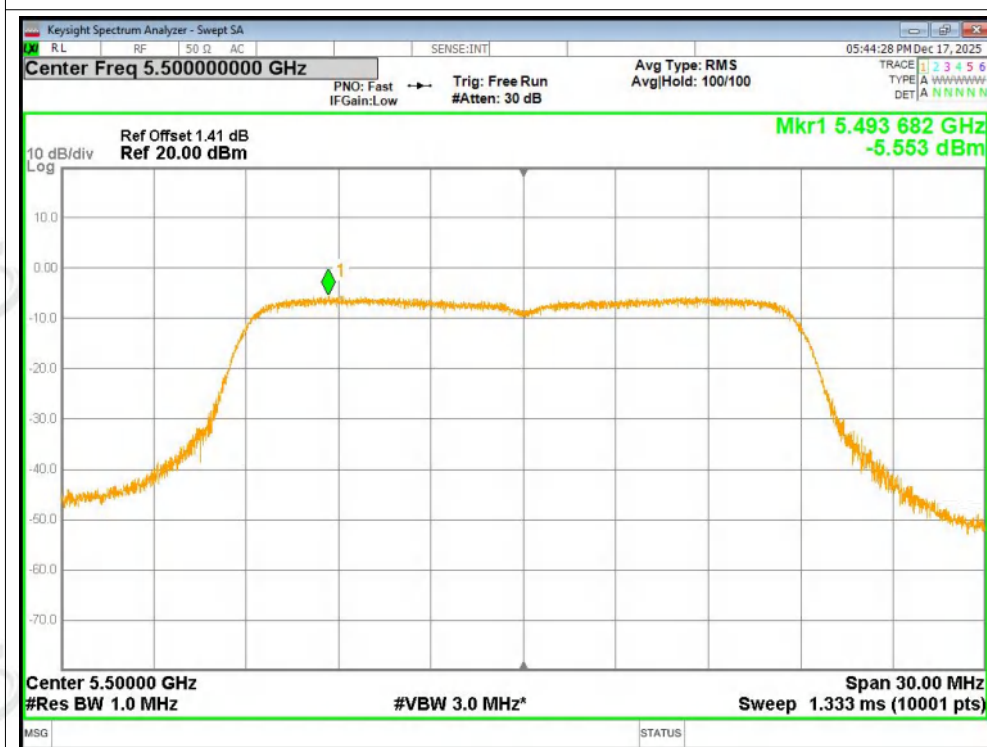




PSD NVNT n40 5670MHz Ant1

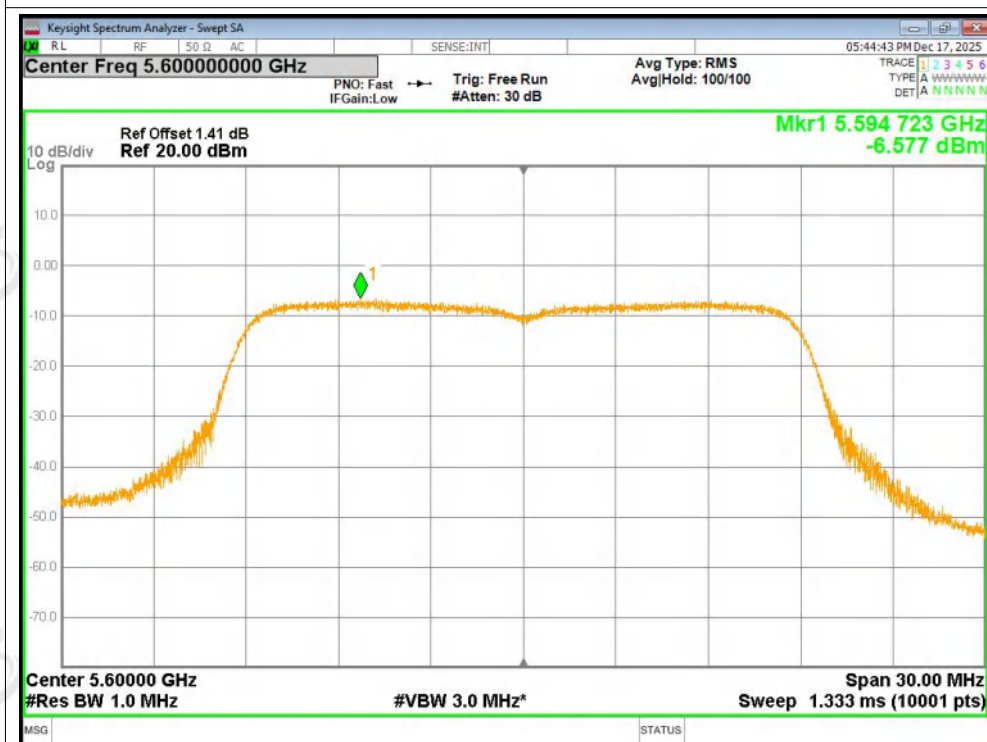


PSD NVNT ac20 5500MHz Ant1

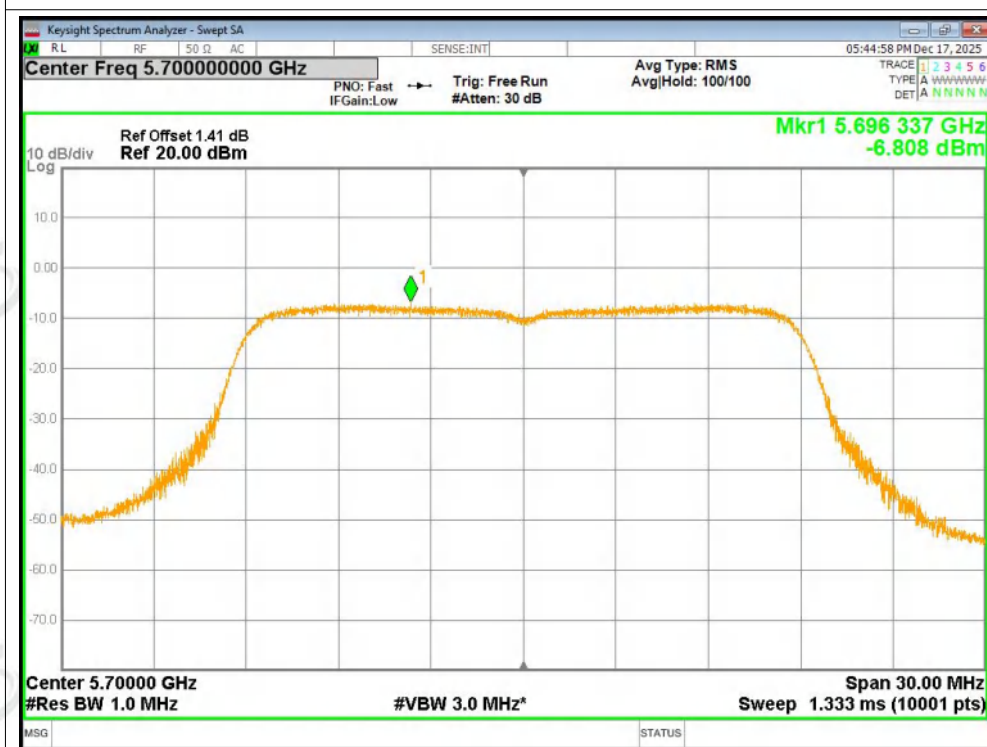




PSD NVNT ac20 5600MHz Ant1

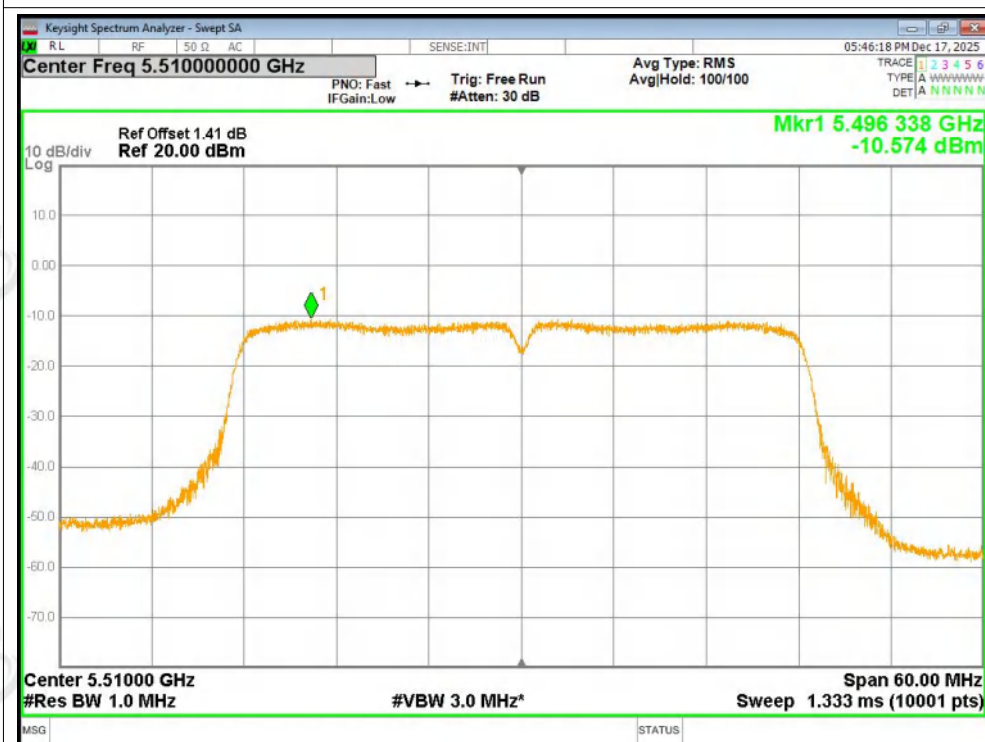


PSD NVNT ac20 5700MHz Ant1

