

# Appendix

## Test Data

### for BTEK241108034A01E04

|                   |           |               |          |
|-------------------|-----------|---------------|----------|
| Start date        | 2025/1/7  | Finish date   | 2025/1/7 |
| Temperature       | 21.9℃     | Humidity      | 42%      |
| RF specifications | 5.3G_WIFI | Test Engineer | Zora     |

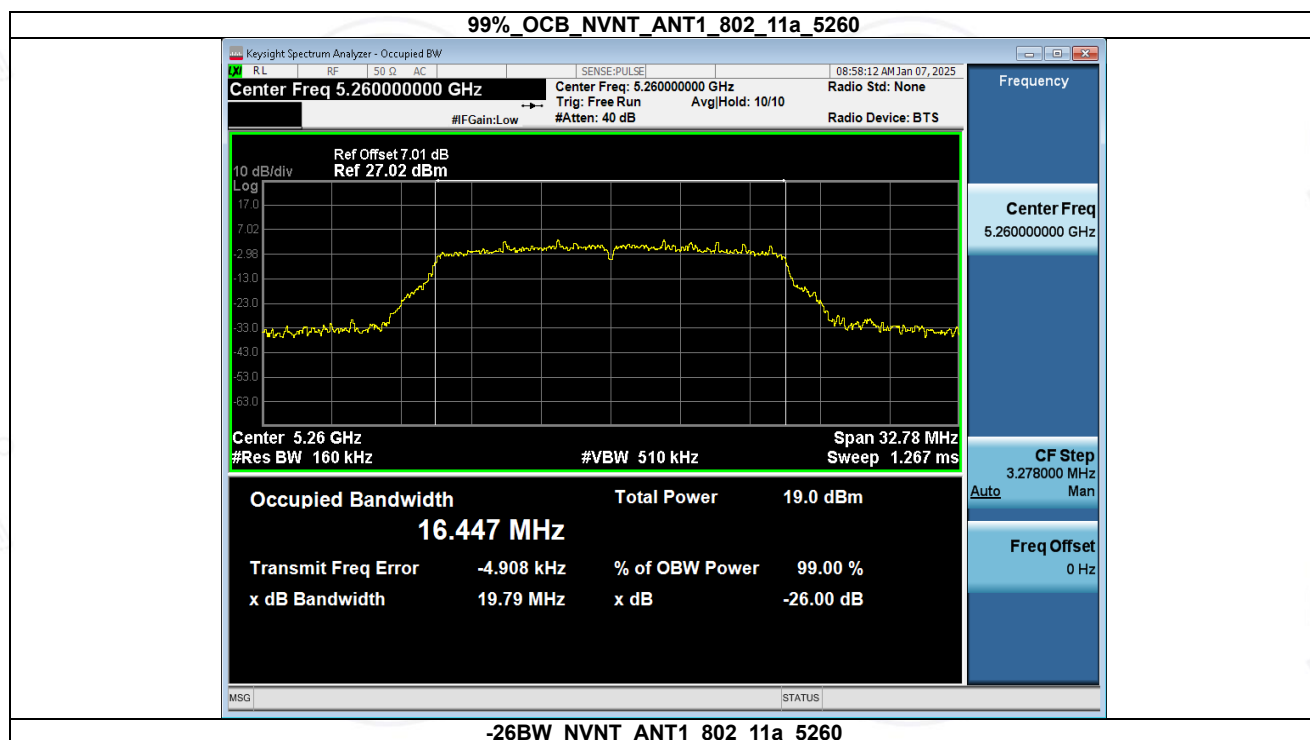


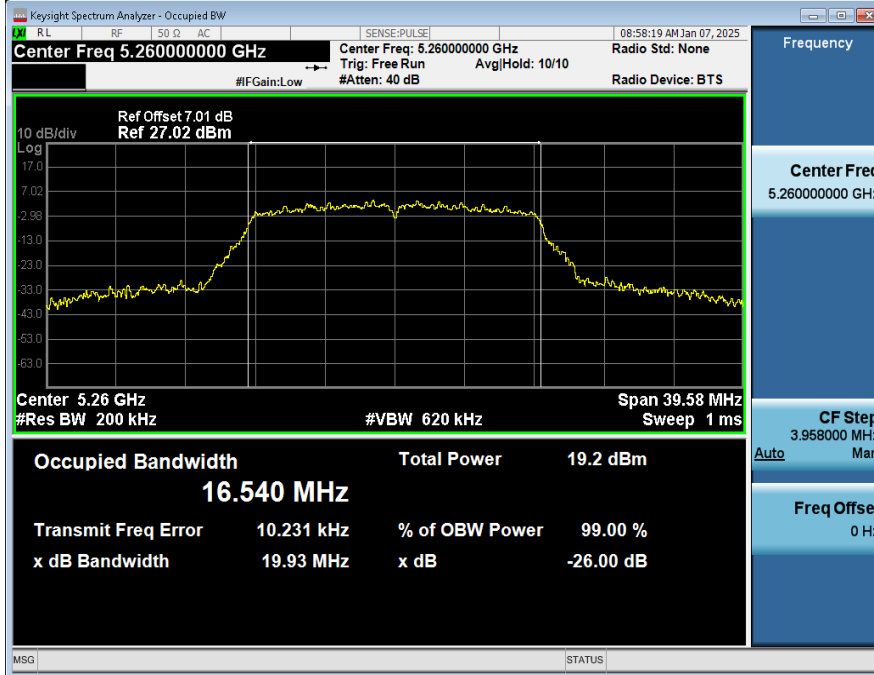
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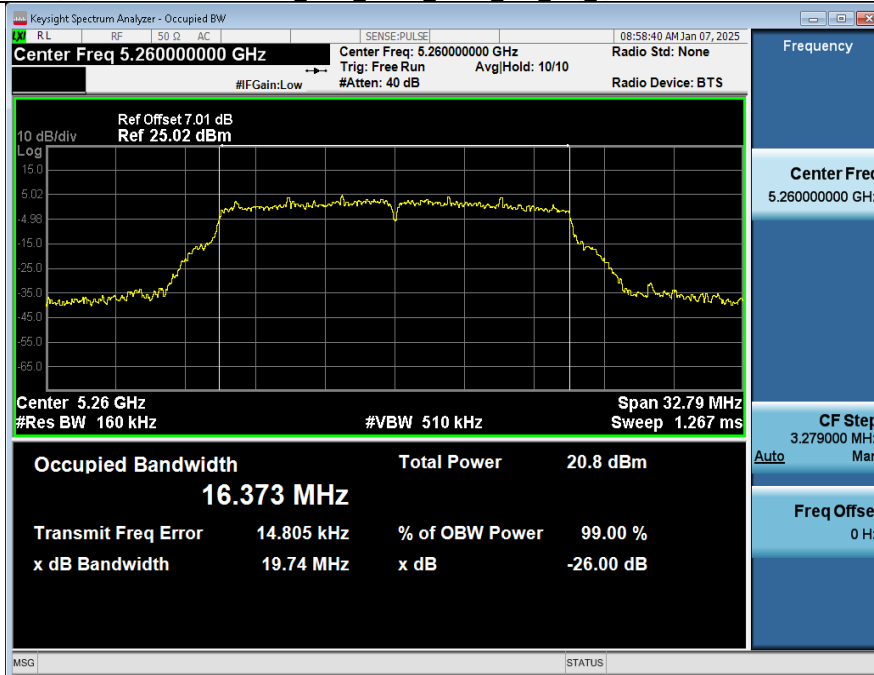


| Condition | Antenna | Modulation      | Frequency(MHz) | 26dB_Emission_Bandwidth(MHz) | Occupied Bandwidth(MHz) |
|-----------|---------|-----------------|----------------|------------------------------|-------------------------|
| NVNT      | ANT1    | 802.11a         | 5260.00        | 19.93                        | 16.45                   |
| NVNT      | ANT2    | 802.11a         | 5260.00        | 19.89                        | 16.37                   |
| NVNT      | ANT1    | 802.11a         | 5300.00        | 19.96                        | 16.47                   |
| NVNT      | ANT2    | 802.11a         | 5300.00        | 19.92                        | 16.37                   |
| NVNT      | ANT1    | 802.11a         | 5320.00        | 19.83                        | 16.42                   |
| NVNT      | ANT2    | 802.11a         | 5320.00        | 19.81                        | 16.35                   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5260.00        | 20.05                        | 17.55                   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5260.00        | 20.13                        | 17.57                   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5300.00        | 20.08                        | 17.59                   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5300.00        | 20.08                        | 17.57                   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5320.00        | 20.06                        | 17.54                   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5320.00        | 20.07                        | 17.55                   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5260.00        | 19.99                        | 17.59                   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5260.00        | 20.09                        | 17.55                   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5300.00        | 20.04                        | 17.56                   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5300.00        | 20.07                        | 17.55                   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5320.00        | 20.23                        | 17.54                   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5320.00        | 20.21                        | 17.54                   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5270.00        | 40.26                        | 36.01                   |
| NVNT      | ANT2    | 802.11n(HT40)   | 5270.00        | 39.70                        | 36.07                   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5310.00        | 40.16                        | 36.00                   |
| NVNT      | ANT2    | 802.11n(HT40)   | 5310.00        | 39.48                        | 36.06                   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5270.00        | 40.41                        | 36.00                   |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5270.00        | 39.72                        | 36.07                   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5310.00        | 40.48                        | 35.99                   |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5310.00        | 39.63                        | 36.05                   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5290.00        | 81.67                        | 76.01                   |
| NVNT      | ANT2    | 802.11ac(VHT80) | 5290.00        | 80.54                        | 75.73                   |



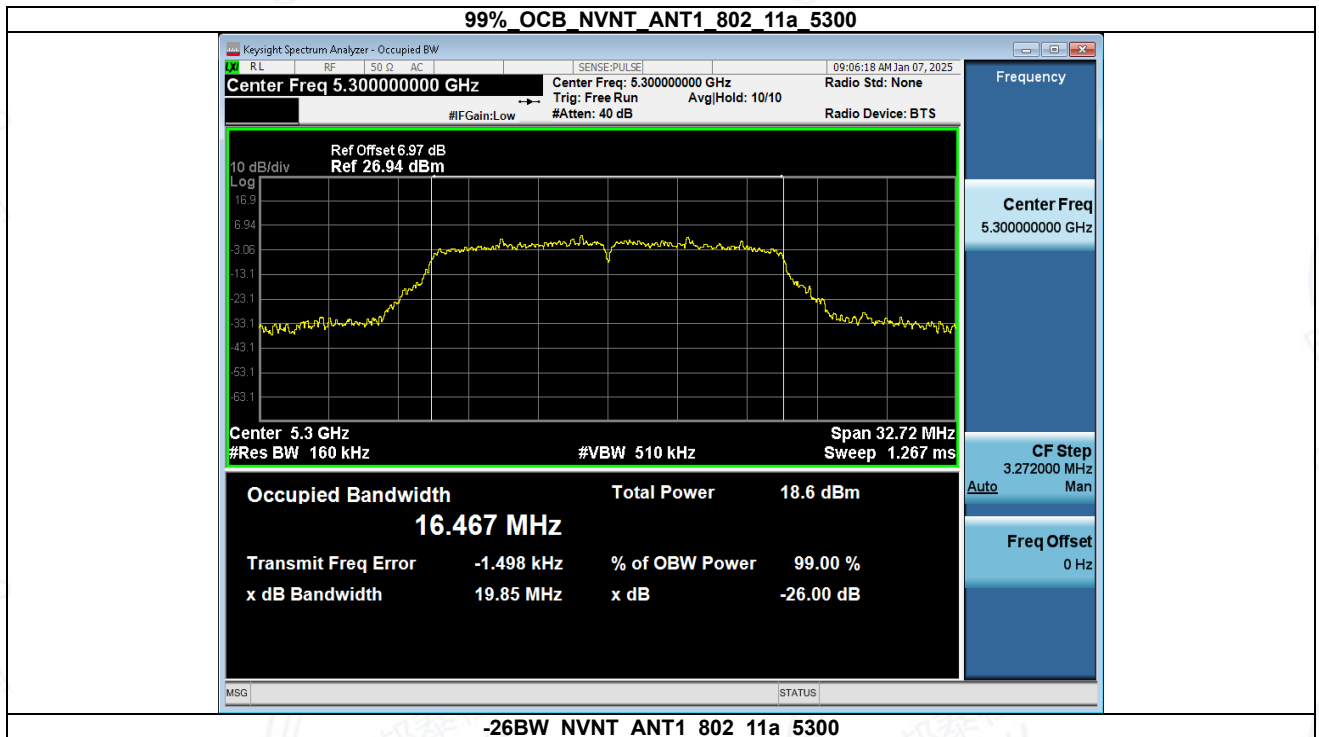


99%\_OCB\_NVNT\_ANT2\_802\_11a\_5260

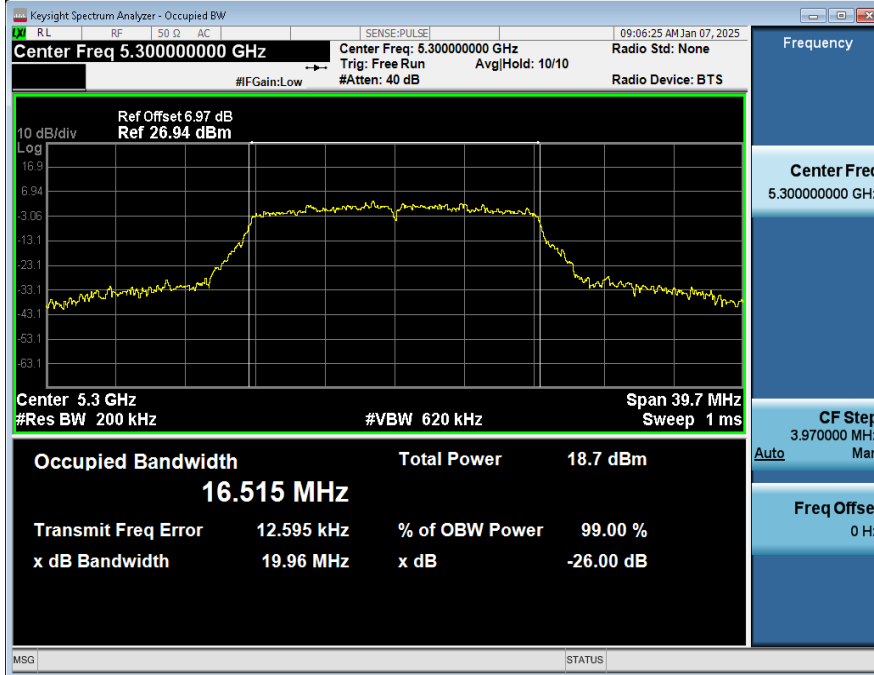


-26BW\_NVNT\_ANT2\_802\_11a\_5260

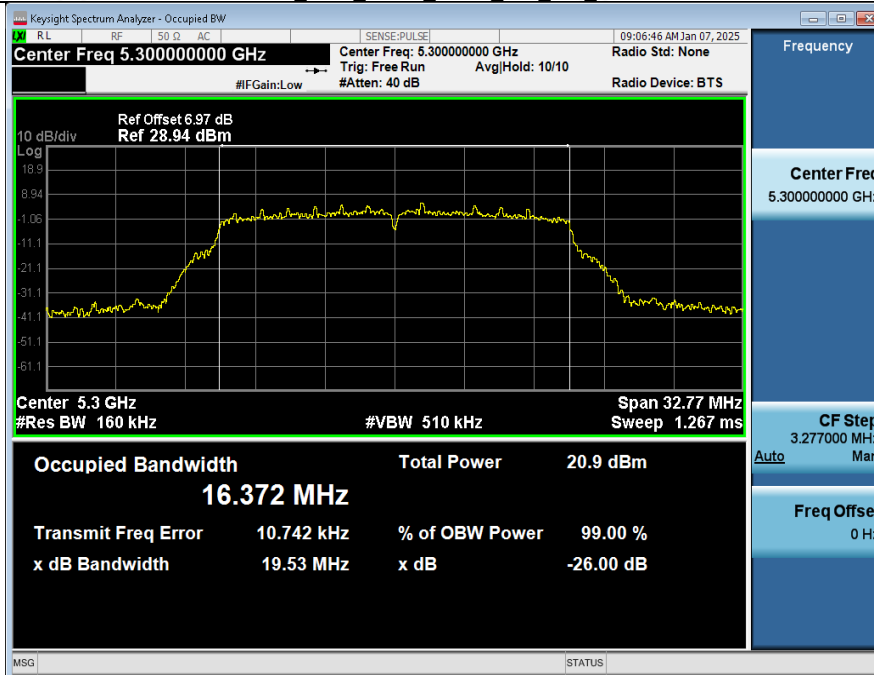






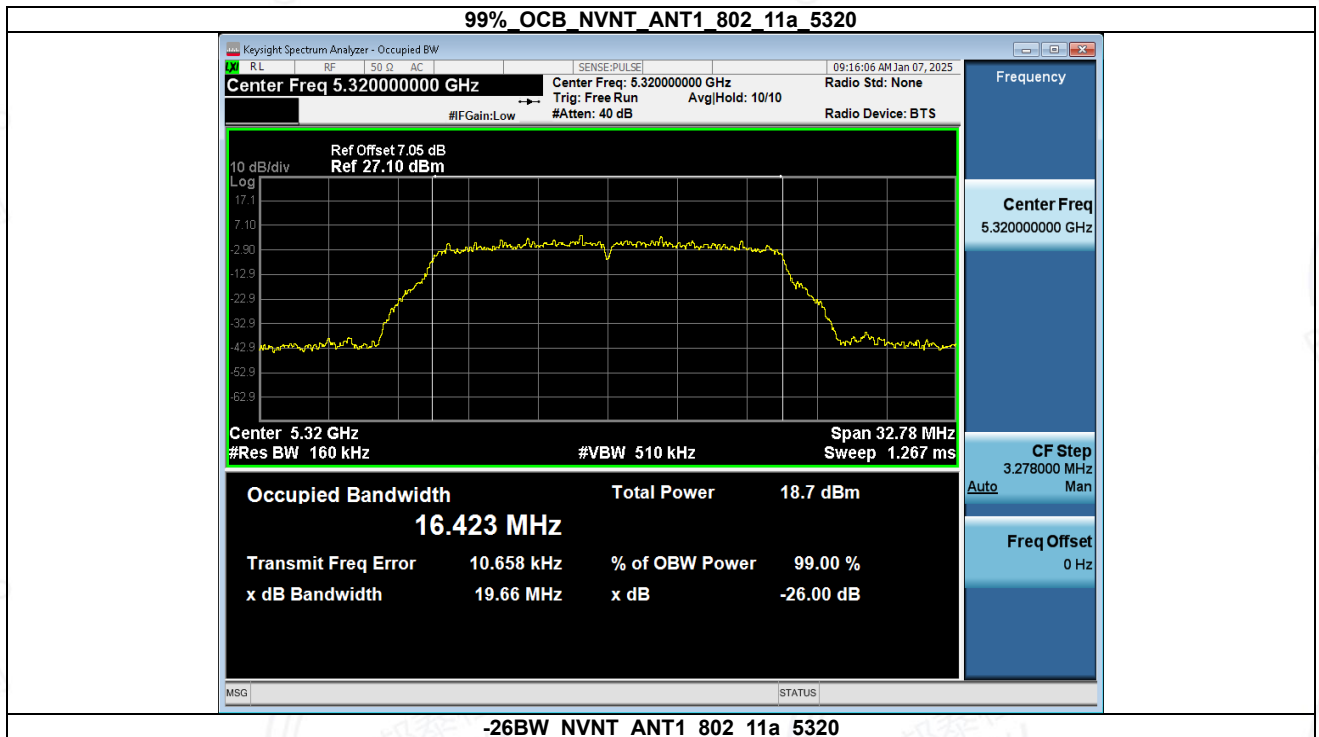


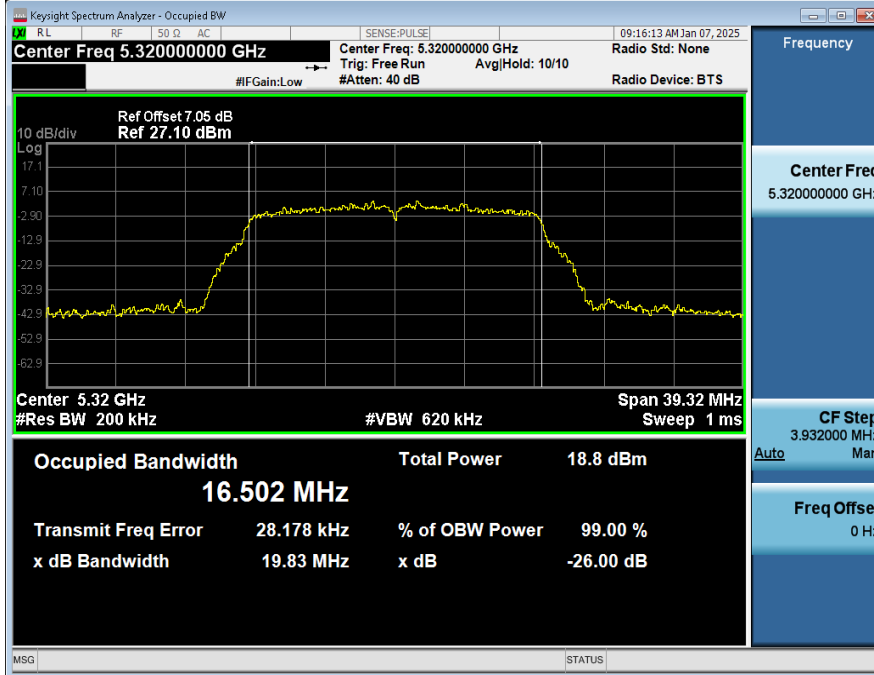
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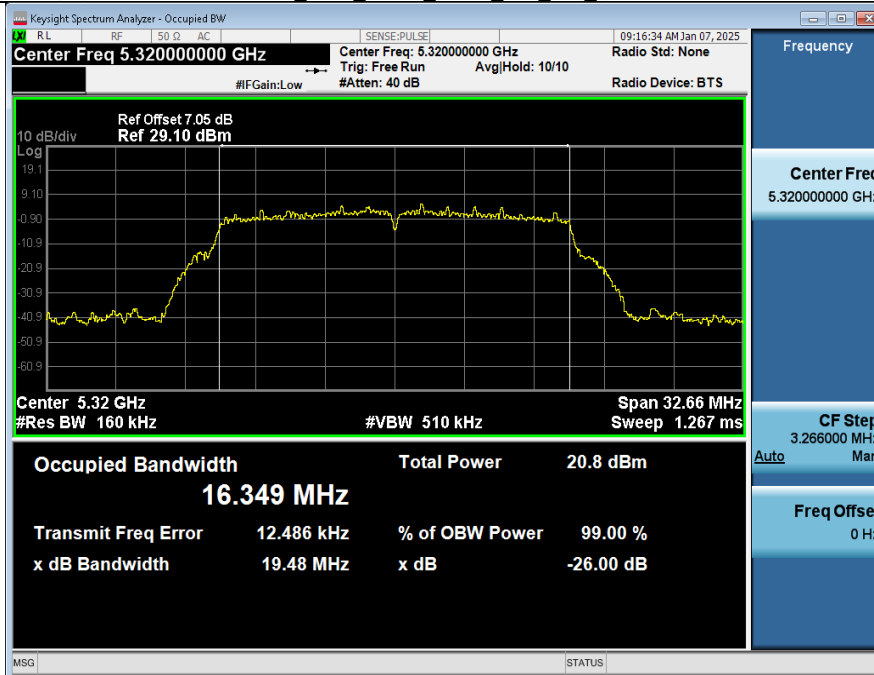
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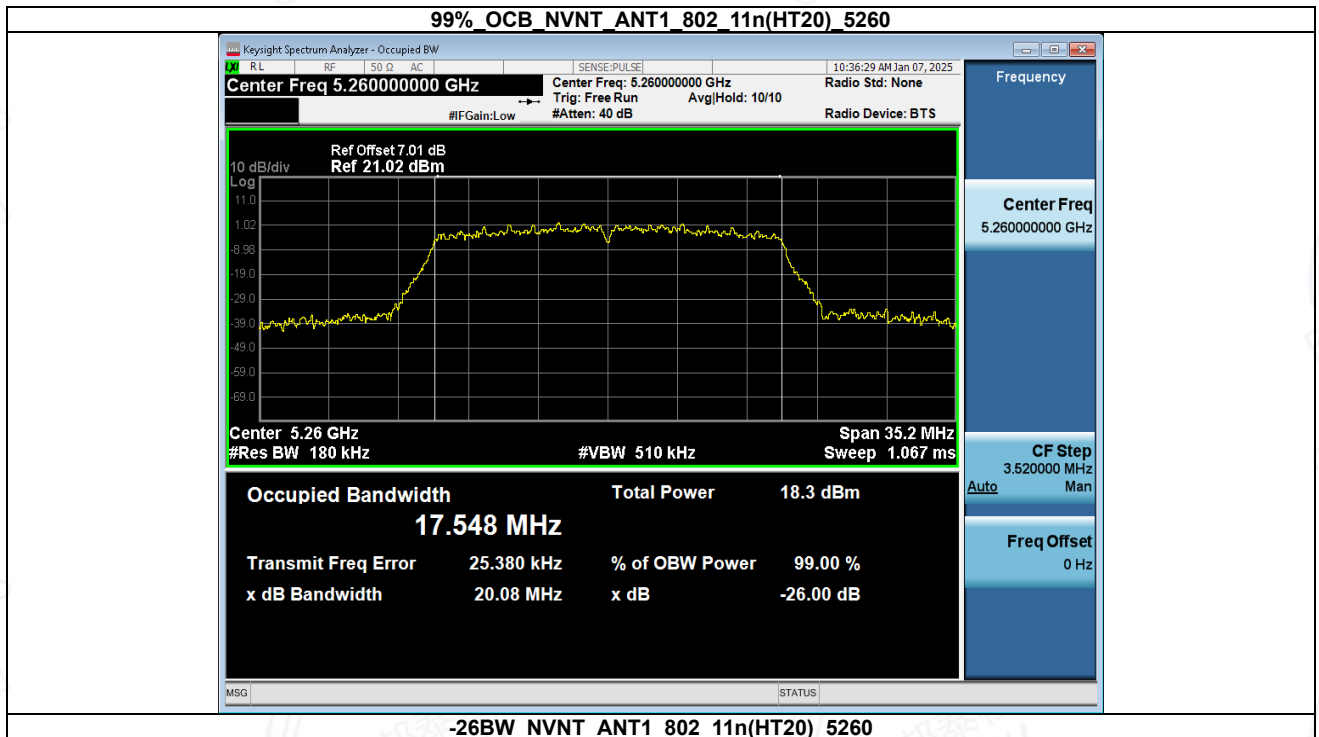
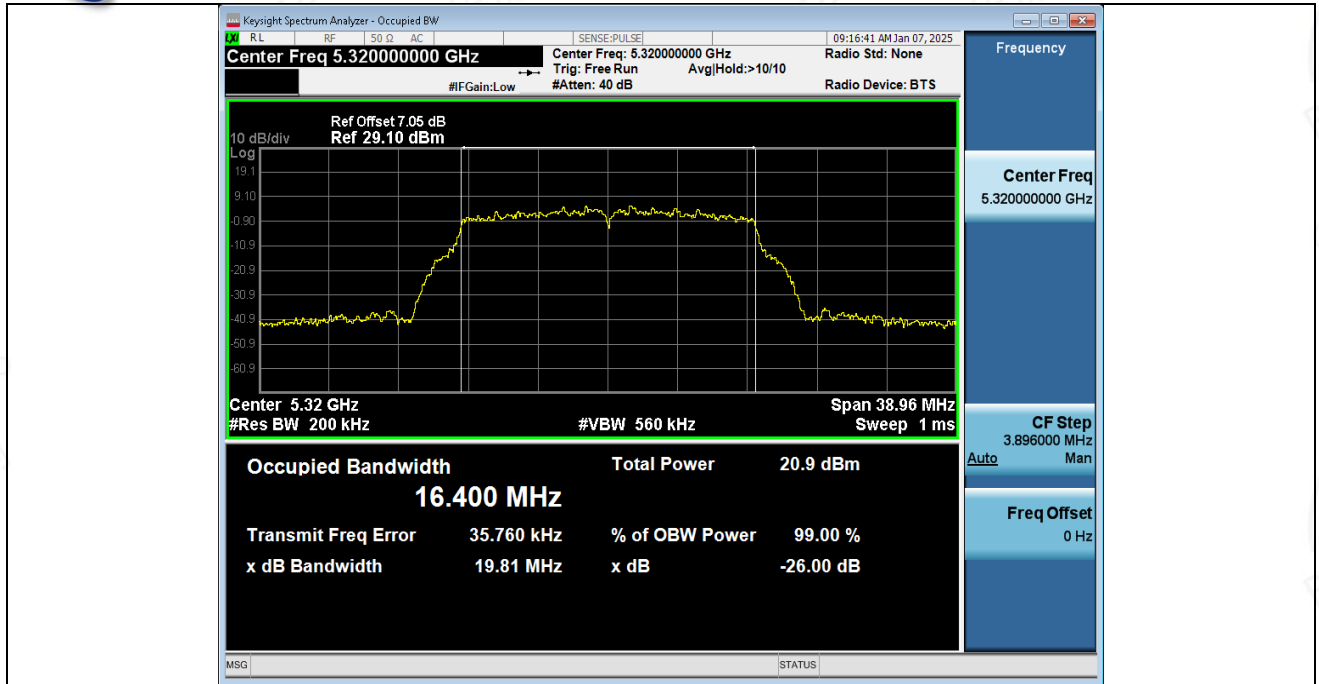
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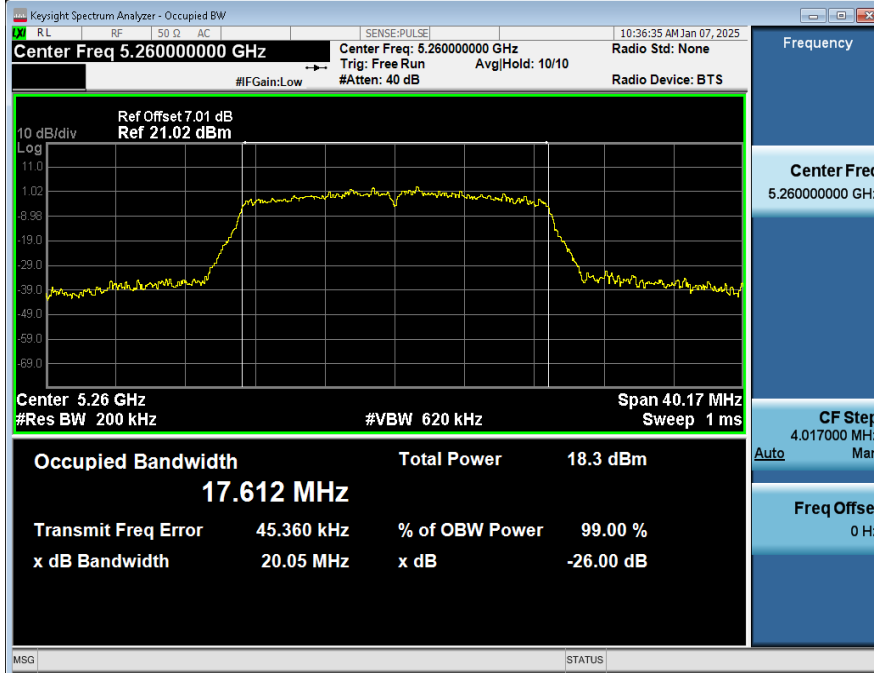


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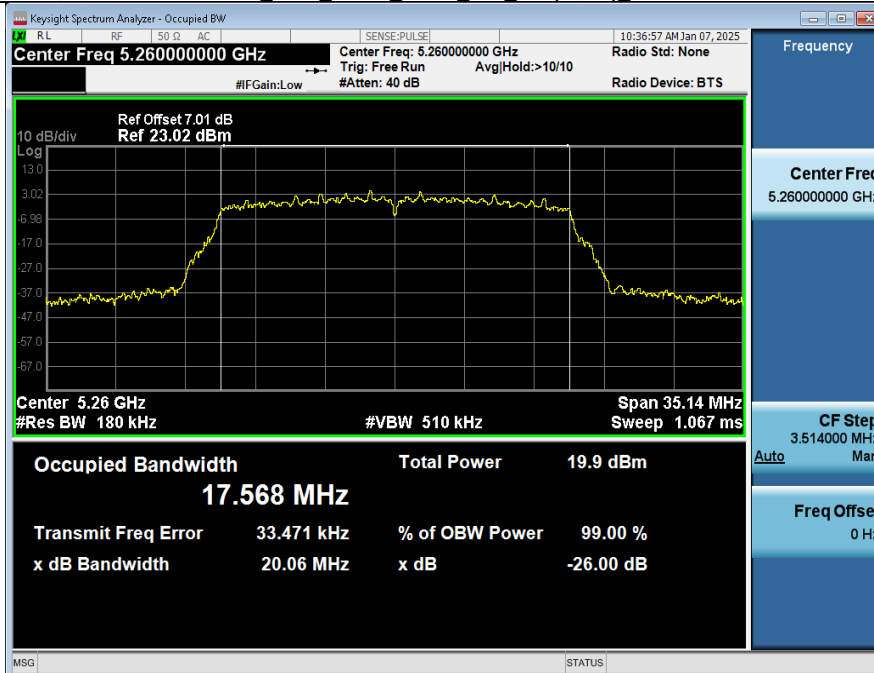