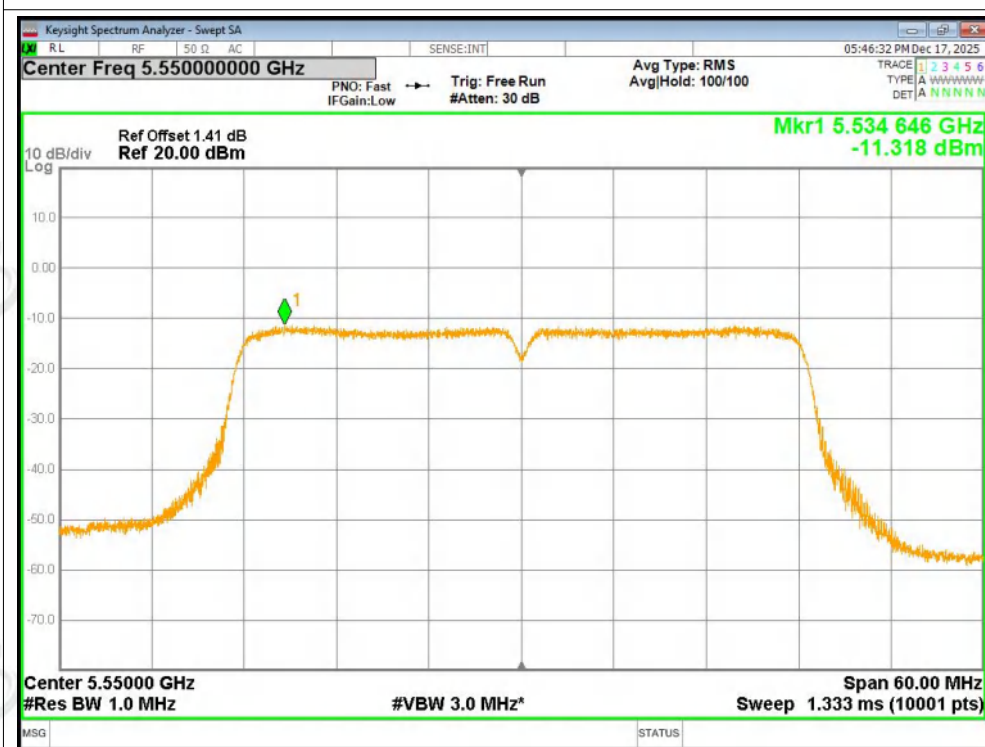




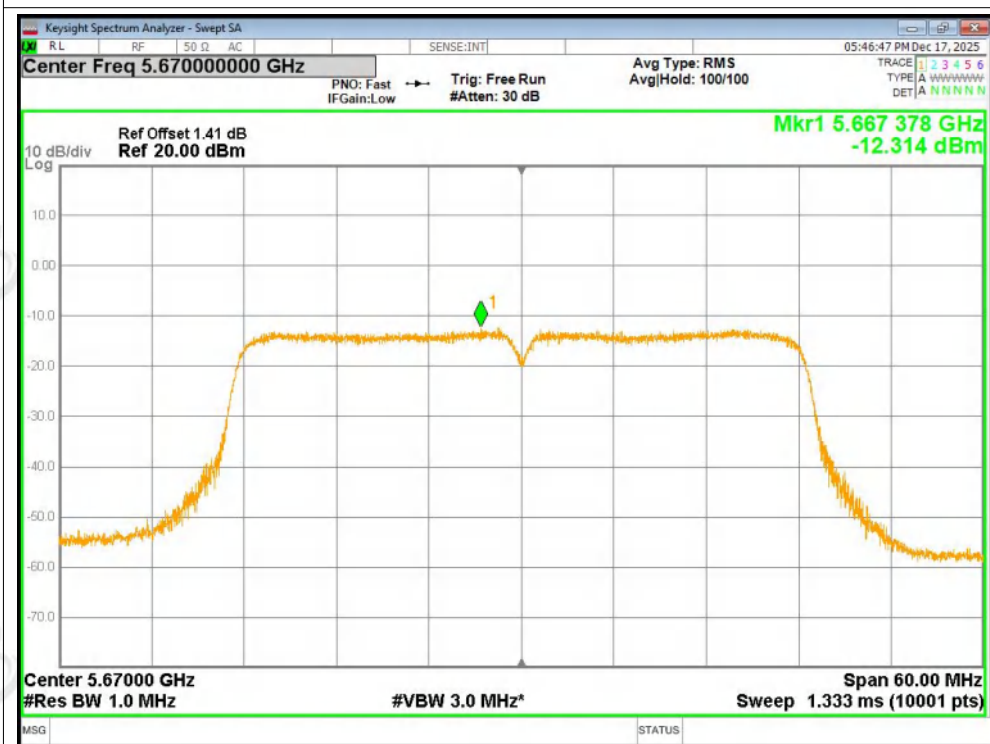
PSD NVNT ac40 5510MHz Ant1



PSD NVNT ac40 5550MHz Ant1

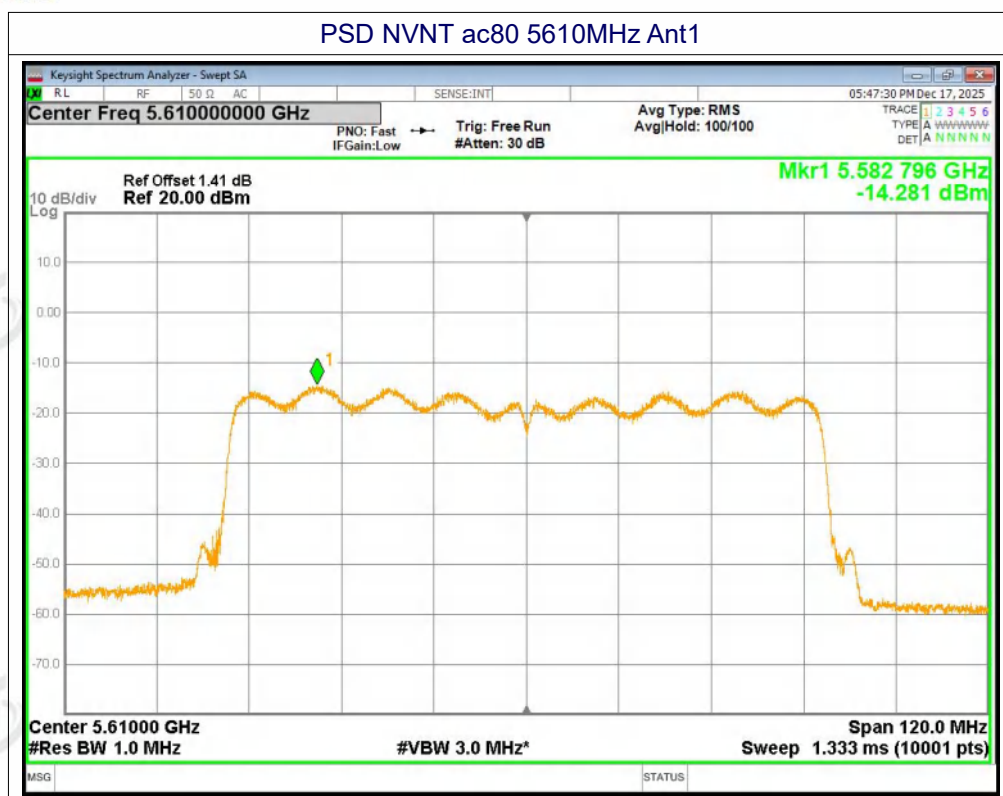


PSD NVNT ac40 5670MHz Ant1



PSD NVNT ac80 5530MHz Ant1



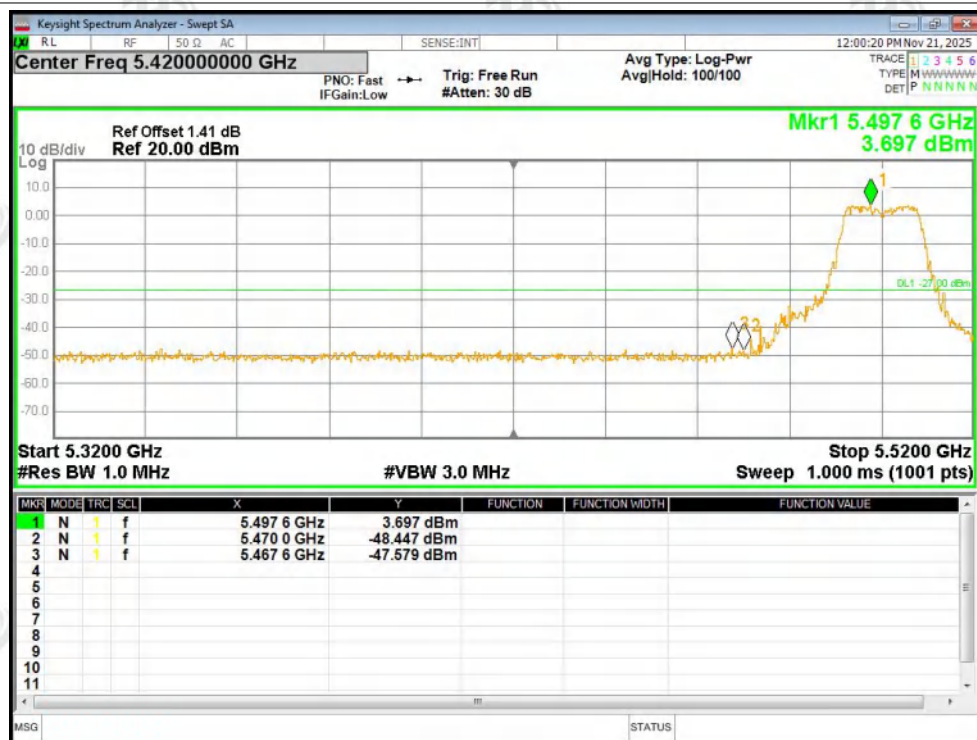