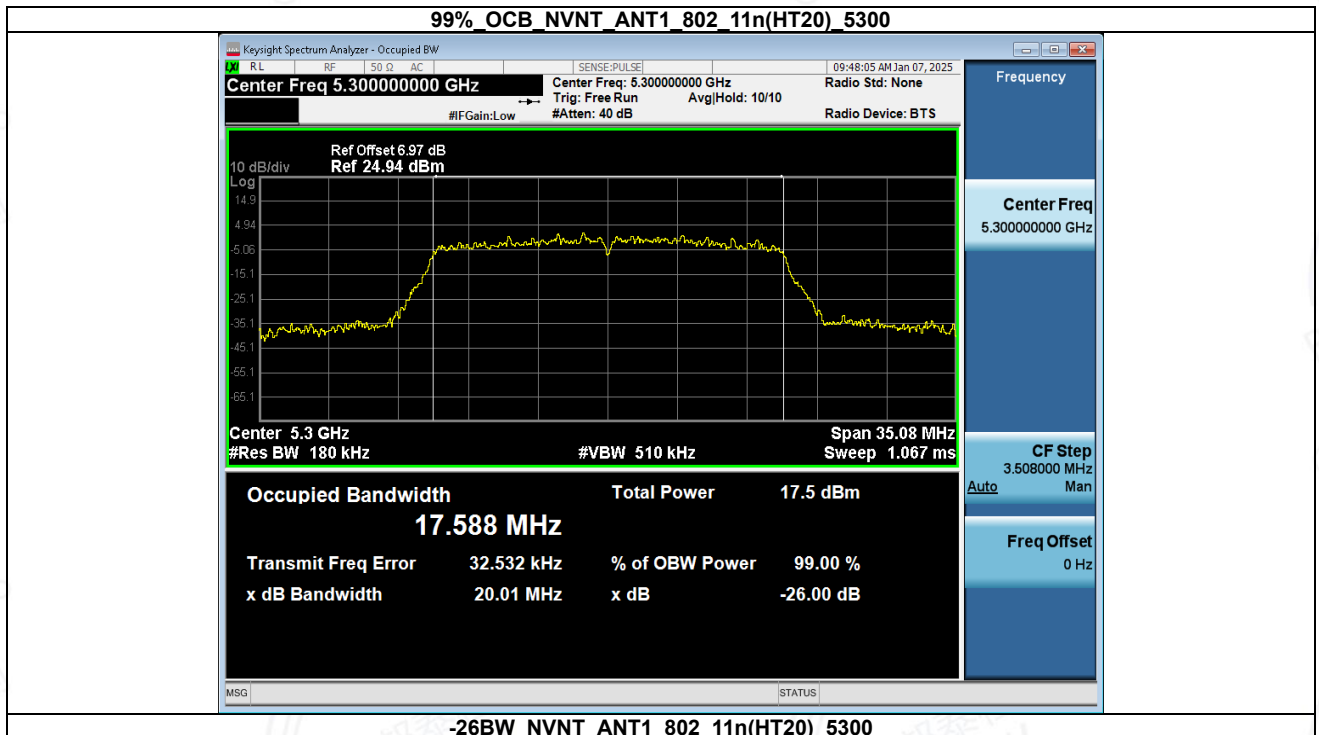


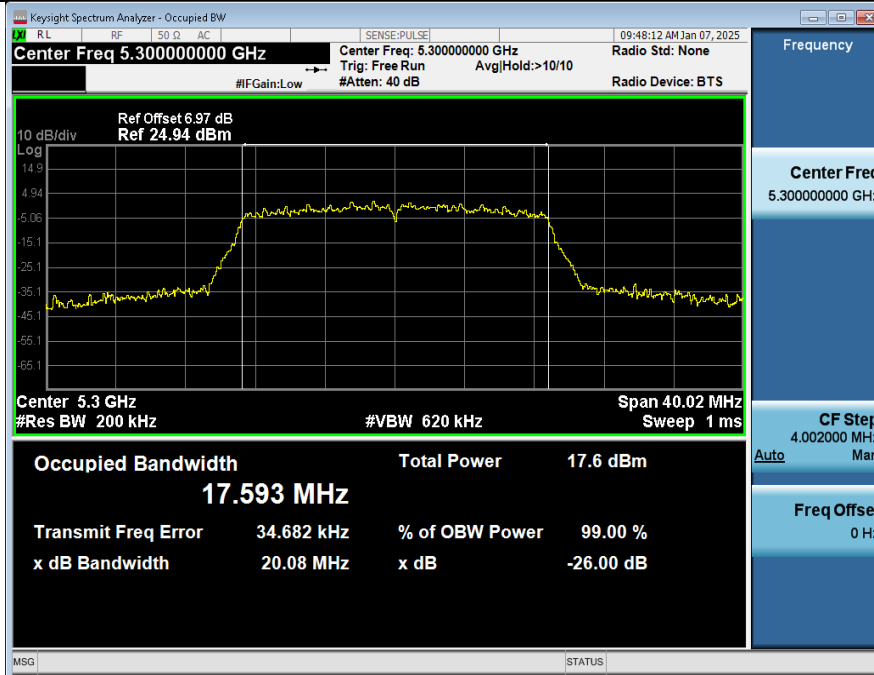
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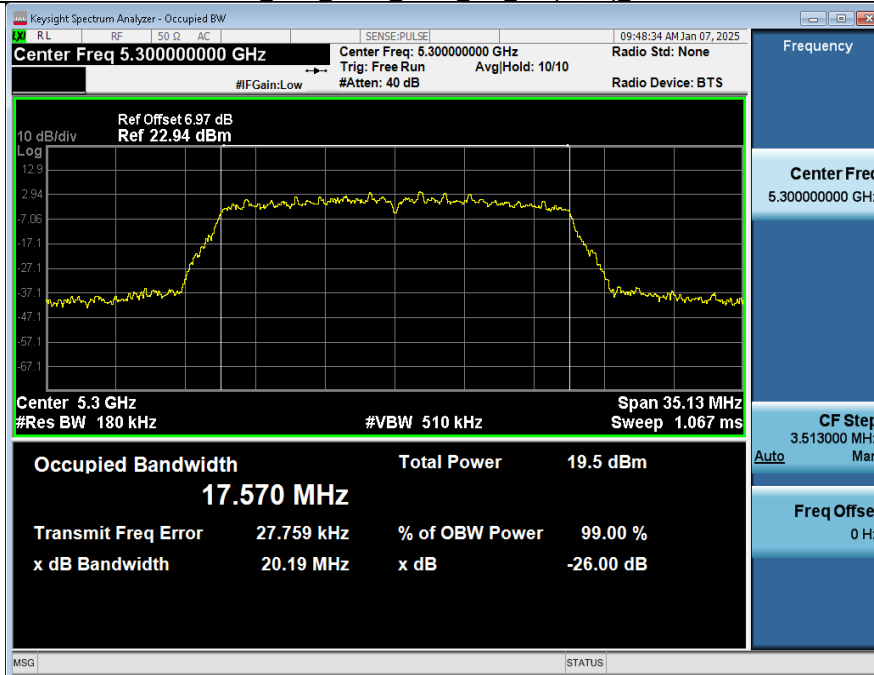
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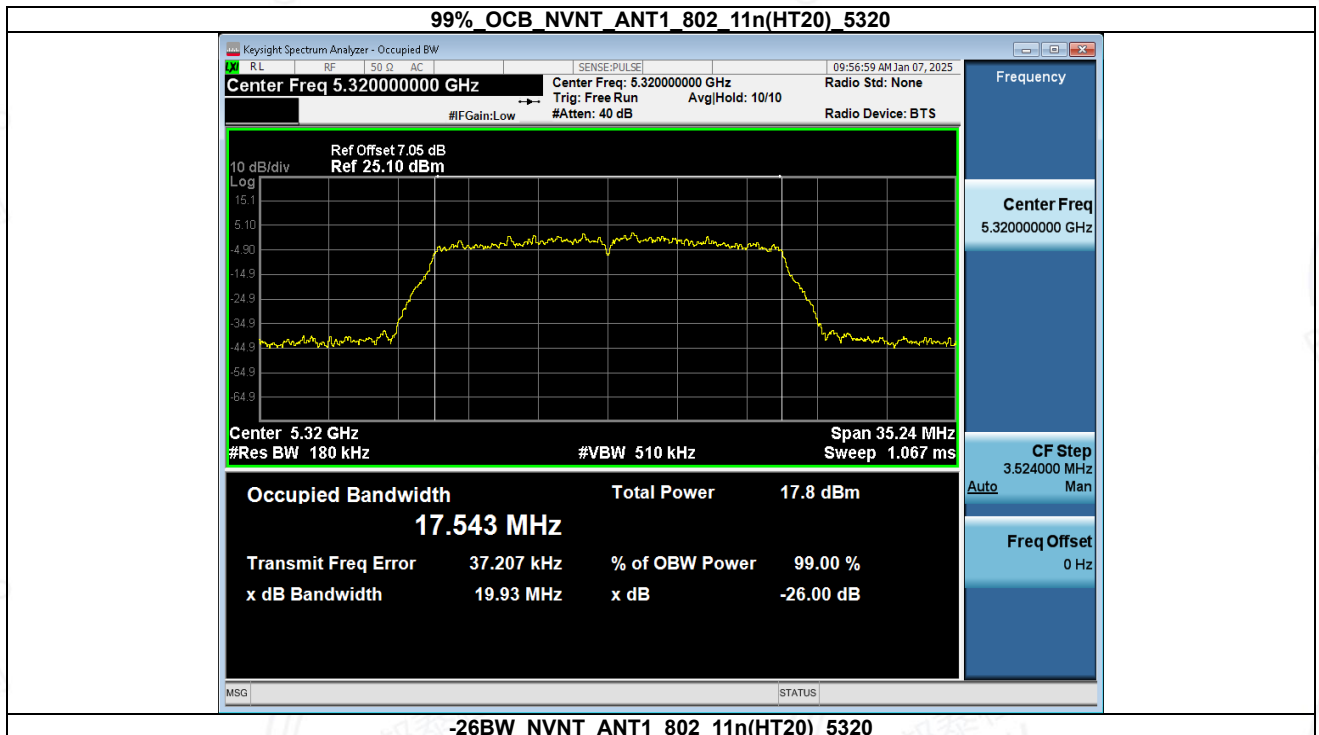
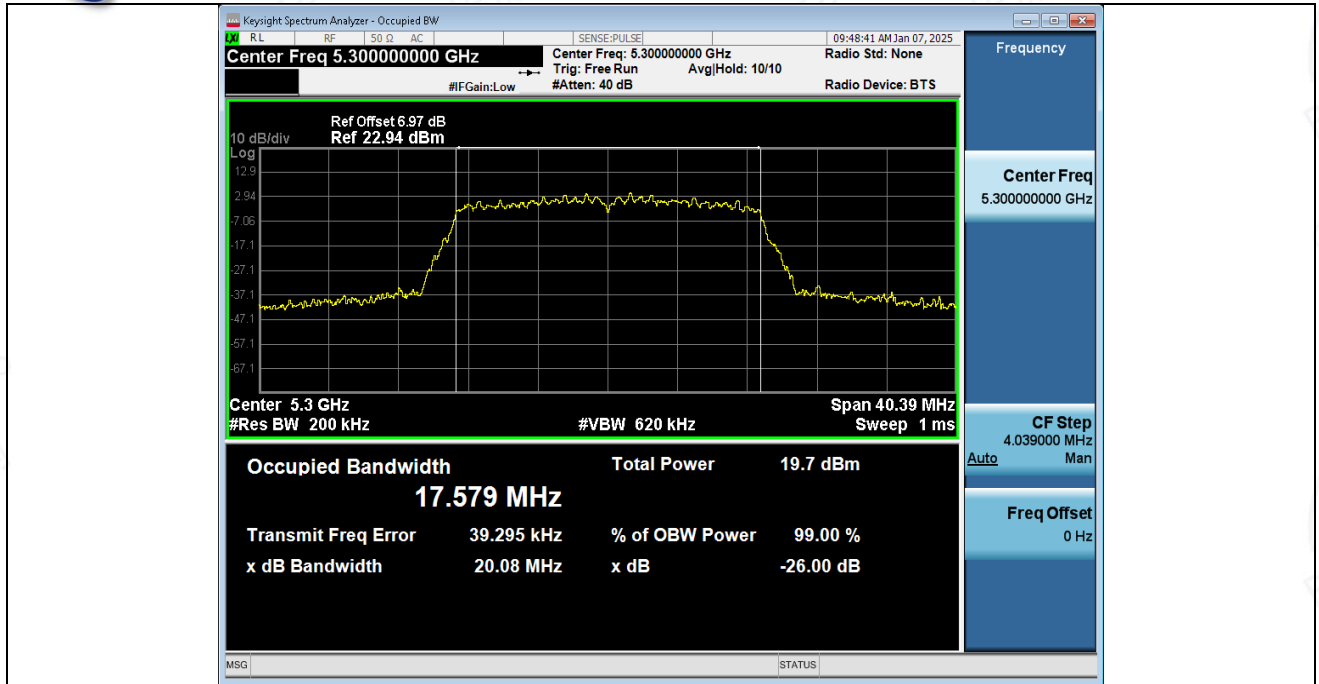


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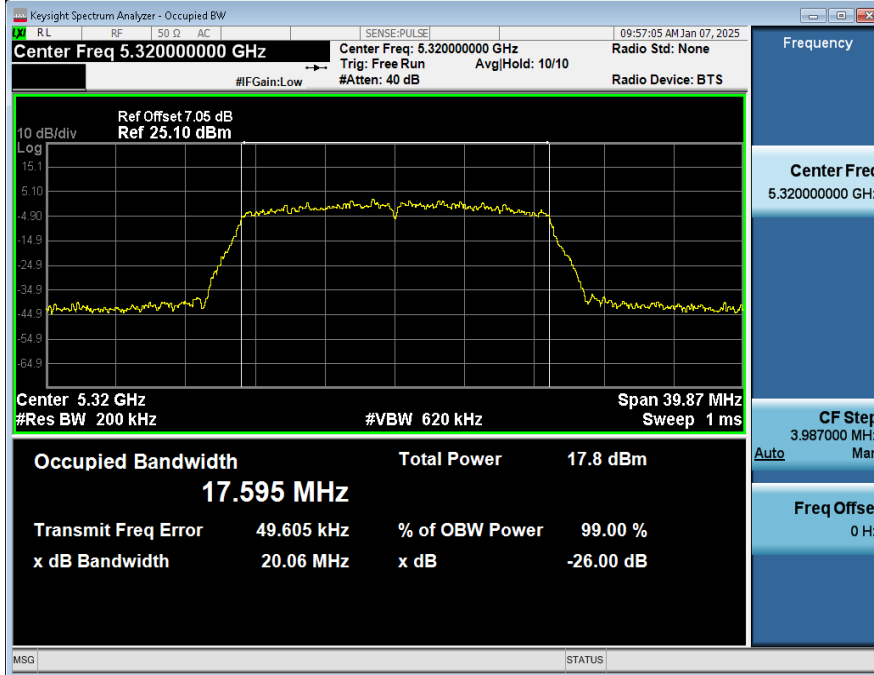


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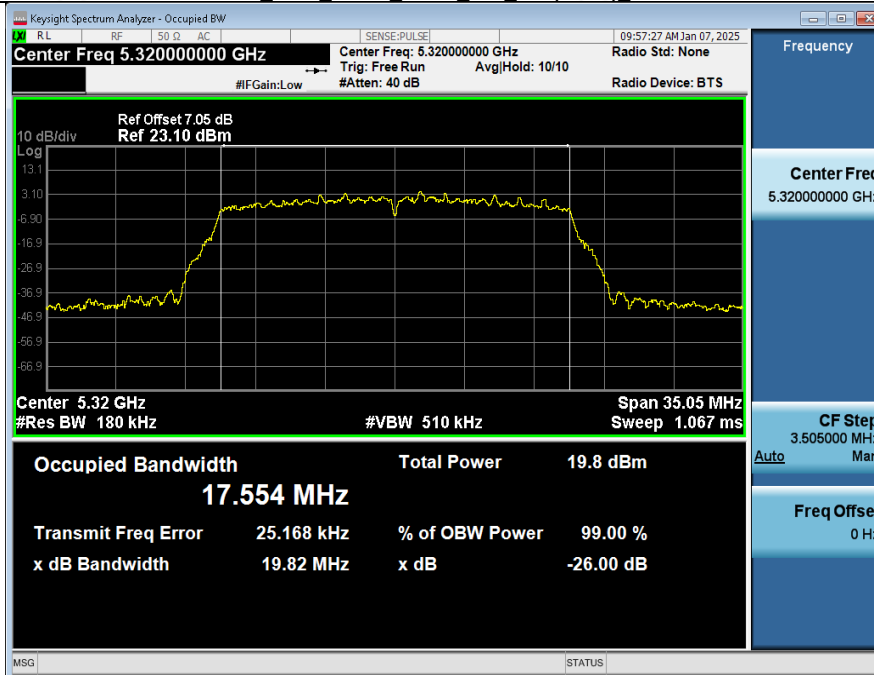






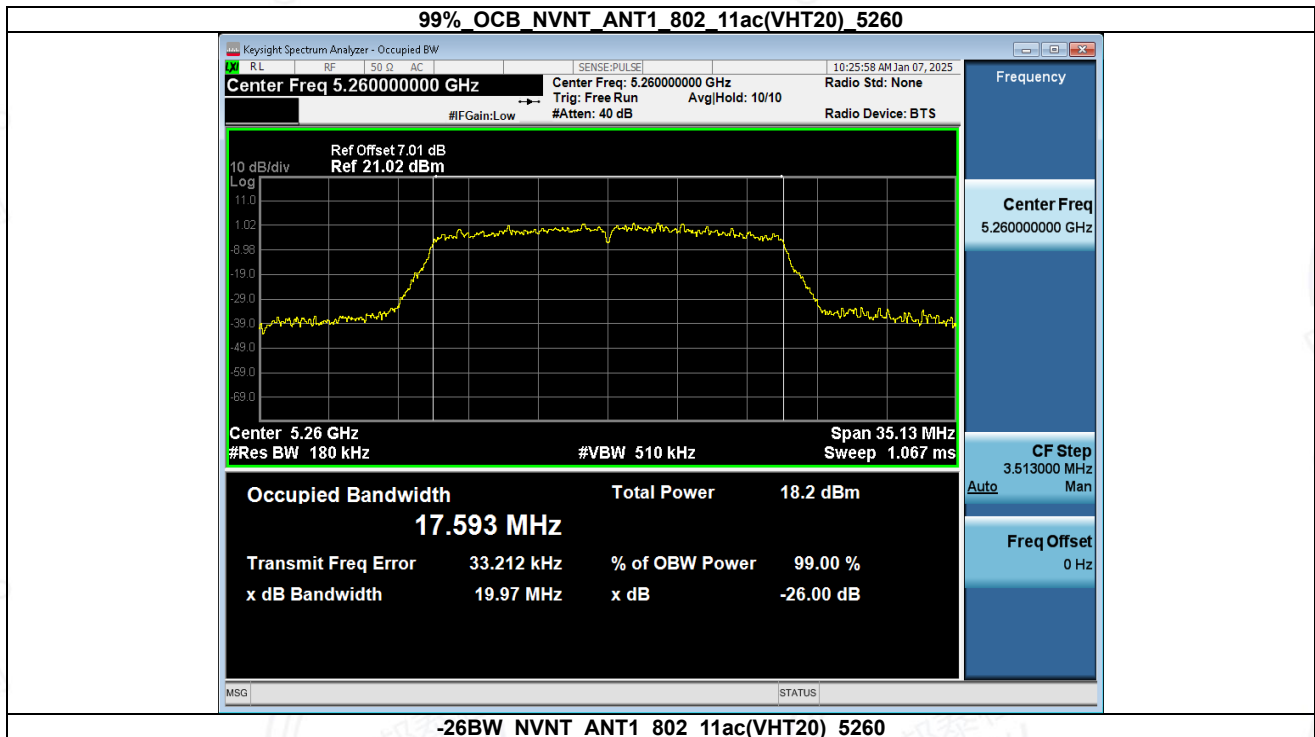
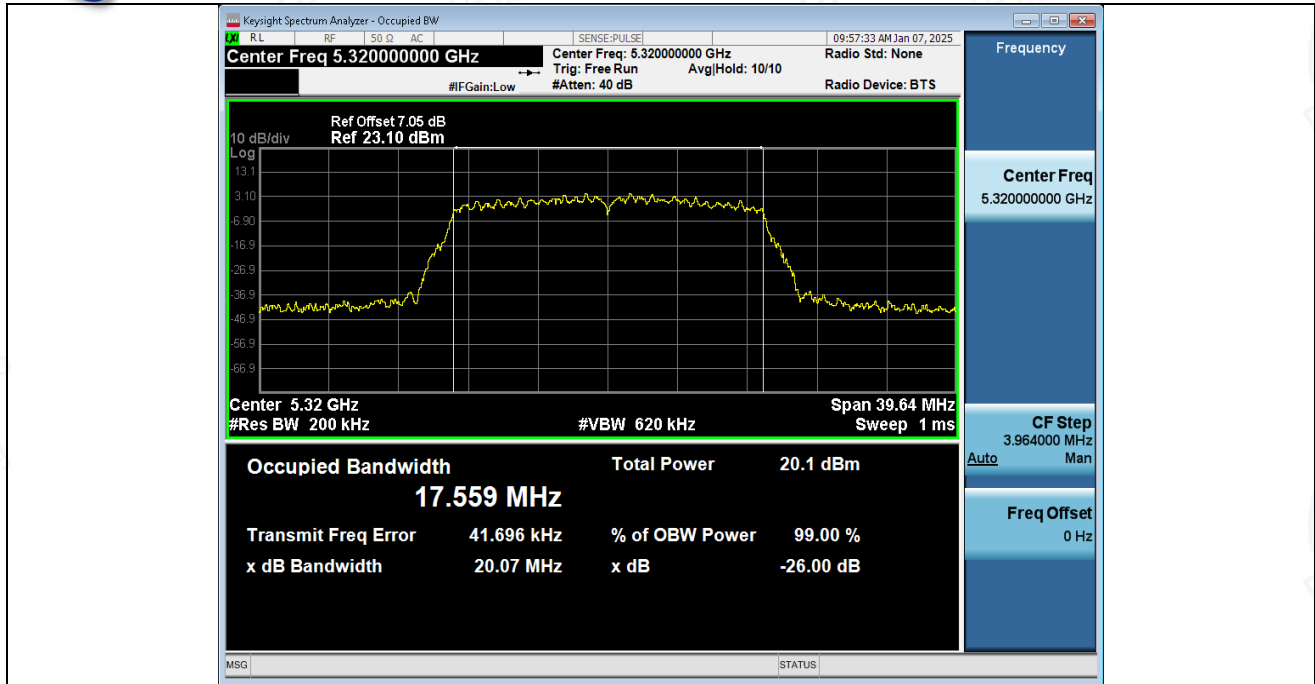


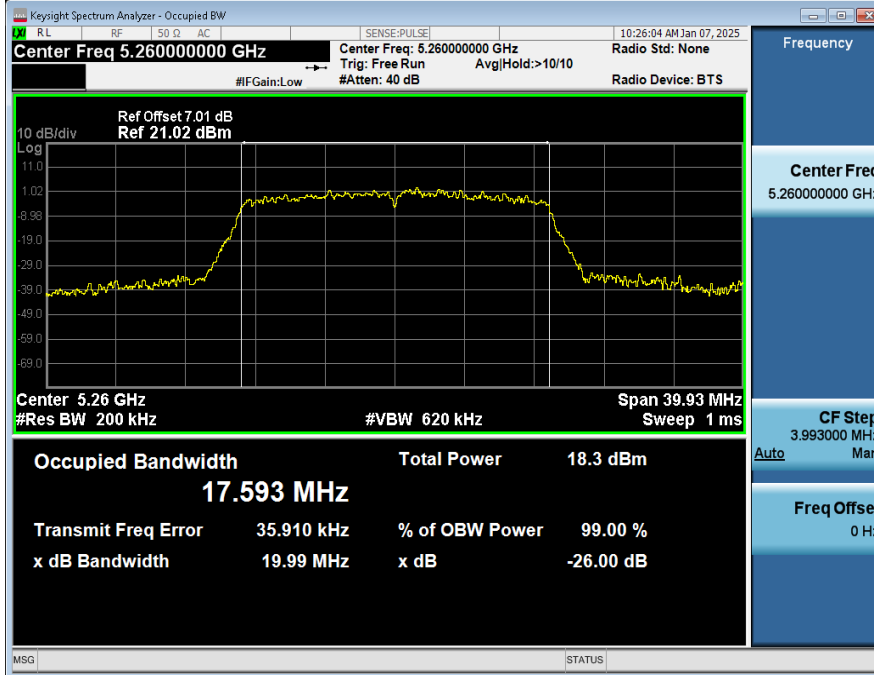
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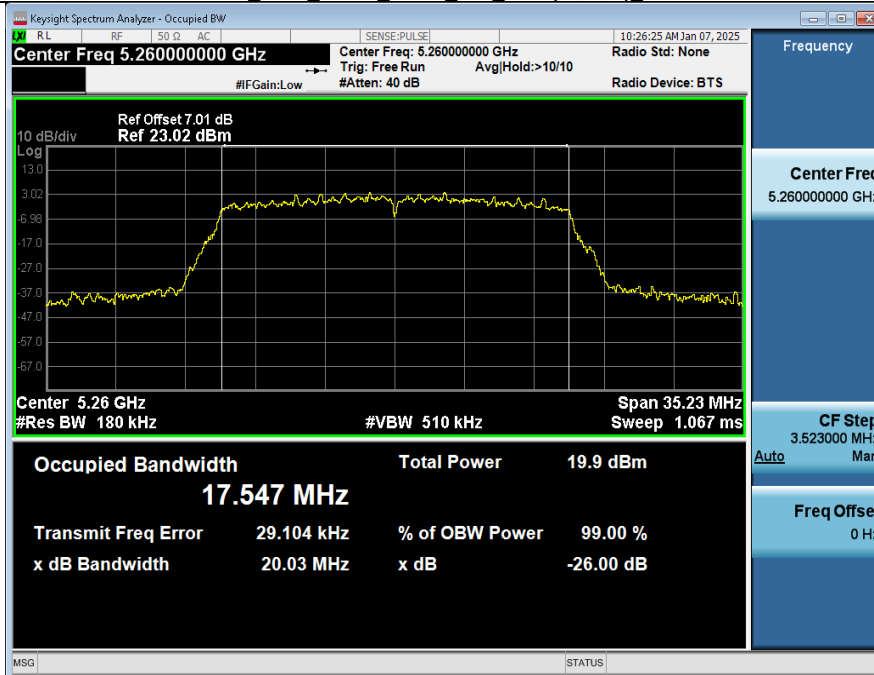
-26BW\_NVNT\_ANT2\_802\_11n(HT20)\_5320





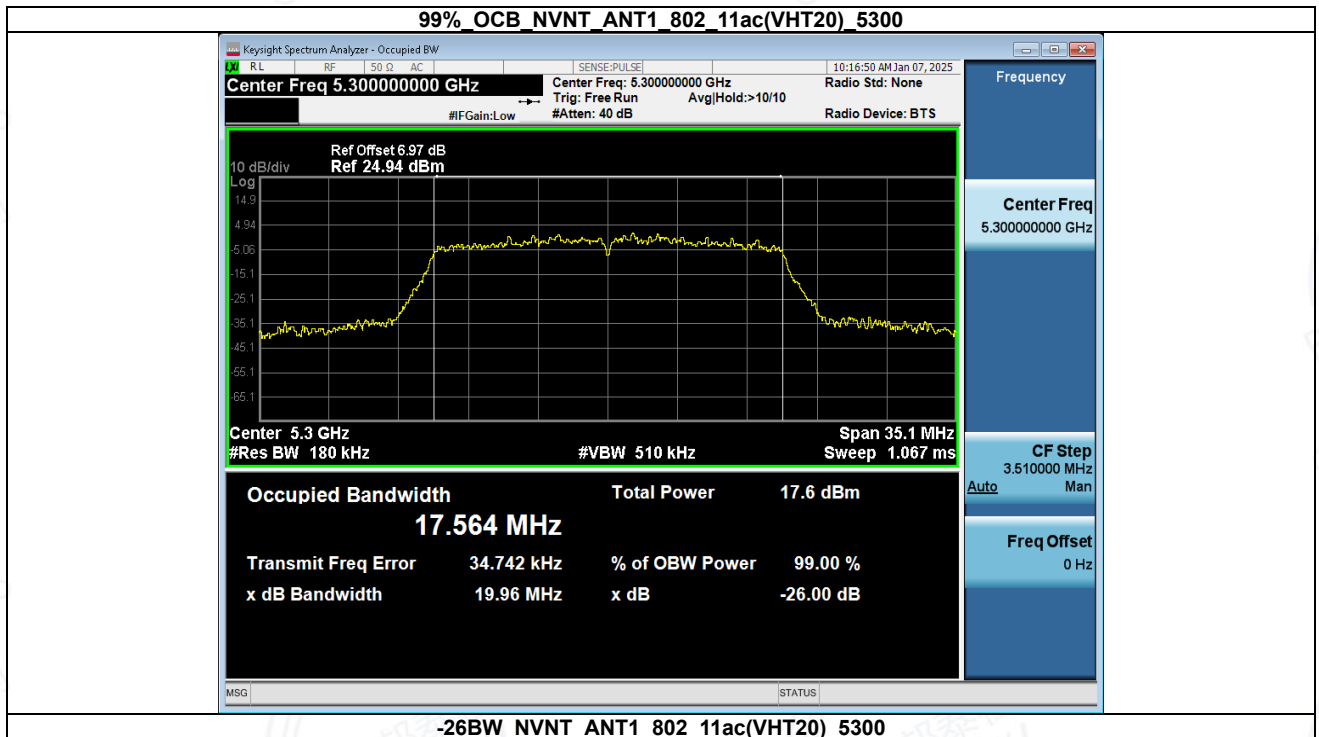
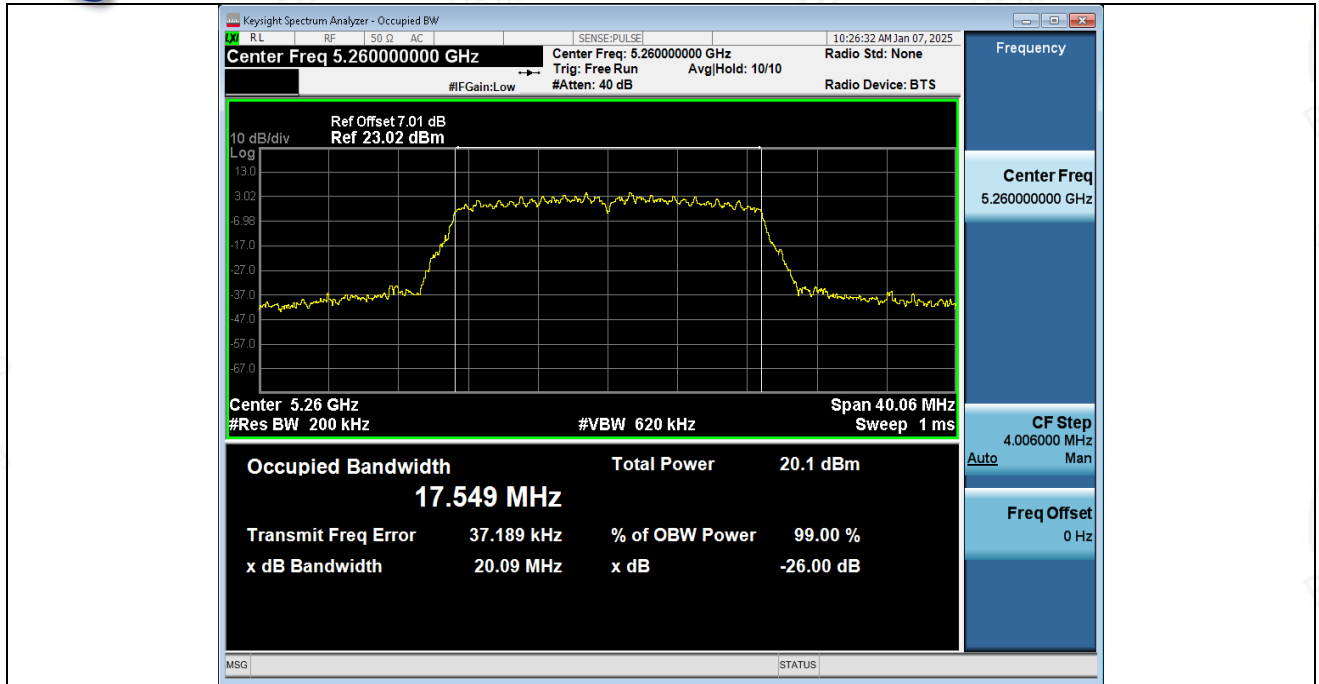


99%\_OCB\_NVNT\_ANT2\_802\_11ac(VHT20)\_5260



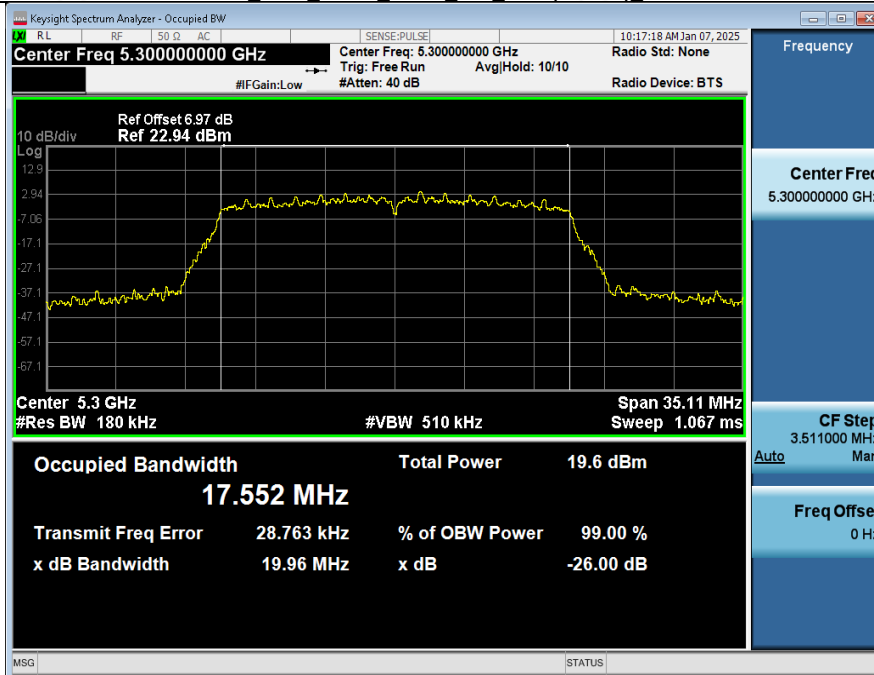
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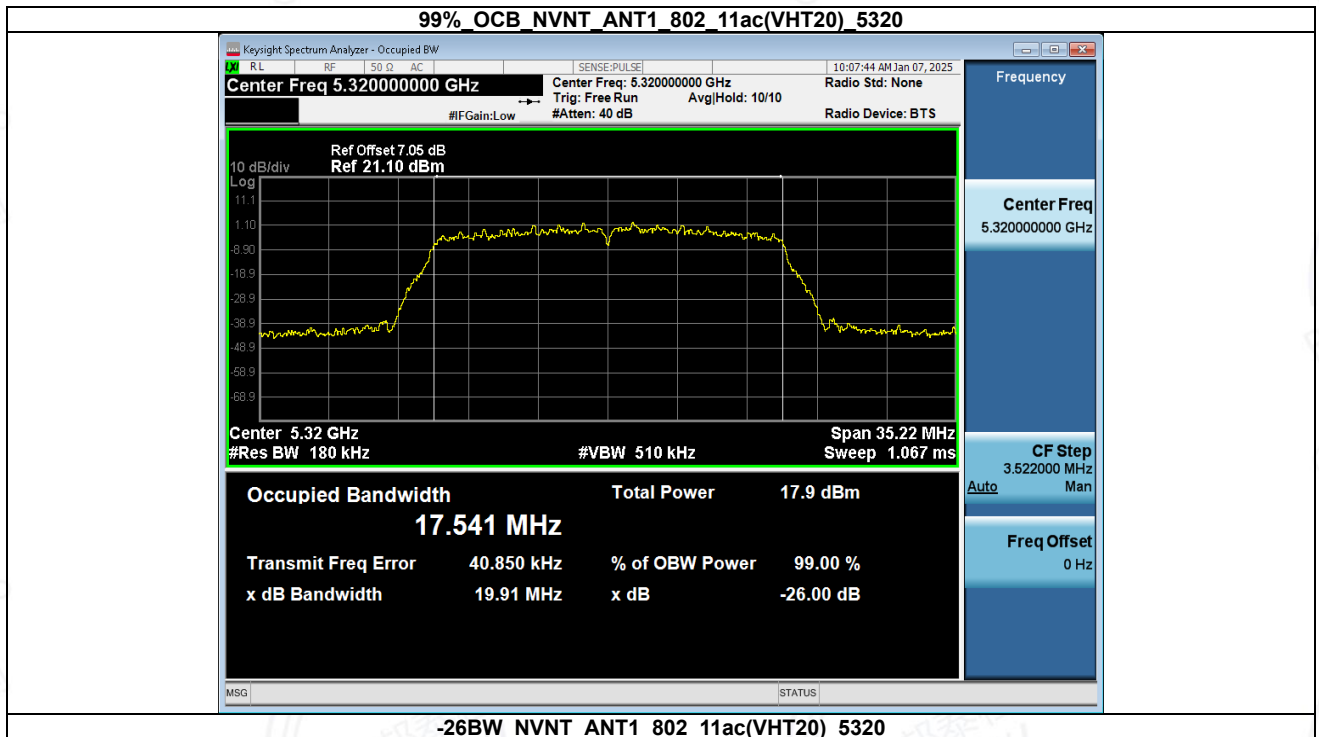
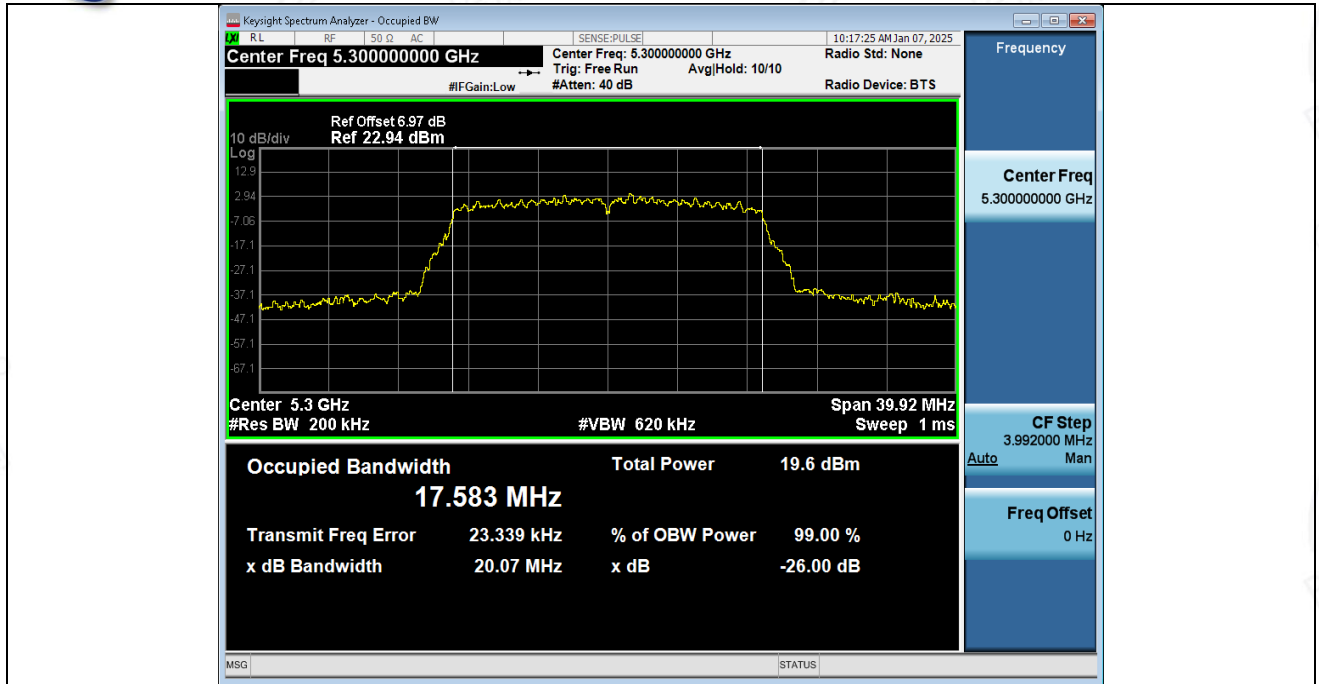
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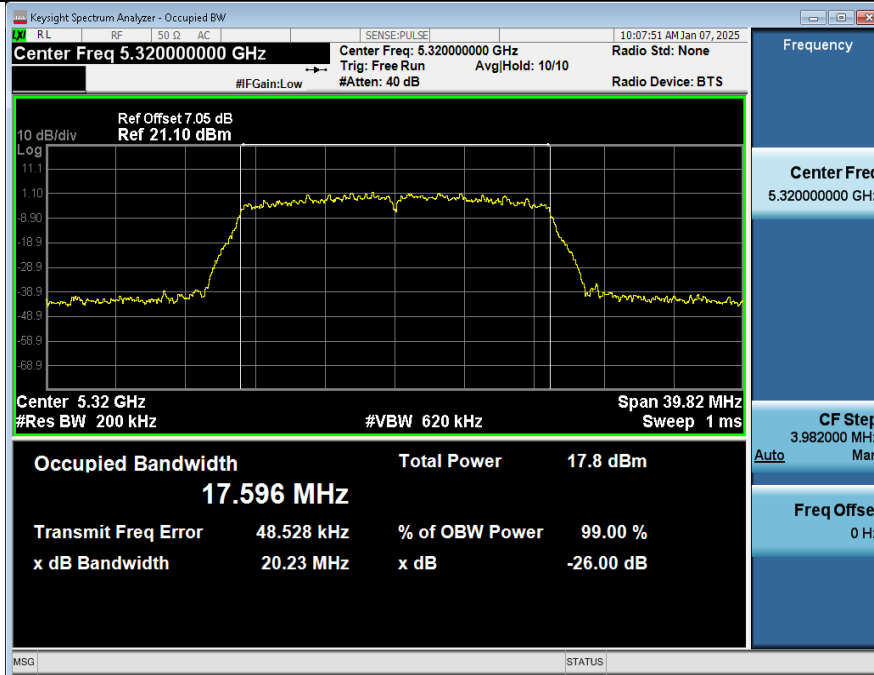


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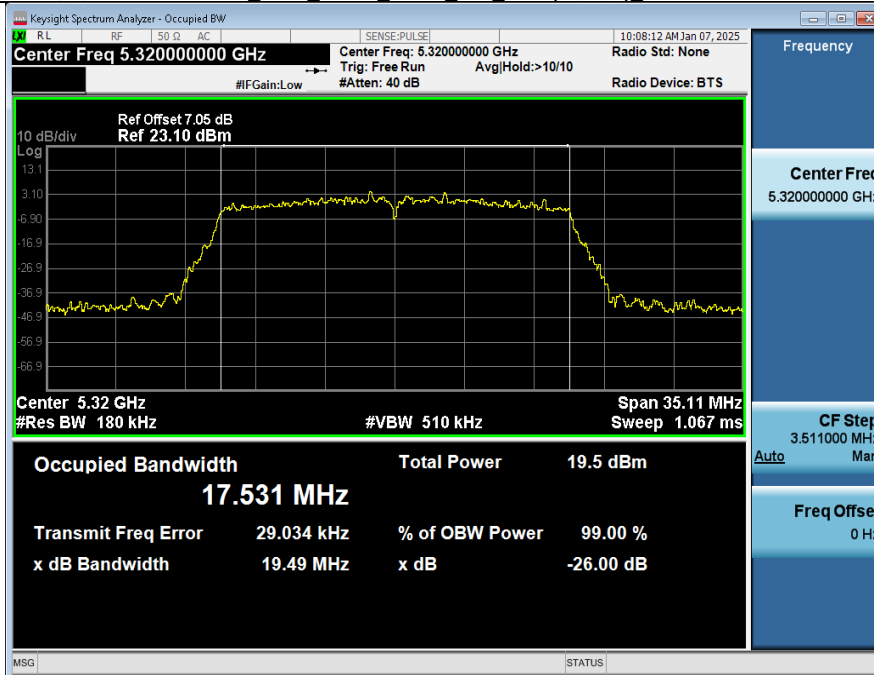






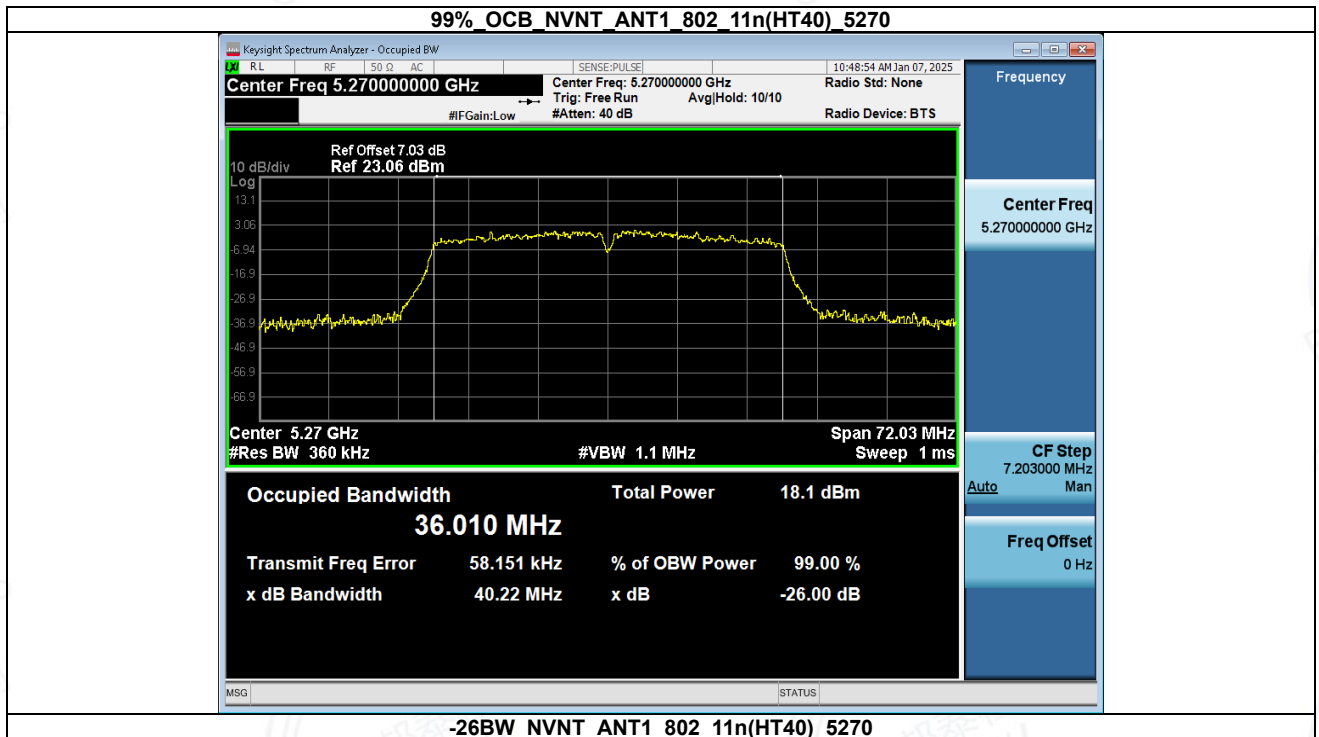
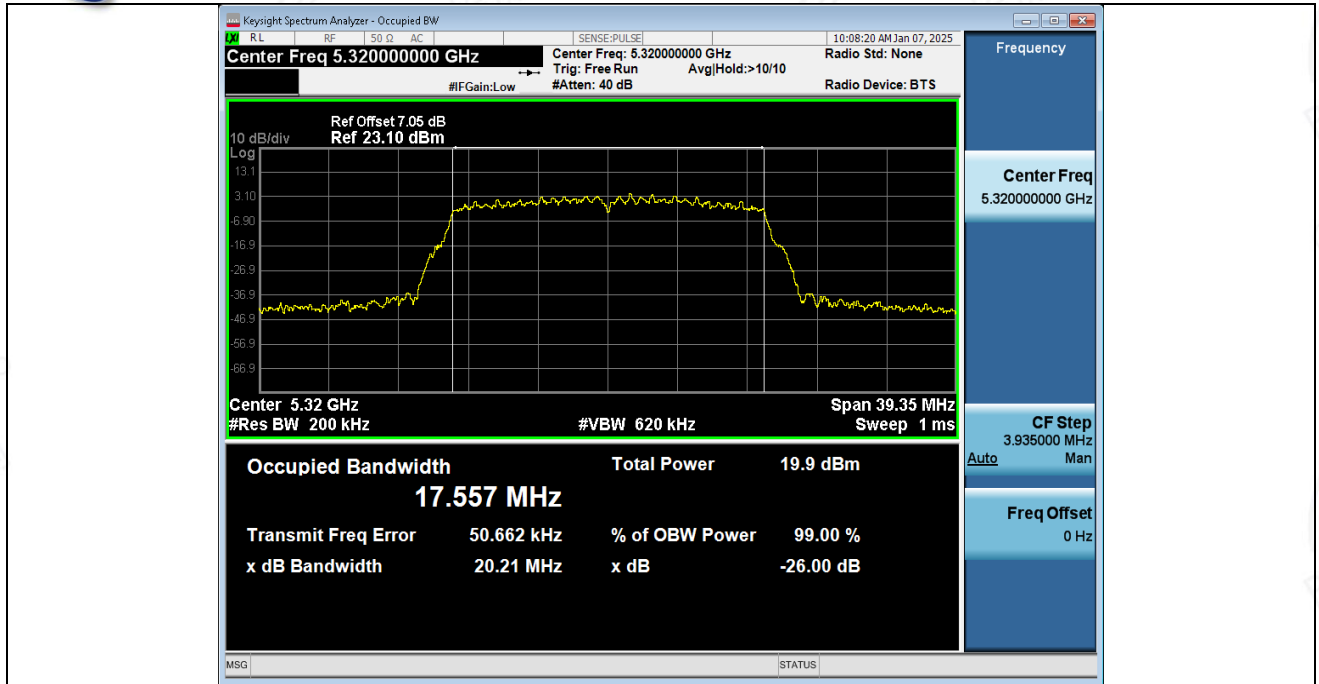