**C.6 Band Edge**

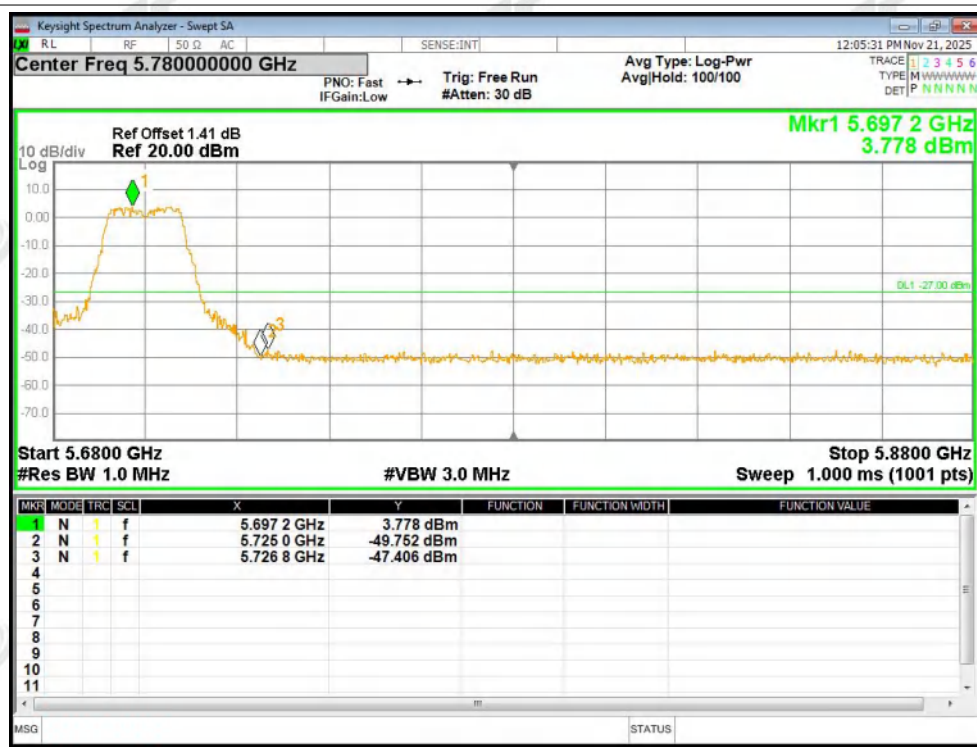
| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|-----------------|-------------|---------|
| NVNT      | a    | 5500            | Ant1    | -47.57          | -27         | Pass    |
| NVNT      | a    | 5700            | Ant1    | -47.40          | -27         | Pass    |
| NVNT      | n20  | 5500            | Ant1    | -47.74          | -27         | Pass    |
| NVNT      | n20  | 5700            | Ant1    | -47.63          | -27         | Pass    |
| NVNT      | n40  | 5510            | Ant1    | -35.62          | -27         | Pass    |
| NVNT      | n40  | 5670            | Ant1    | -47.89          | -27         | Pass    |
| NVNT      | ac20 | 5500            | Ant1    | -46.41          | -27         | Pass    |
| NVNT      | ac20 | 5700            | Ant1    | -47.27          | -27         | Pass    |
| NVNT      | ac40 | 5510            | Ant1    | -35.83          | -27         | Pass    |
| NVNT      | ac40 | 5670            | Ant1    | -47.69          | -27         | Pass    |
| NVNT      | ac80 | 5530            | Ant1    | -33.31          | -27         | Pass    |