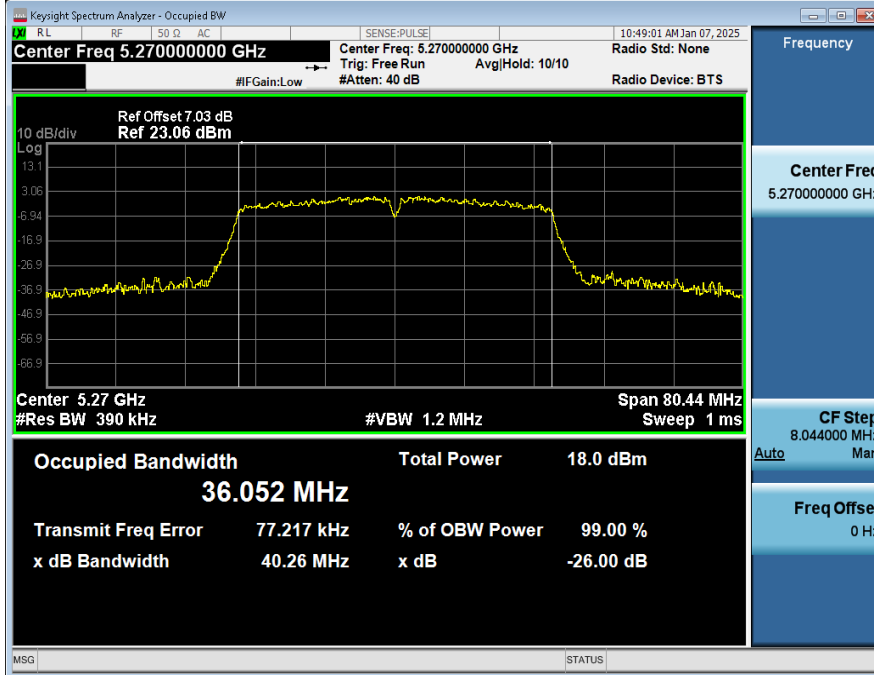
99%\_OCB\_NVNT\_ANT2\_802\_11ac(VHT20)\_5320



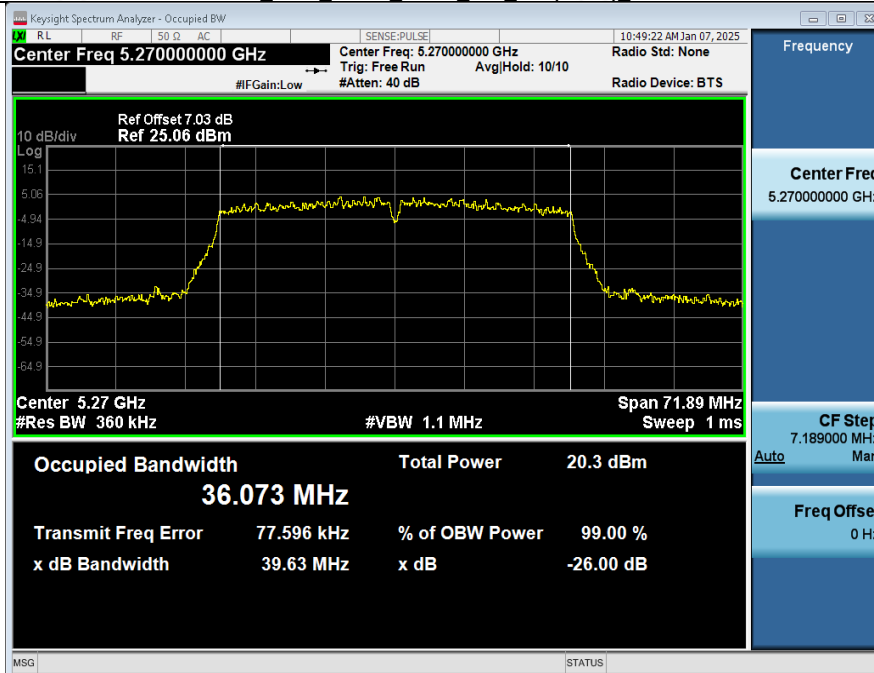
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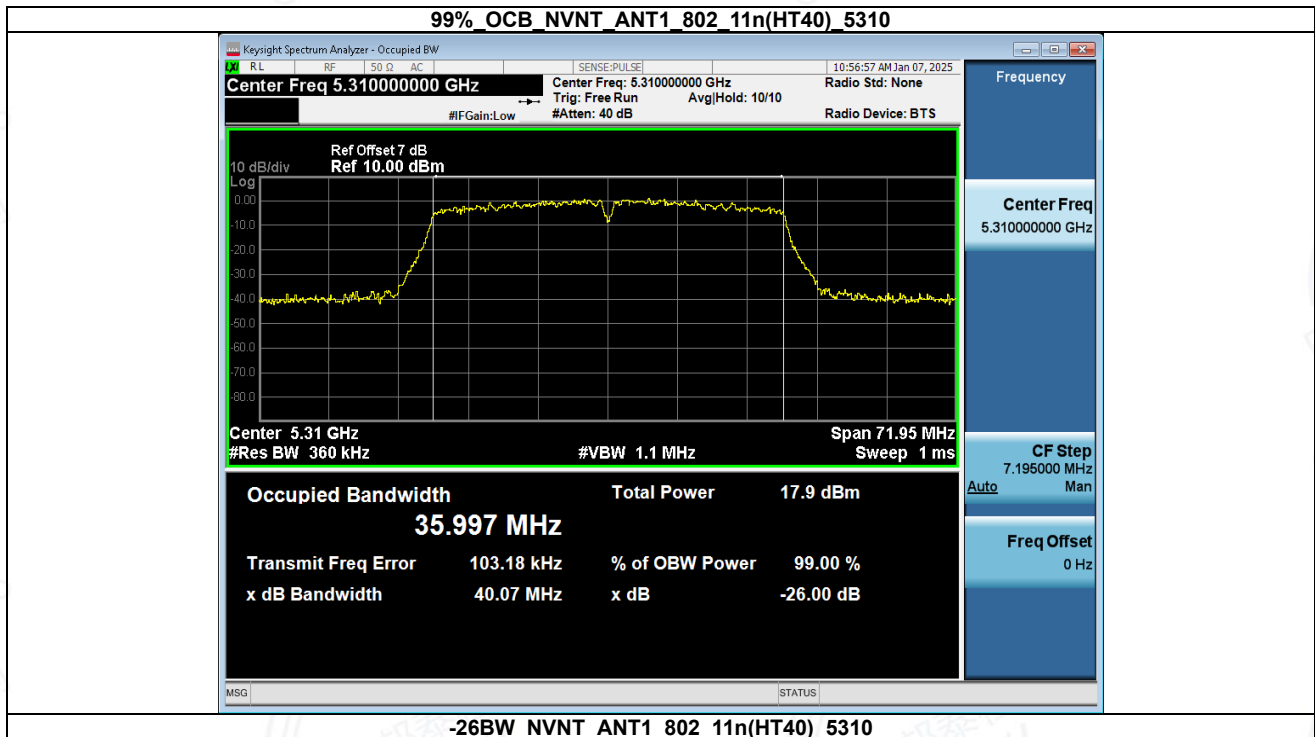
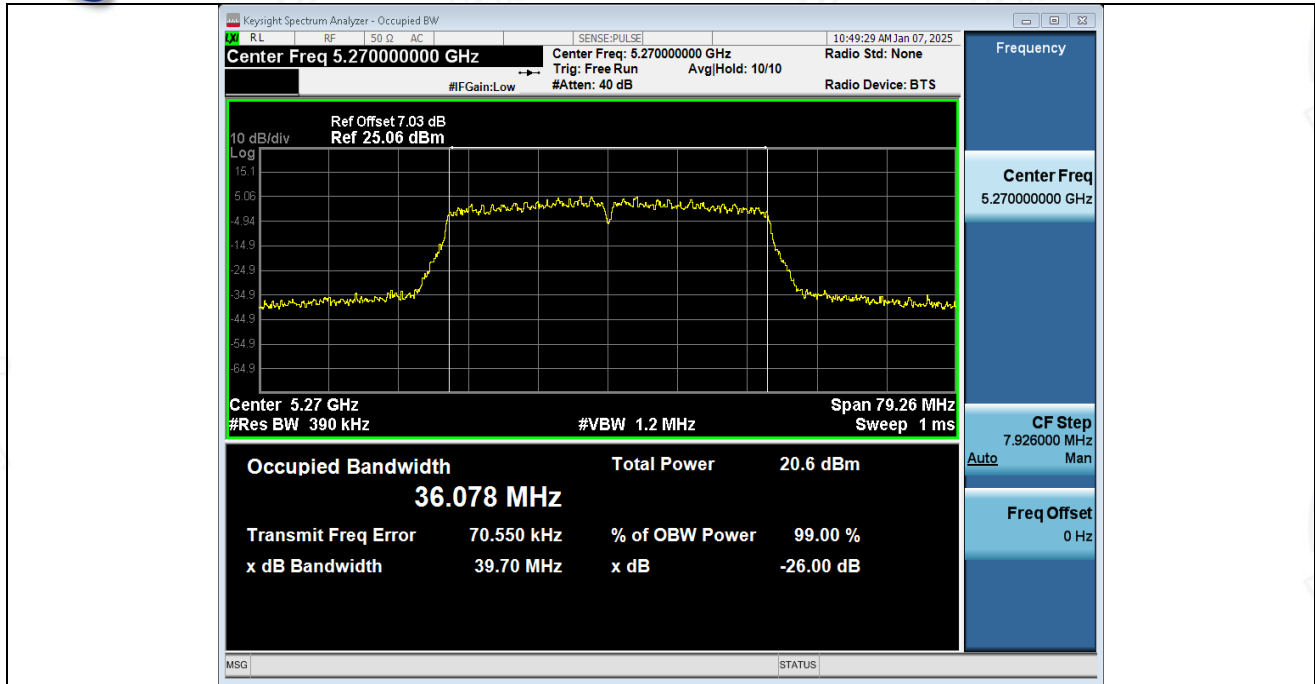


99%\_OCB\_NVNT\_ANT2\_802\_11n(HT40)\_5270

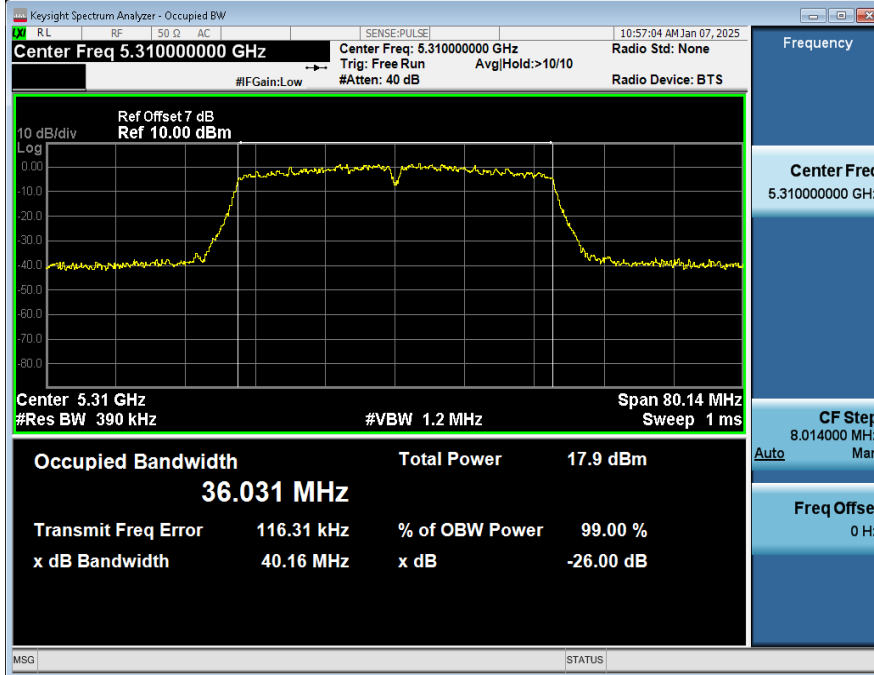


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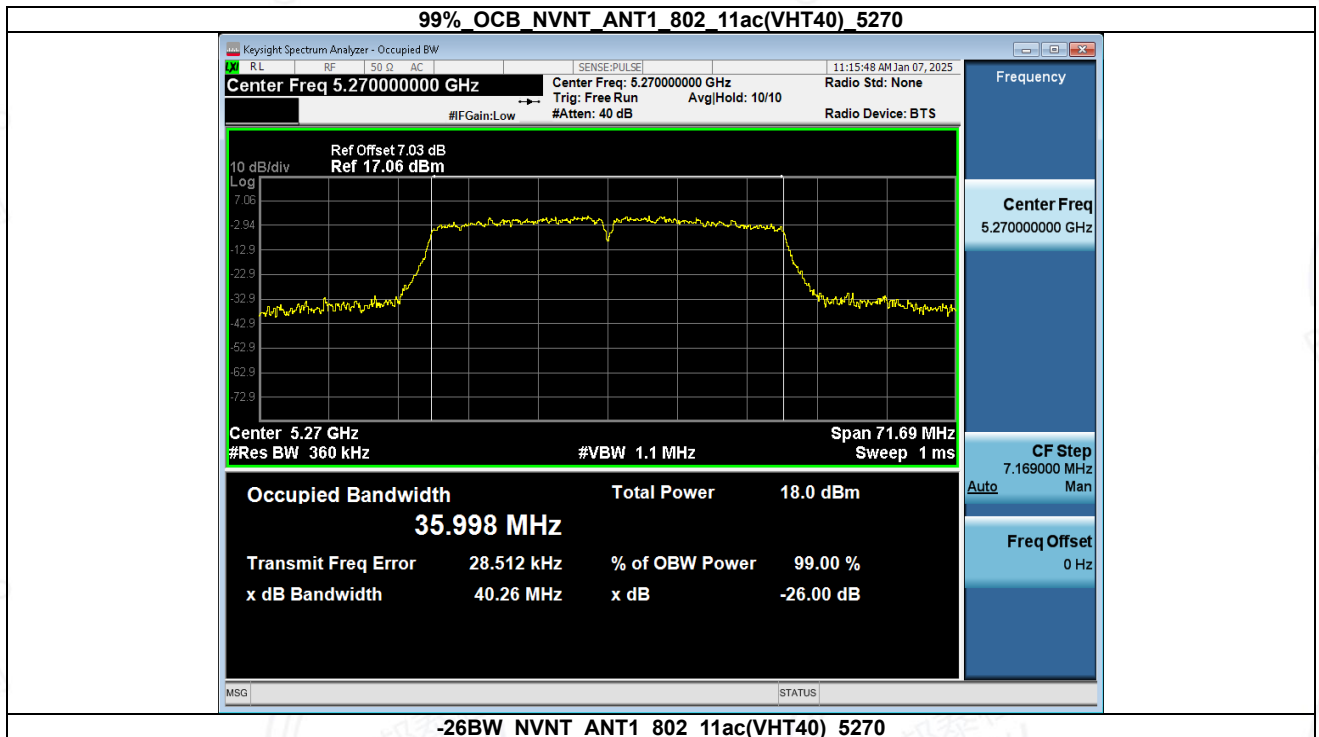
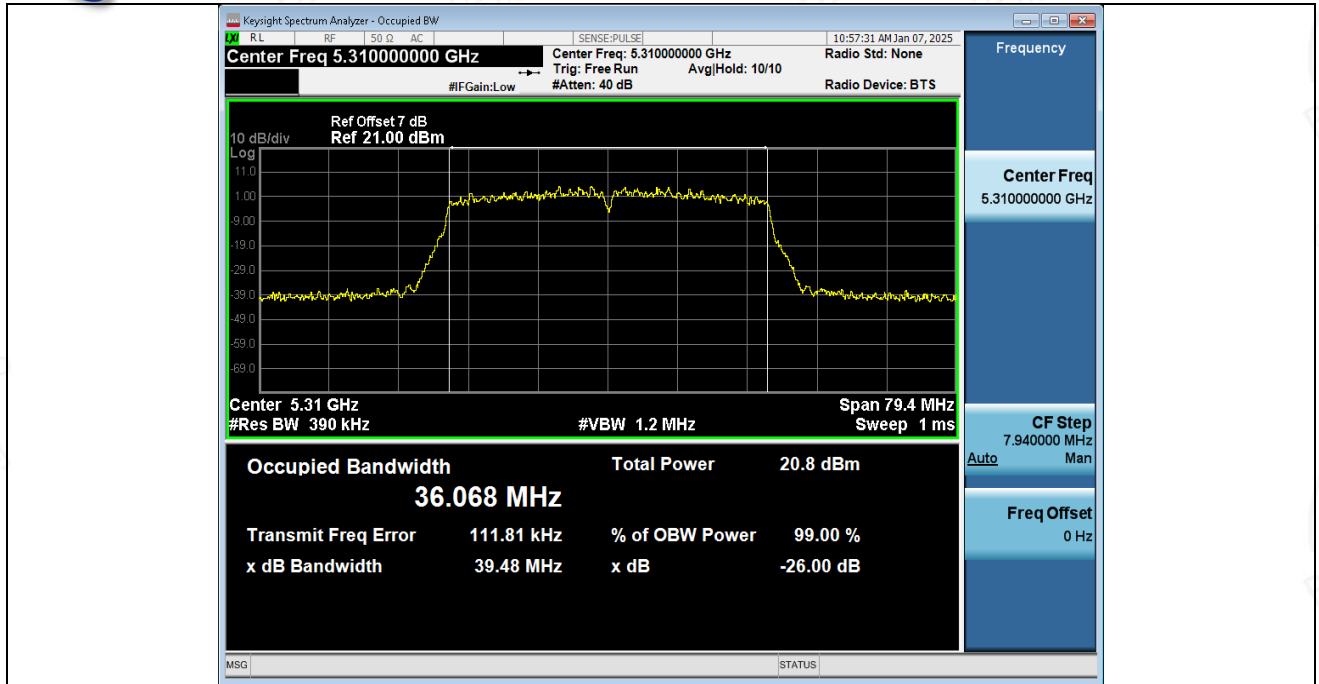


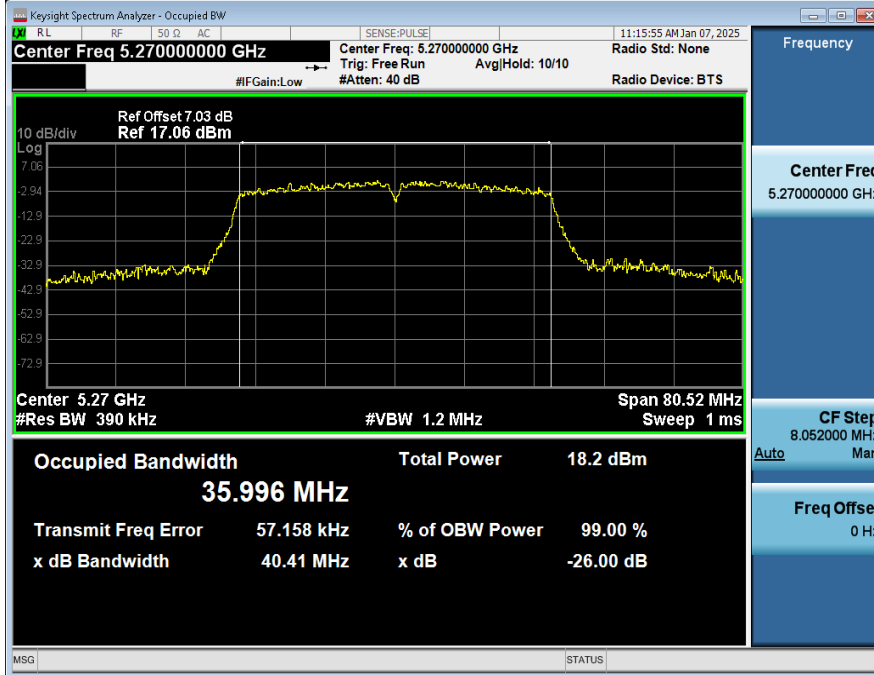
99%\_OCB\_NVNT\_ANT2\_802\_11n(HT40)\_5310



-26BW\_NVNT\_ANT2\_802\_11n(HT40)\_5310





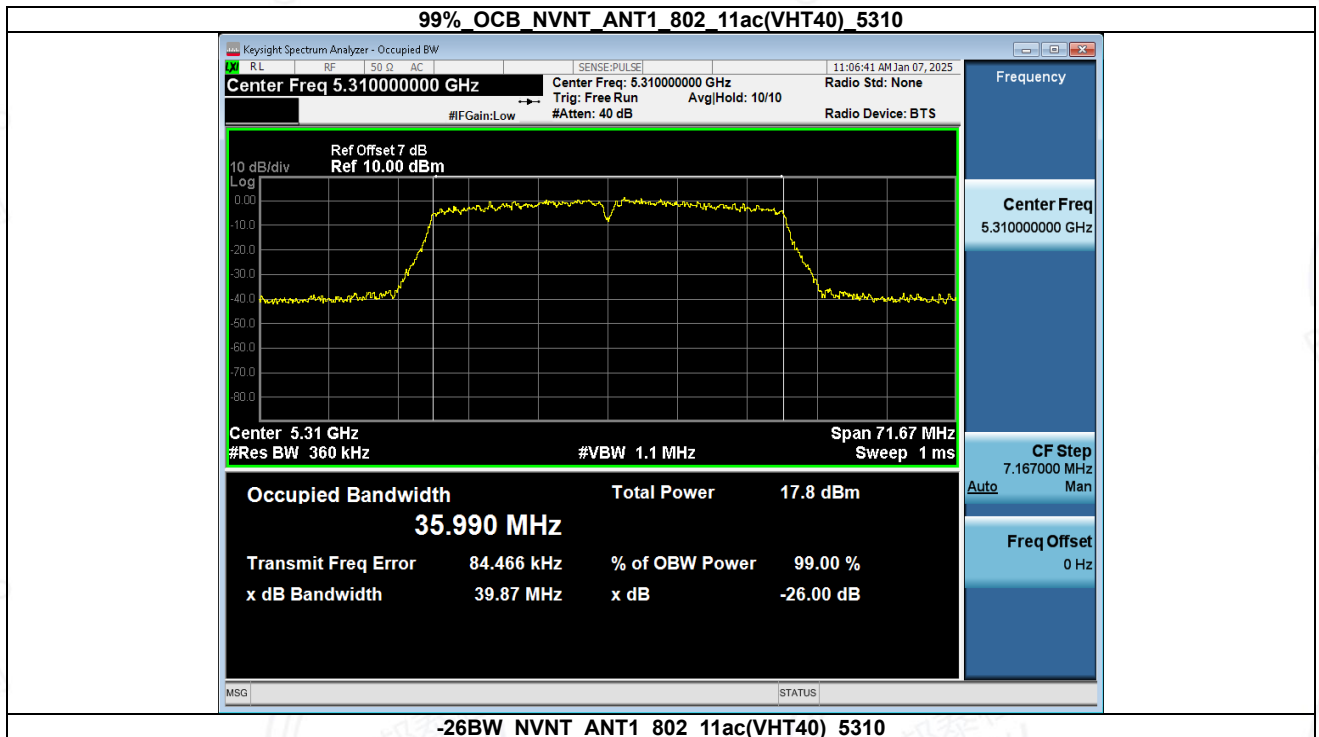
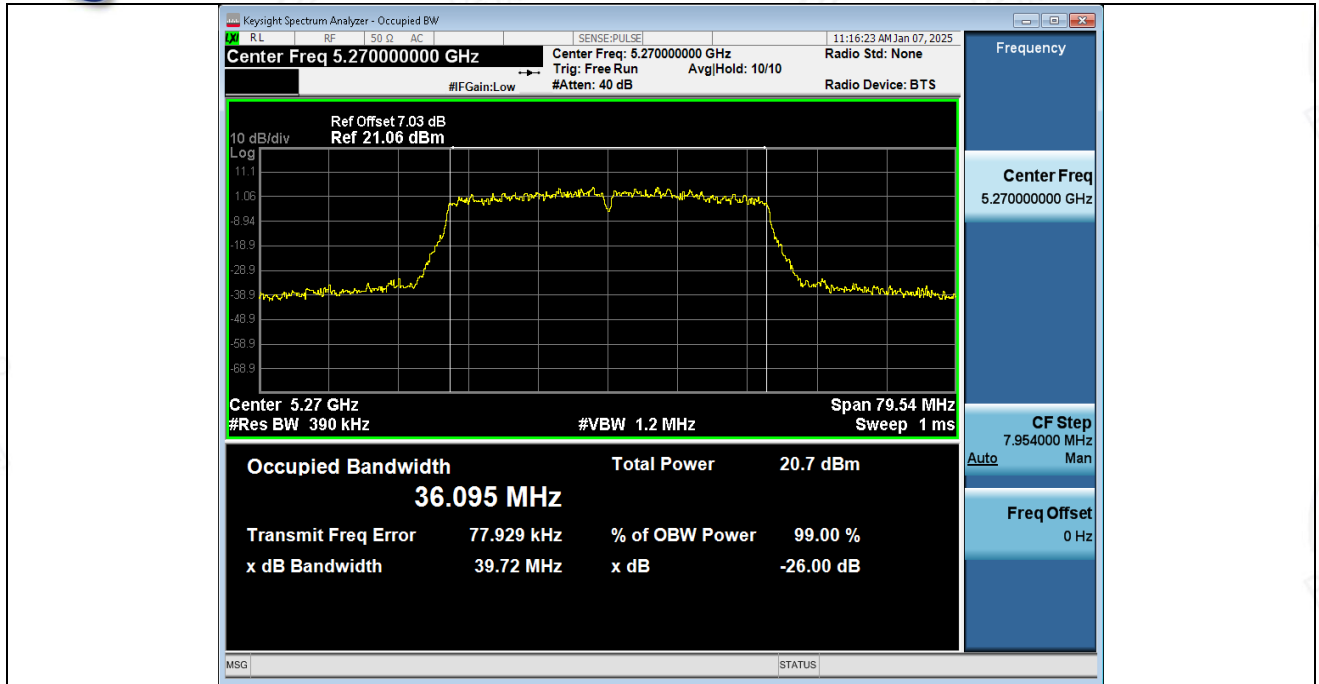


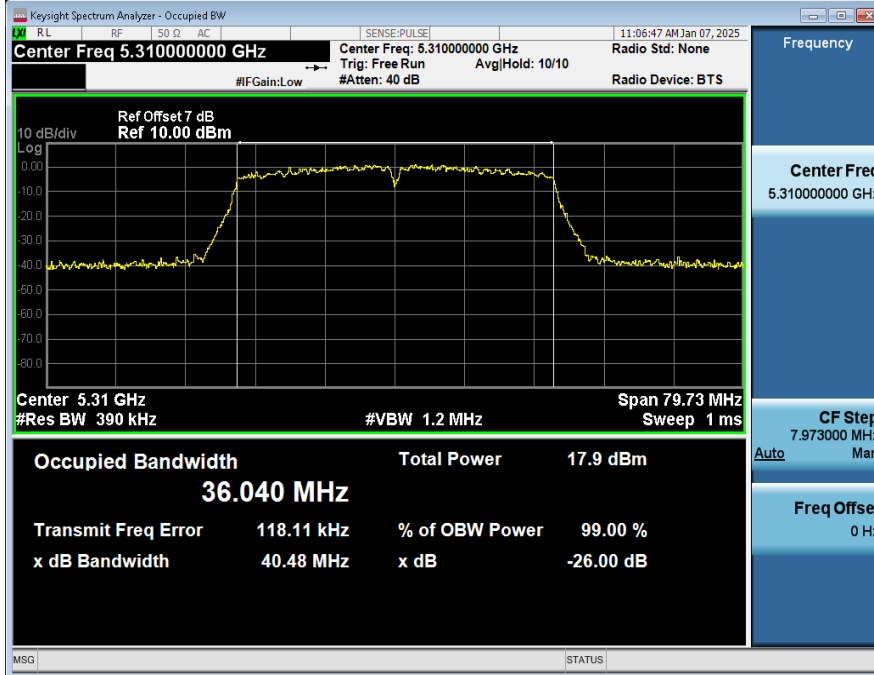
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-26BW\_NVNT\_ANT2\_802\_11ac(VHT40)\_5270







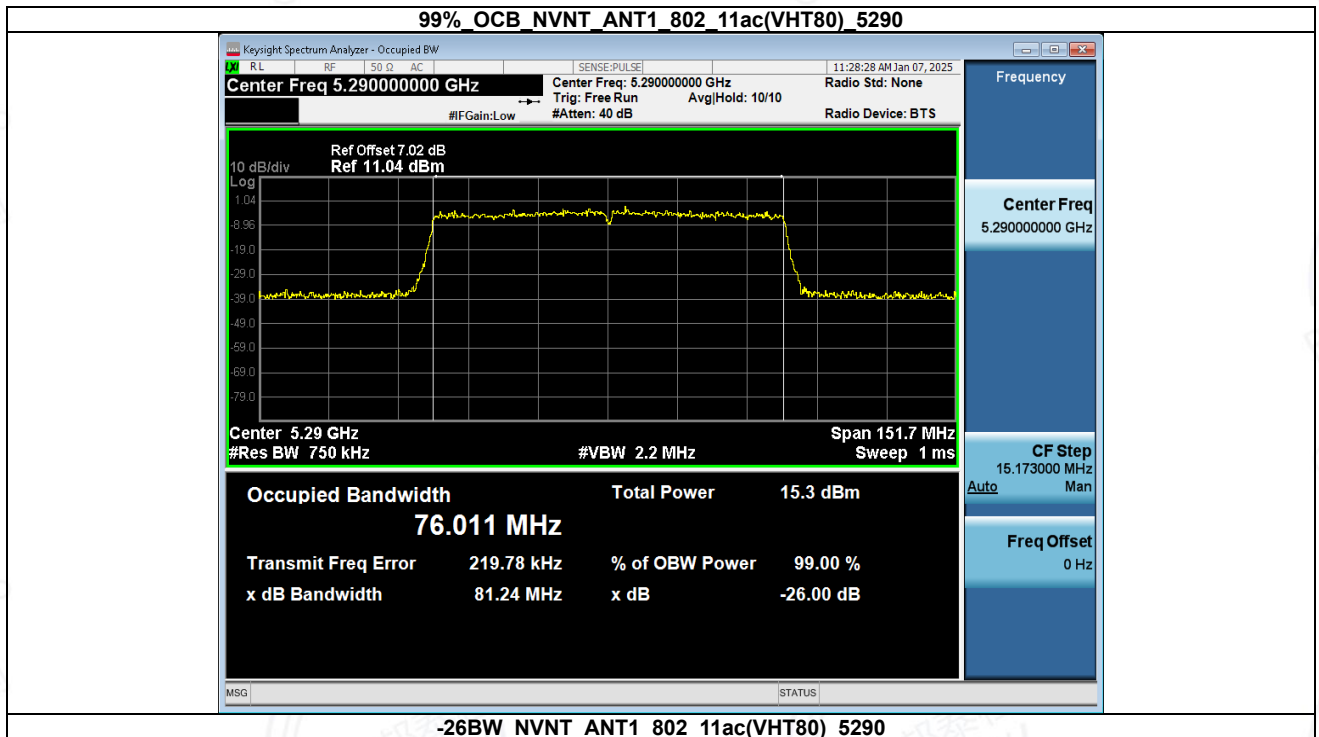
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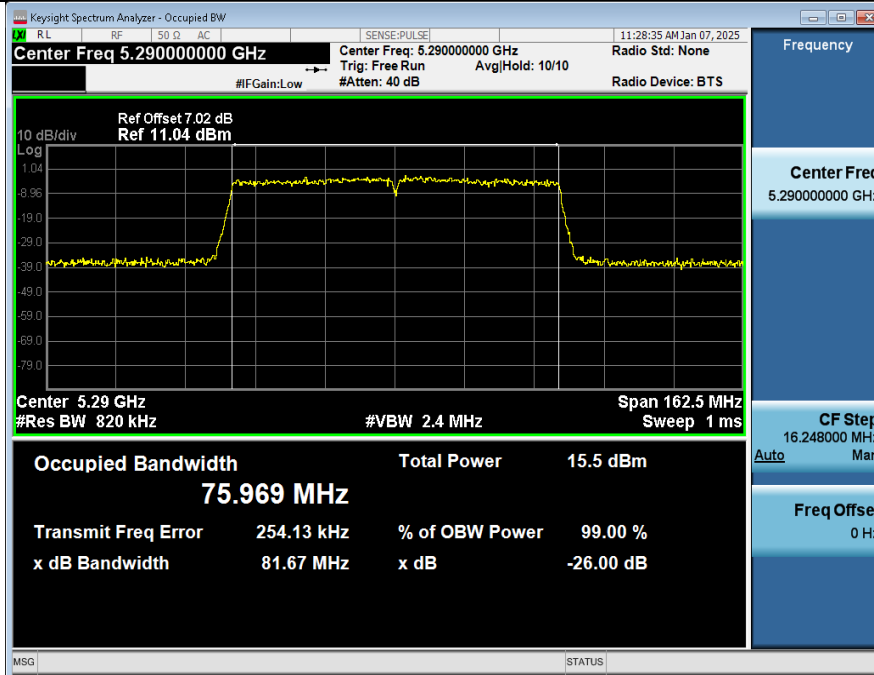


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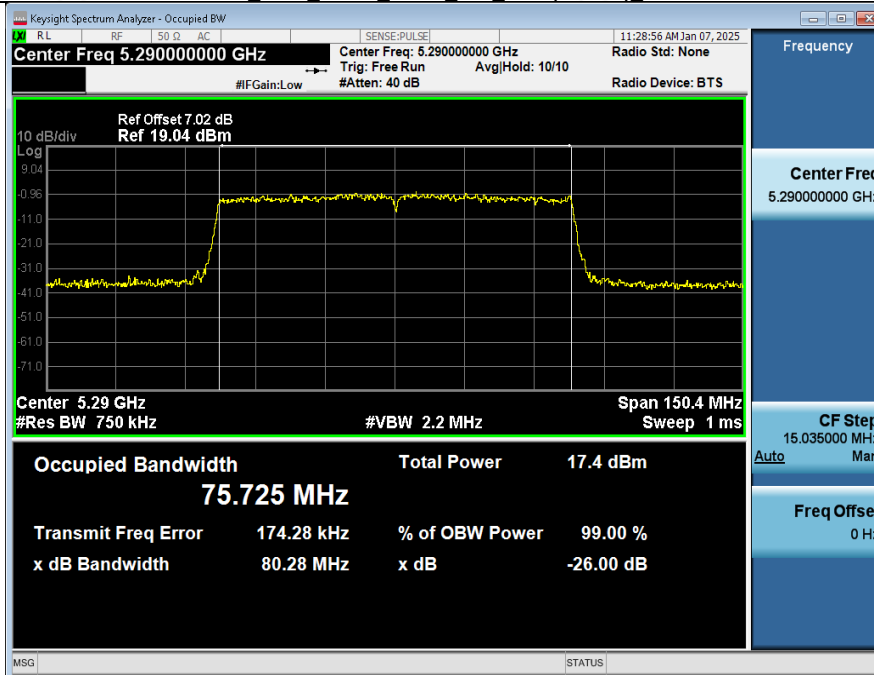