### Test Graphs

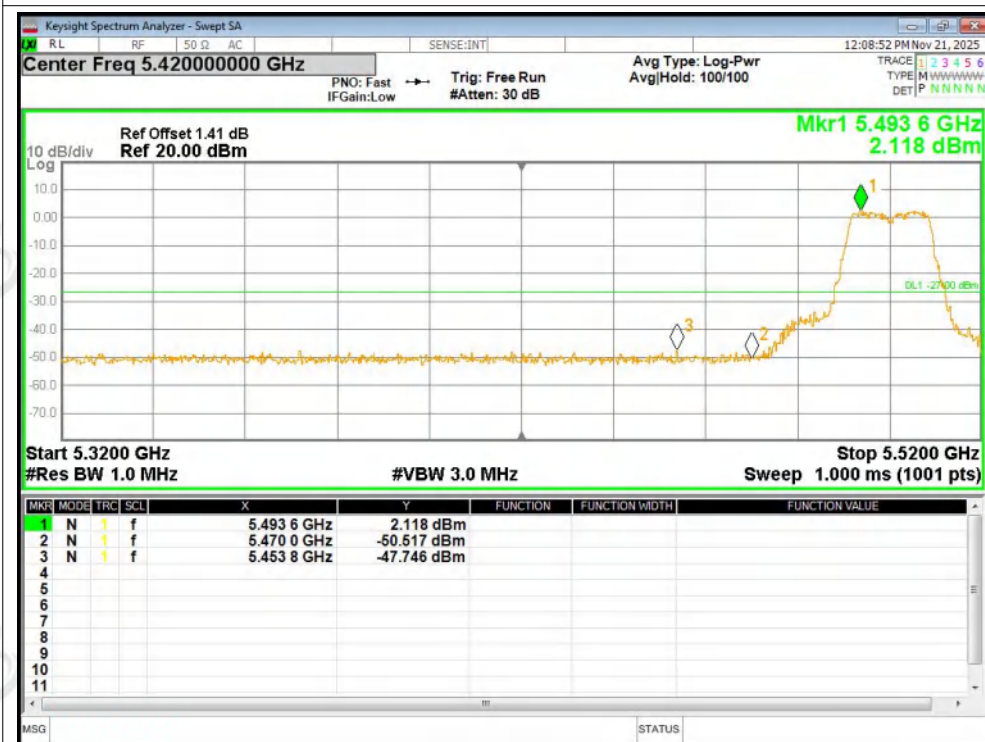
#### Band Edge NVNT a 5500MHz Low Ant1



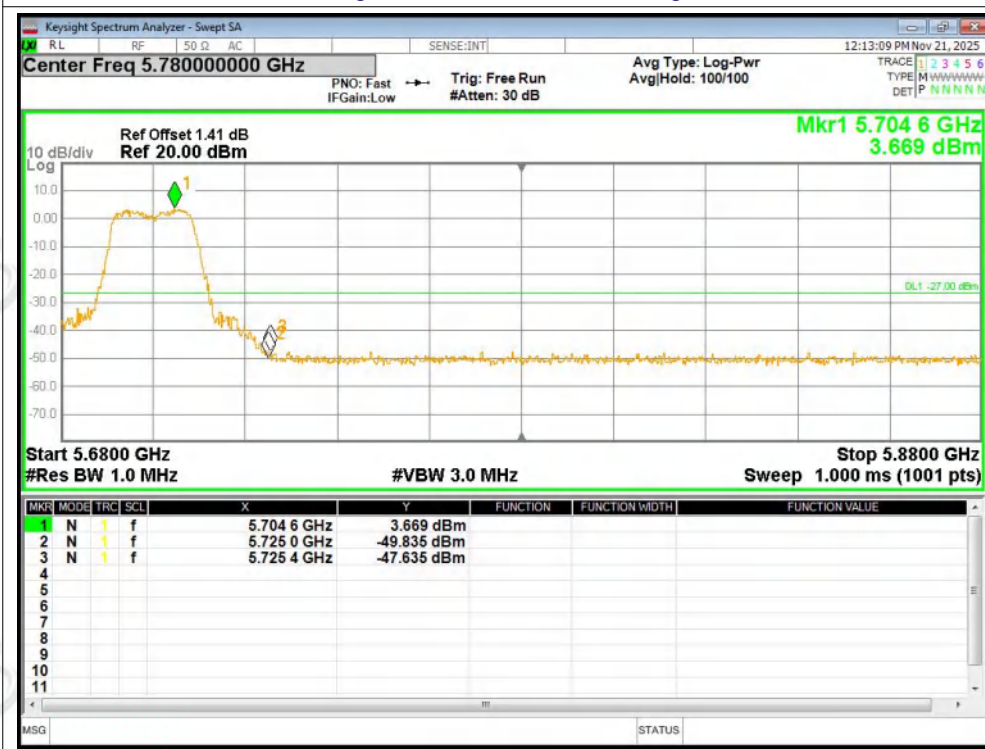
#### Band Edge NVNT a 5700MHz High Ant1



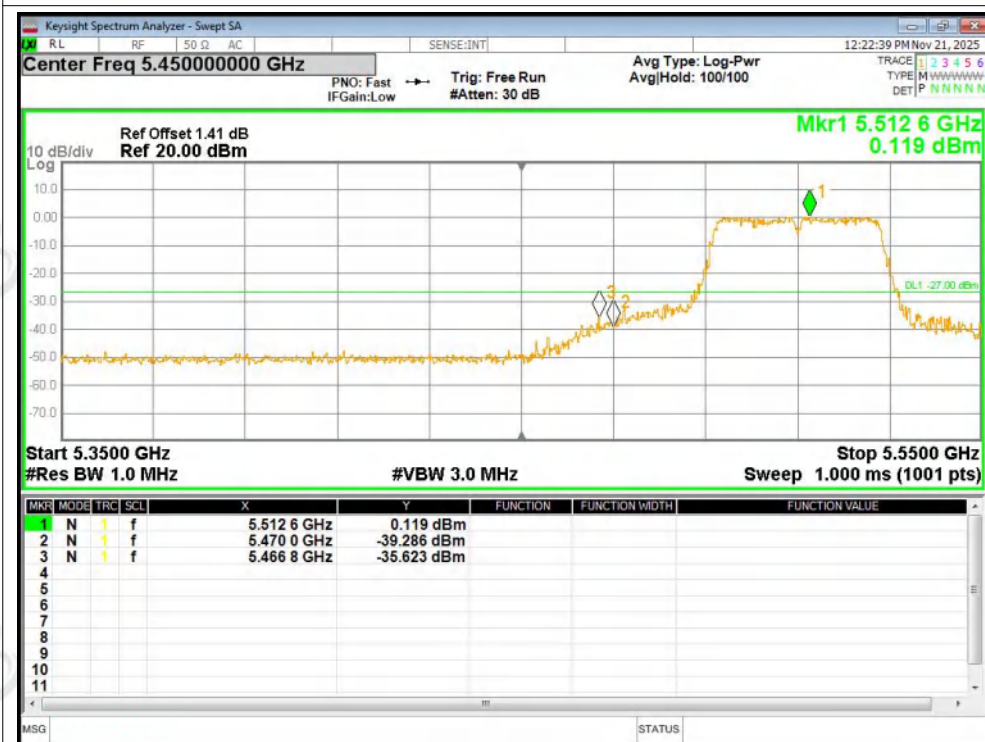
### Band Edge NVNT n20 5500MHz Low Ant1



### Band Edge NVNT n20 5700MHz High Ant1



### Band Edge NVNT n40 5510MHz Low Ant1



### Band Edge NVNT n40 5670MHz High Ant1