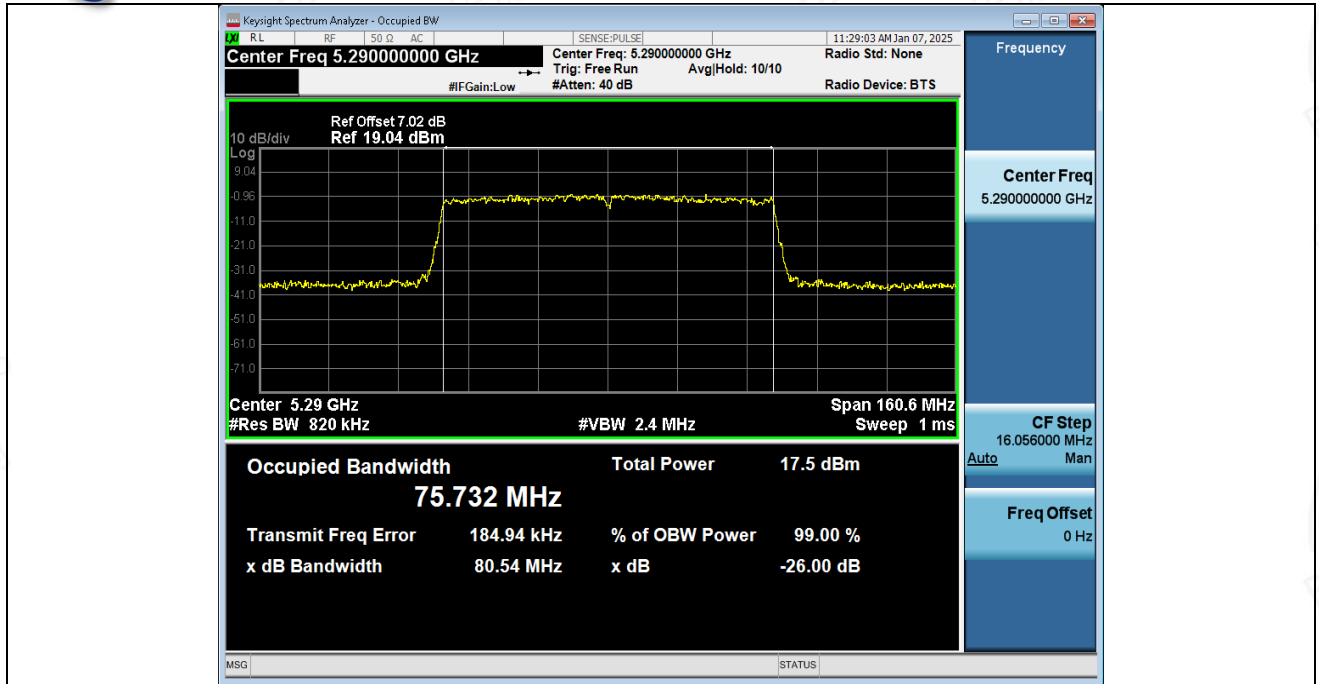


99%\_OCB\_NVNT\_ANT2\_802\_11ac(VHT80)\_5290



-26BW\_NVNT\_ANT2\_802\_11ac(VHT80)\_5290

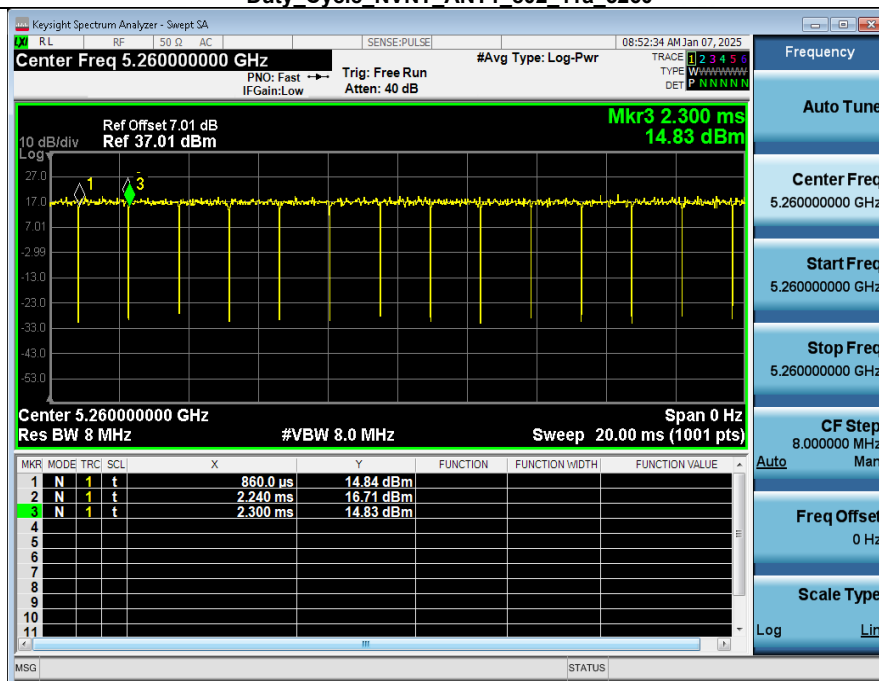




## 2. Duty Cycle

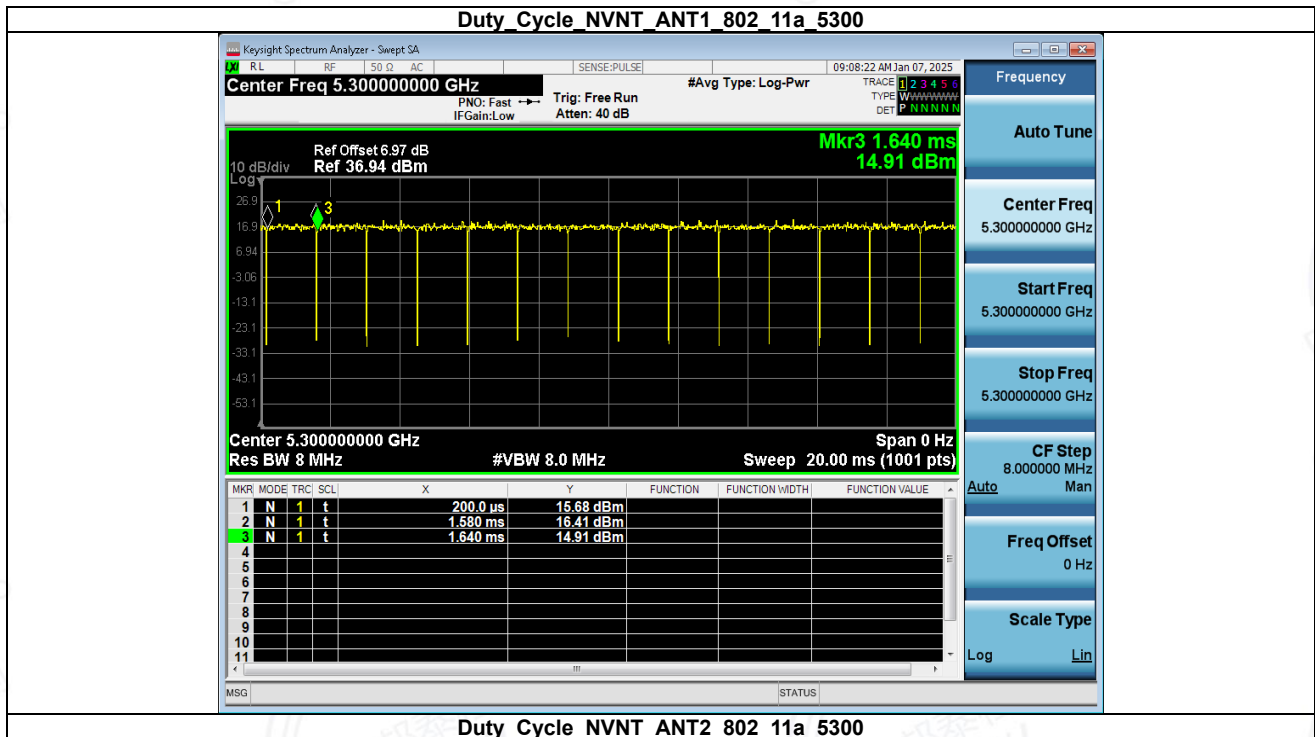
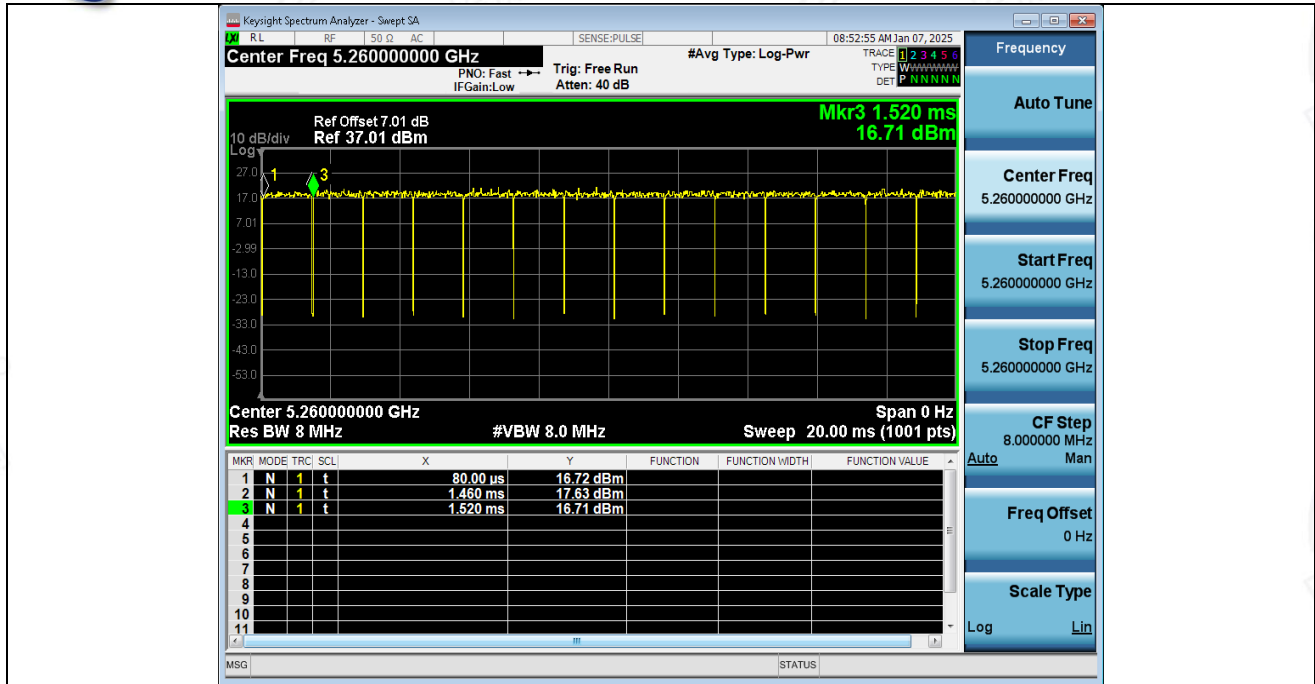
| Condition | Antenna | Modulation      | Frequency(MHz) | Duty cycle(%) | Duty_factor |
|-----------|---------|-----------------|----------------|---------------|-------------|
| NVNT      | ANT1    | 802.11a         | 5260.00        | 95.83         | 0.18        |
| NVNT      | ANT2    | 802.11a         | 5260.00        | 95.83         | 0.18        |
| NVNT      | ANT1    | 802.11a         | 5300.00        | 95.83         | 0.18        |
| NVNT      | ANT2    | 802.11a         | 5300.00        | 97.22         | 0.12        |
| NVNT      | ANT1    | 802.11a         | 5320.00        | 95.89         | 0.18        |
| NVNT      | ANT2    | 802.11a         | 5320.00        | 95.83         | 0.18        |
| NVNT      | ANT1    | 802.11n(HT20)   | 5260.00        | 97.01         | 0.13        |
| NVNT      | ANT2    | 802.11n(HT20)   | 5260.00        | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11n(HT20)   | 5300.00        | 95.59         | 0.20        |
| NVNT      | ANT2    | 802.11n(HT20)   | 5300.00        | 97.01         | 0.13        |
| NVNT      | ANT1    | 802.11n(HT20)   | 5320.00        | 95.59         | 0.20        |
| NVNT      | ANT2    | 802.11n(HT20)   | 5320.00        | 95.59         | 0.20        |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5260.00        | 95.59         | 0.20        |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5260.00        | 95.59         | 0.20        |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5300.00        | 95.59         | 0.20        |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5300.00        | 95.59         | 0.20        |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5320.00        | 95.59         | 0.20        |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5320.00        | 95.59         | 0.20        |
| NVNT      | ANT1    | 802.11n(HT40)   | 5270.00        | 91.43         | 0.39        |
| NVNT      | ANT2    | 802.11n(HT40)   | 5270.00        | 91.43         | 0.39        |
| NVNT      | ANT1    | 802.11n(HT40)   | 5310.00        | 91.43         | 0.39        |
| NVNT      | ANT2    | 802.11n(HT40)   | 5310.00        | 94.29         | 0.26        |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5270.00        | 94.29         | 0.26        |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5270.00        | 94.29         | 0.26        |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5310.00        | 94.29         | 0.26        |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5310.00        | 94.29         | 0.26        |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5290.00        | 50.00         | 3.01        |
| NVNT      | ANT2    | 802.11ac(VHT80) | 5290.00        | 50.00         | 3.01        |

Duty Cycle NVNT ANT1 802\_11a 5260

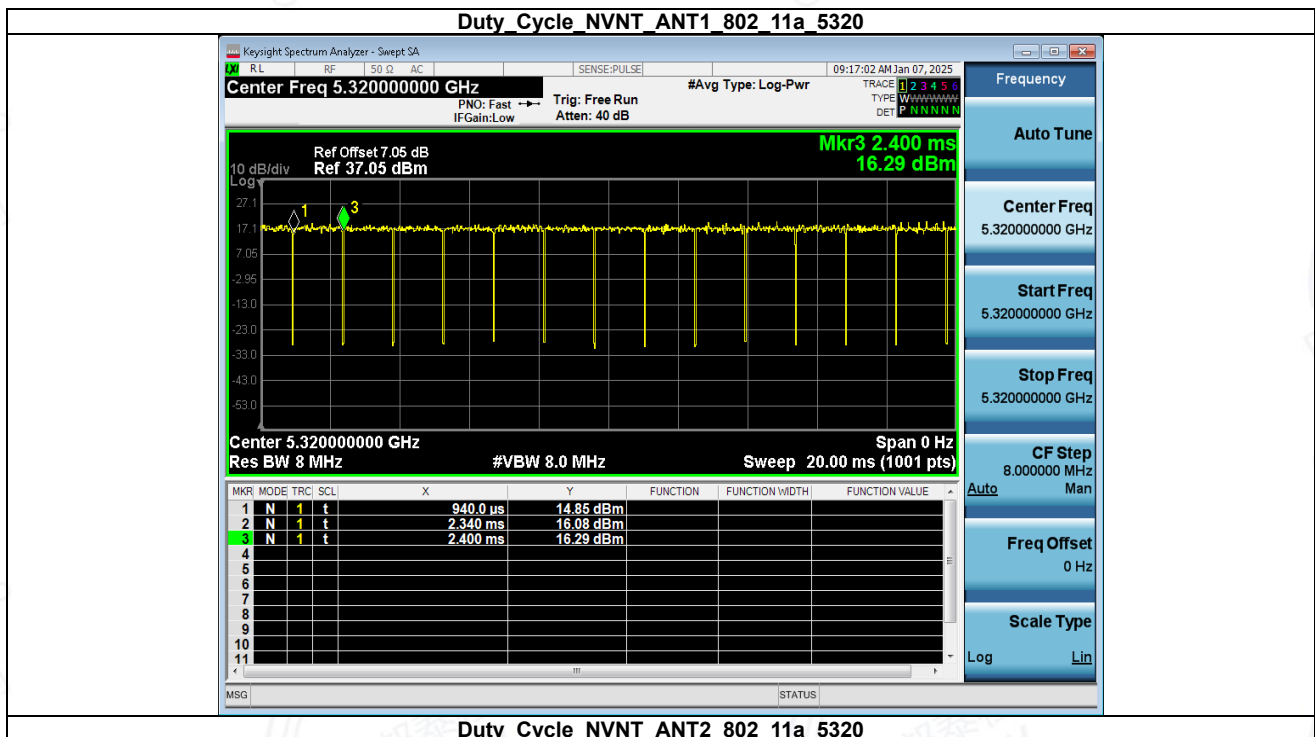
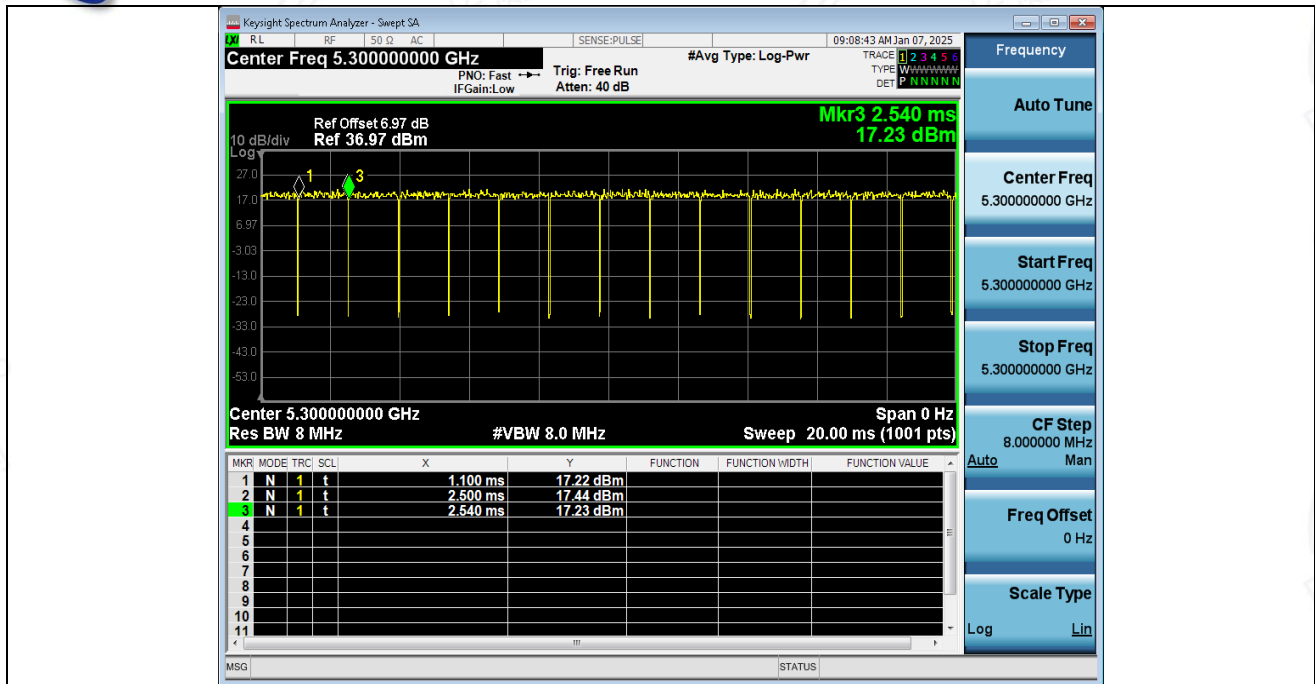


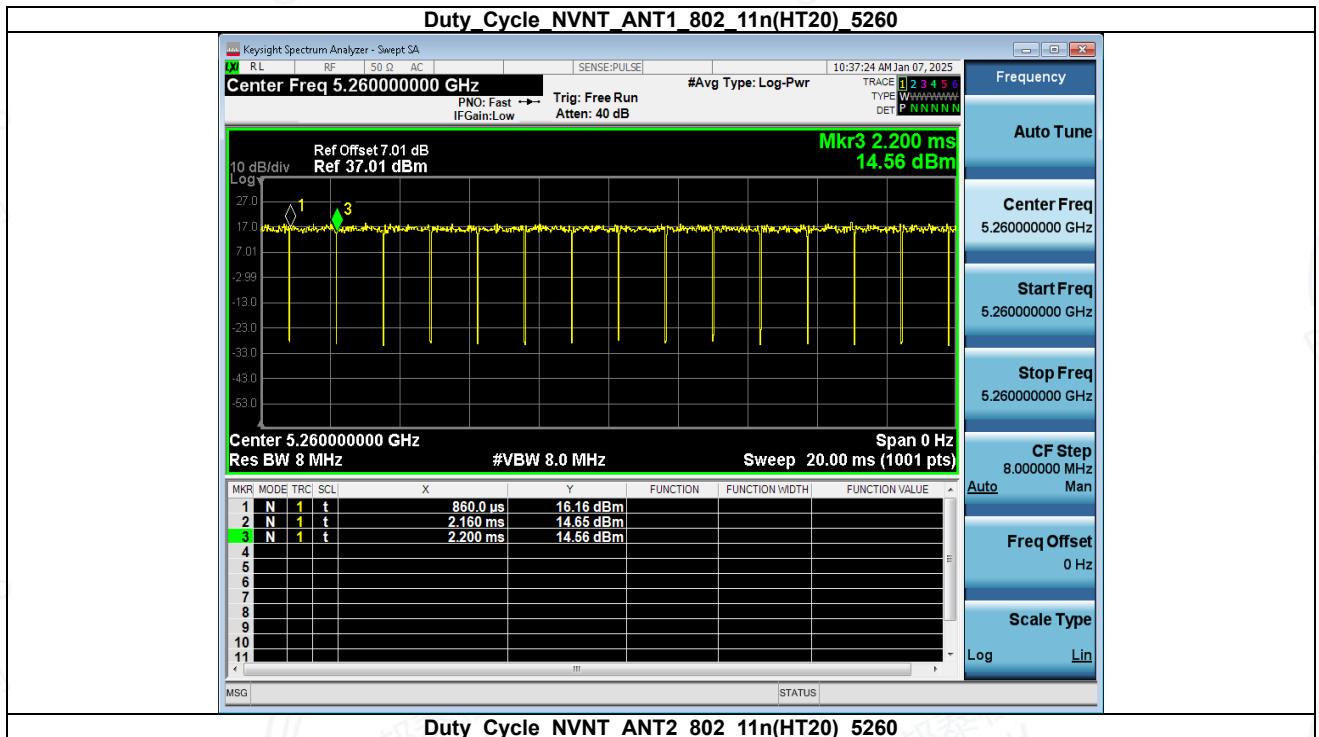
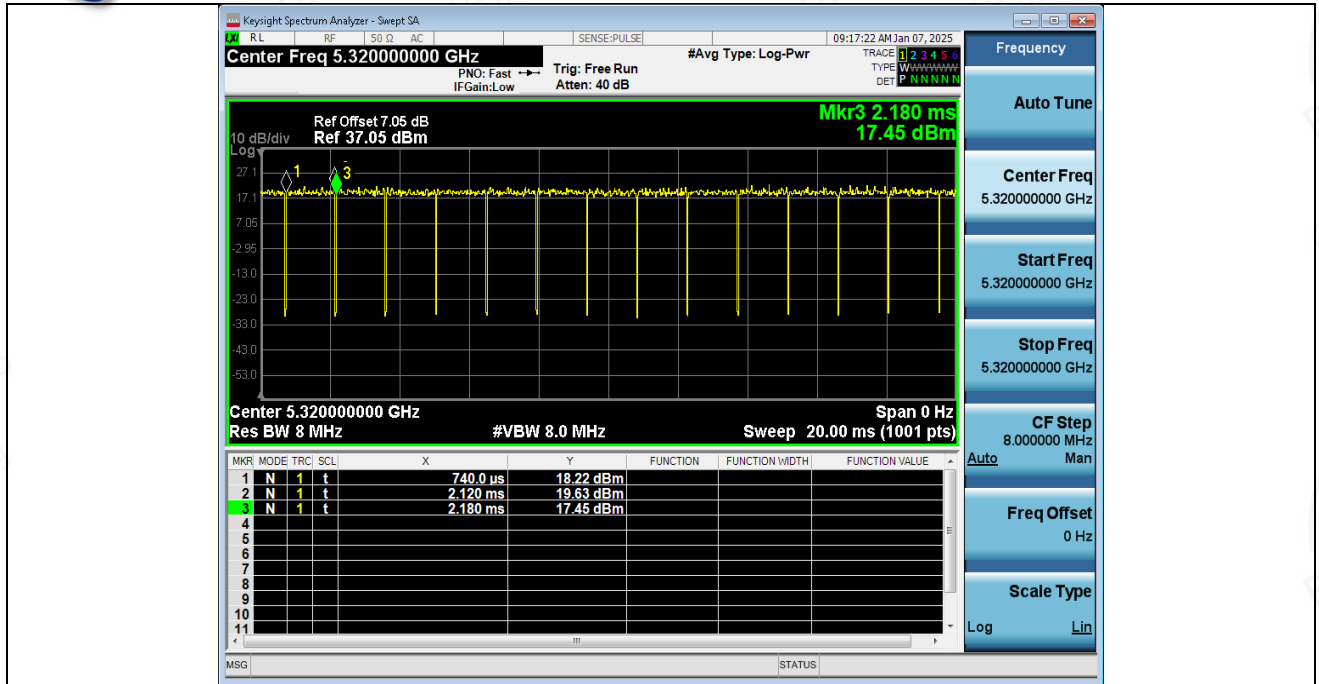
Duty Cycle NVNT ANT2 802\_11a 5260

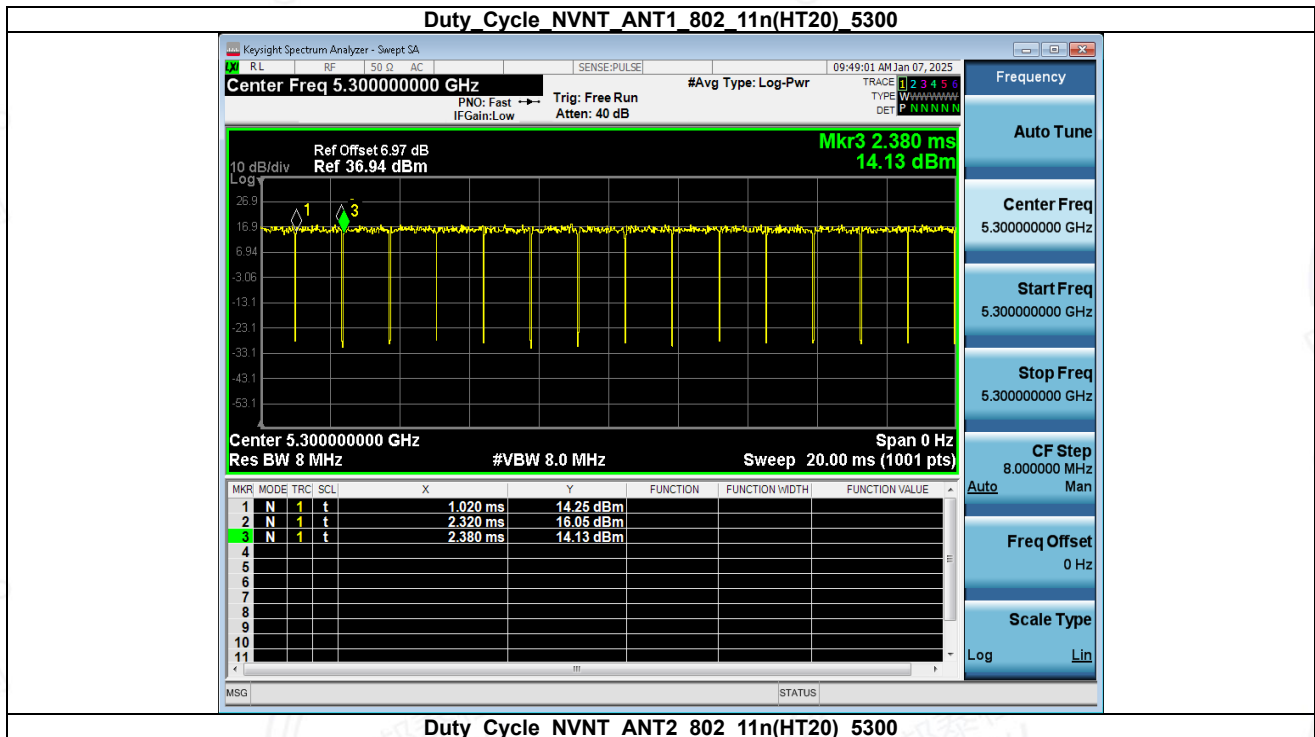
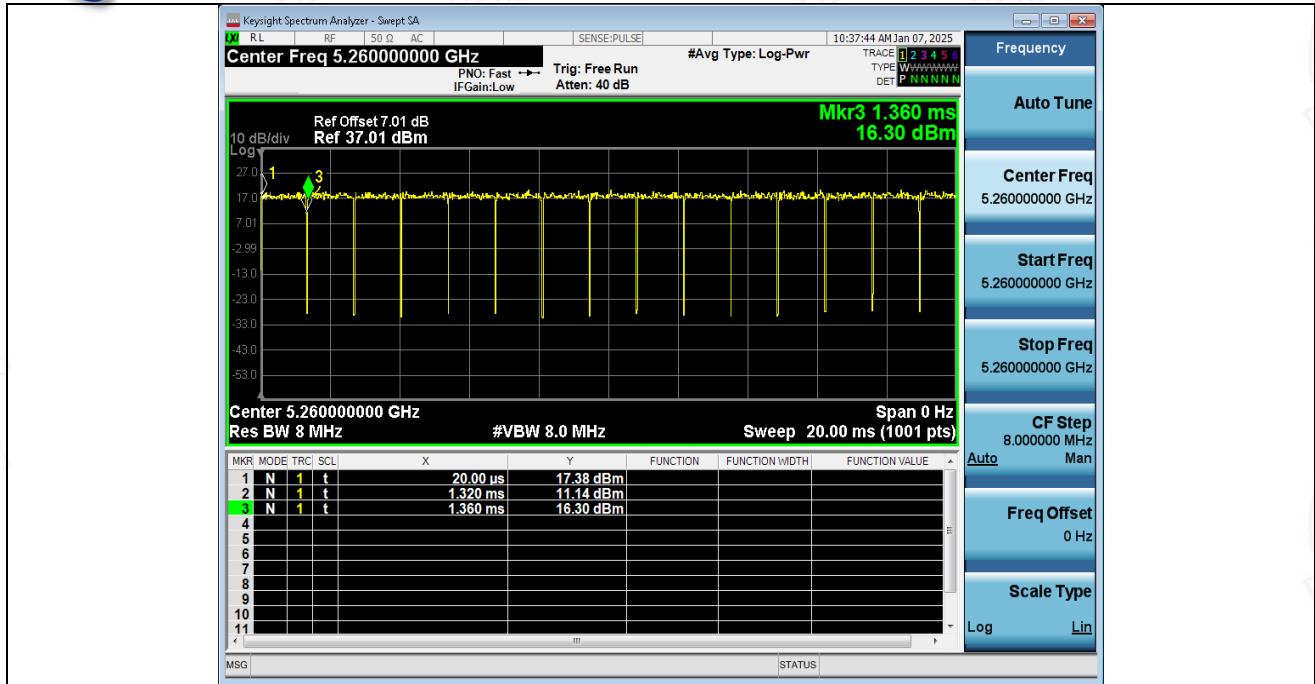


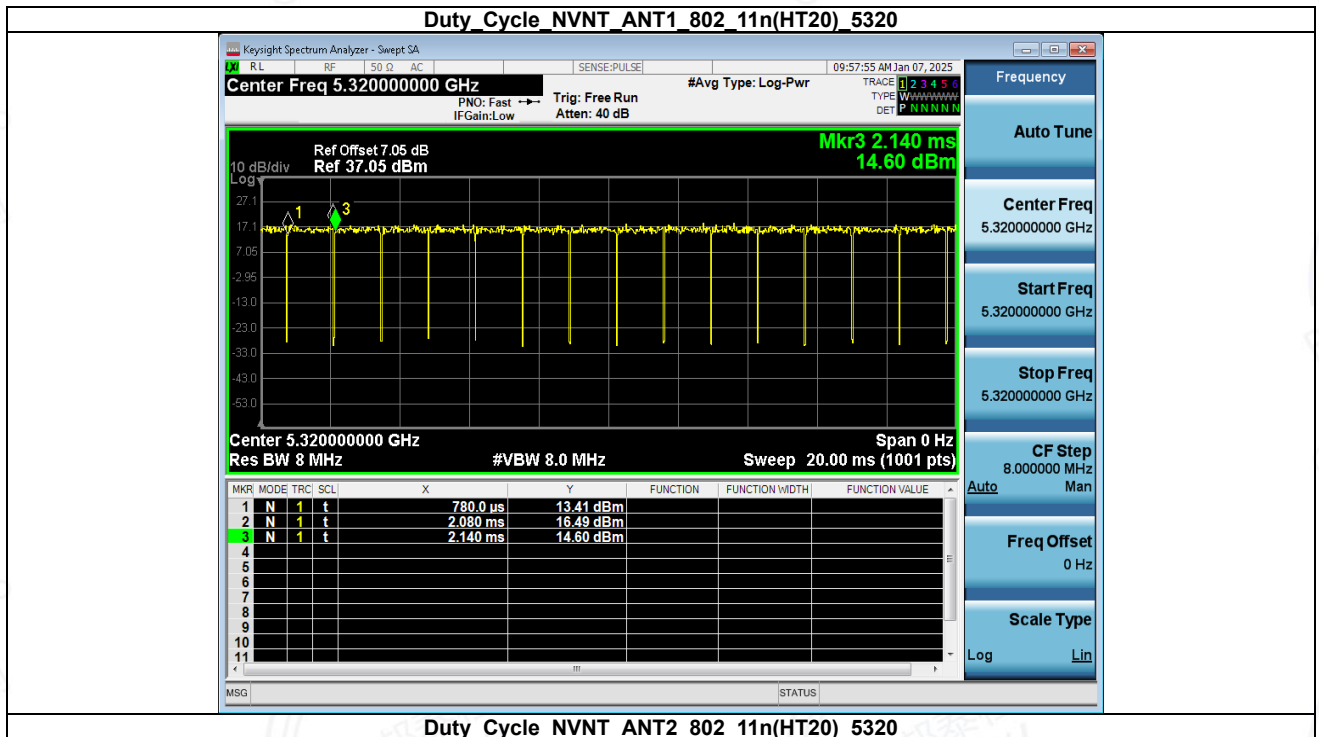
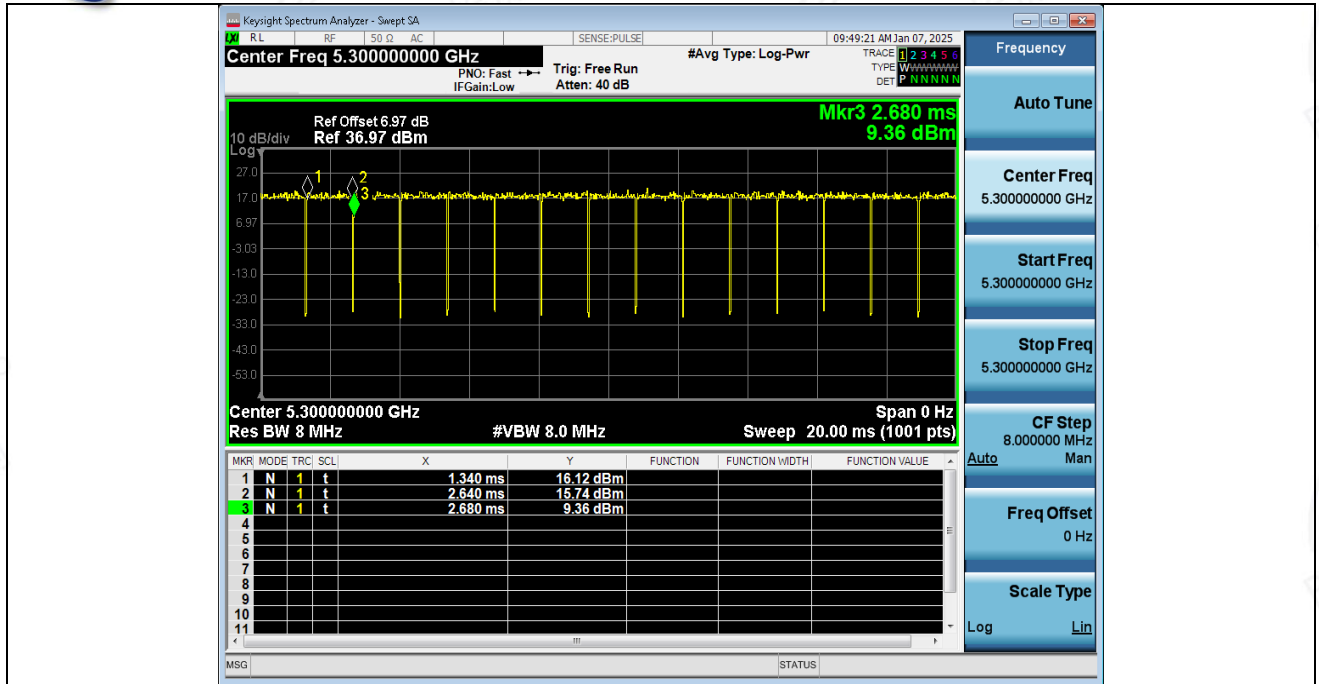


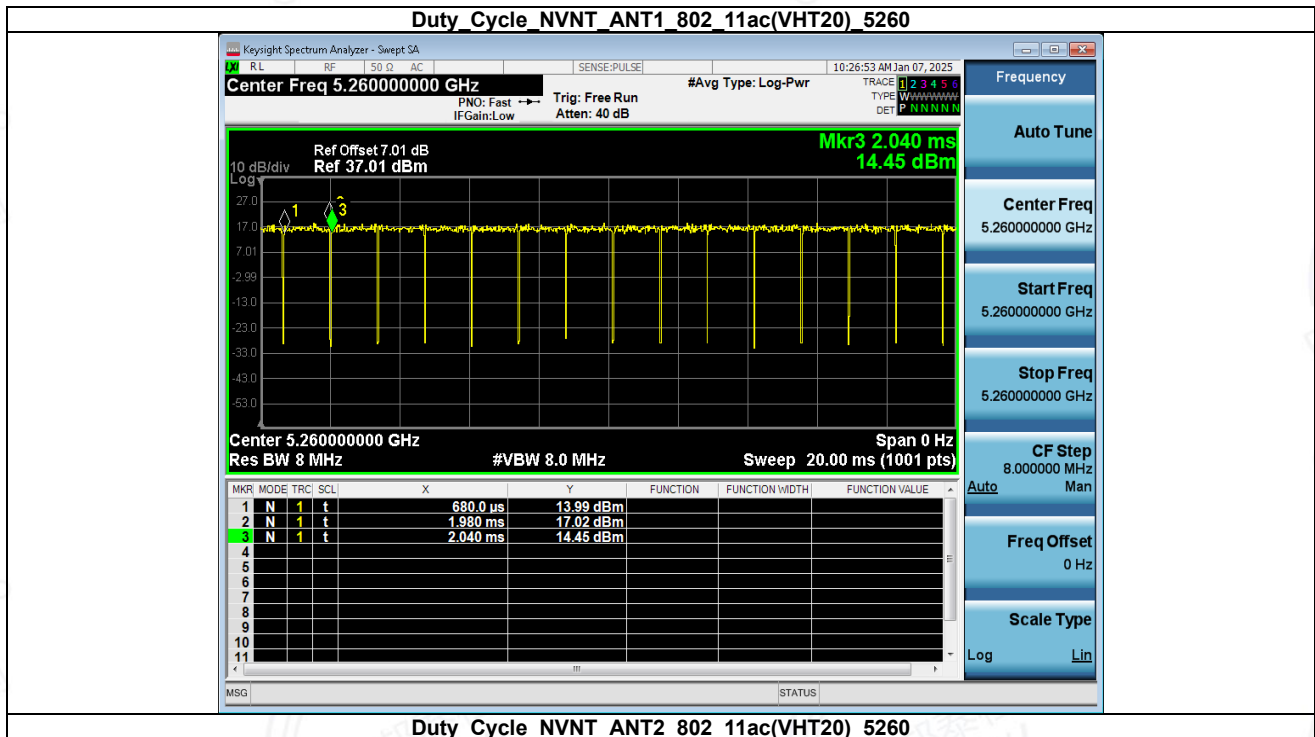
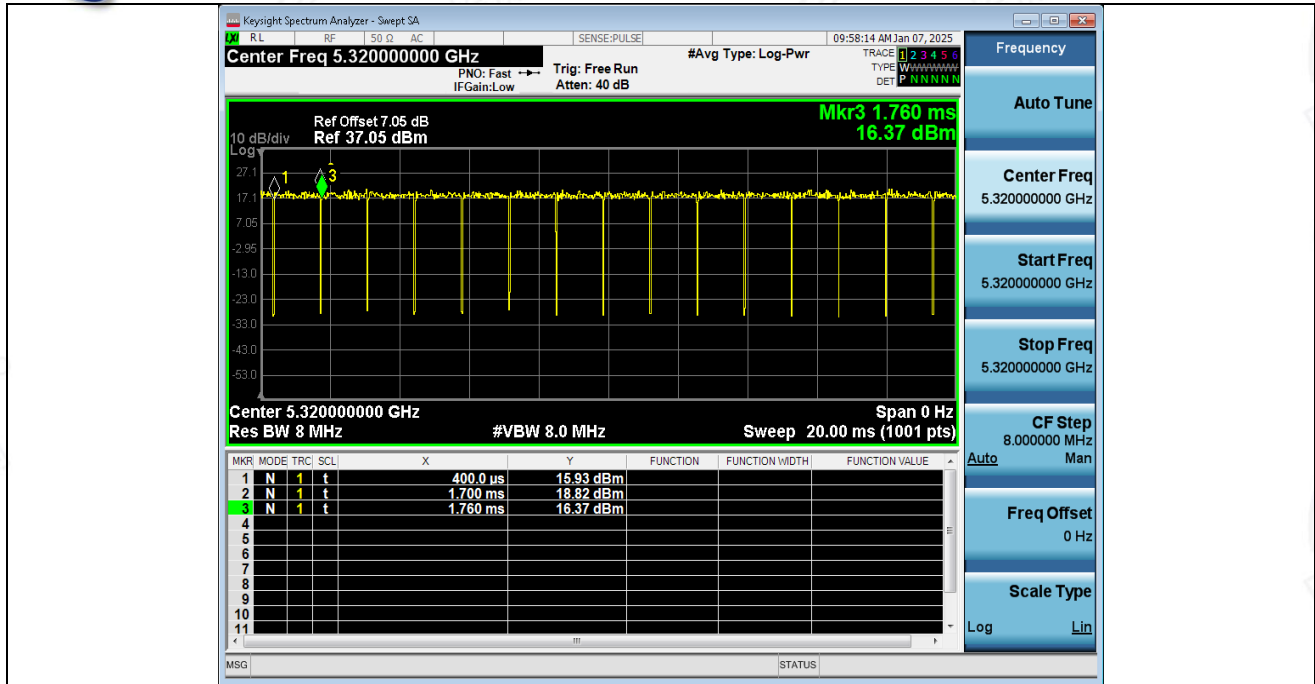




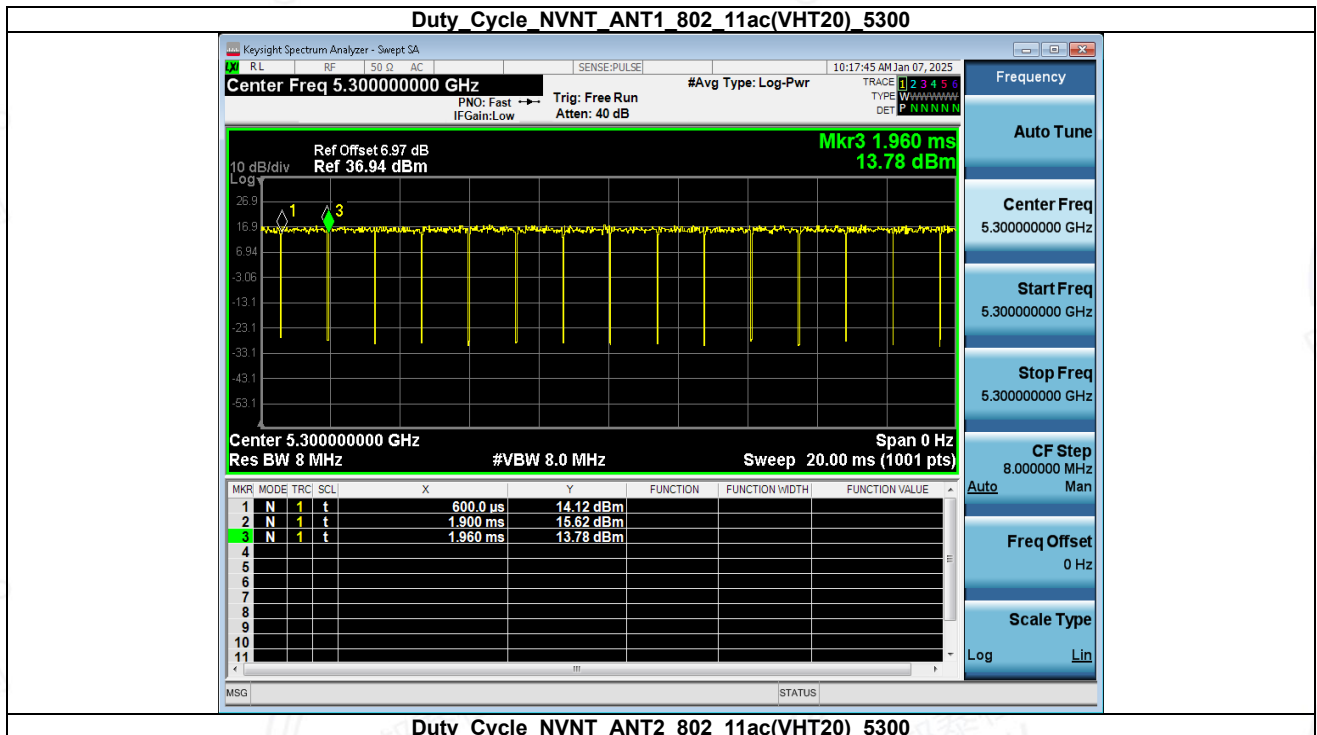
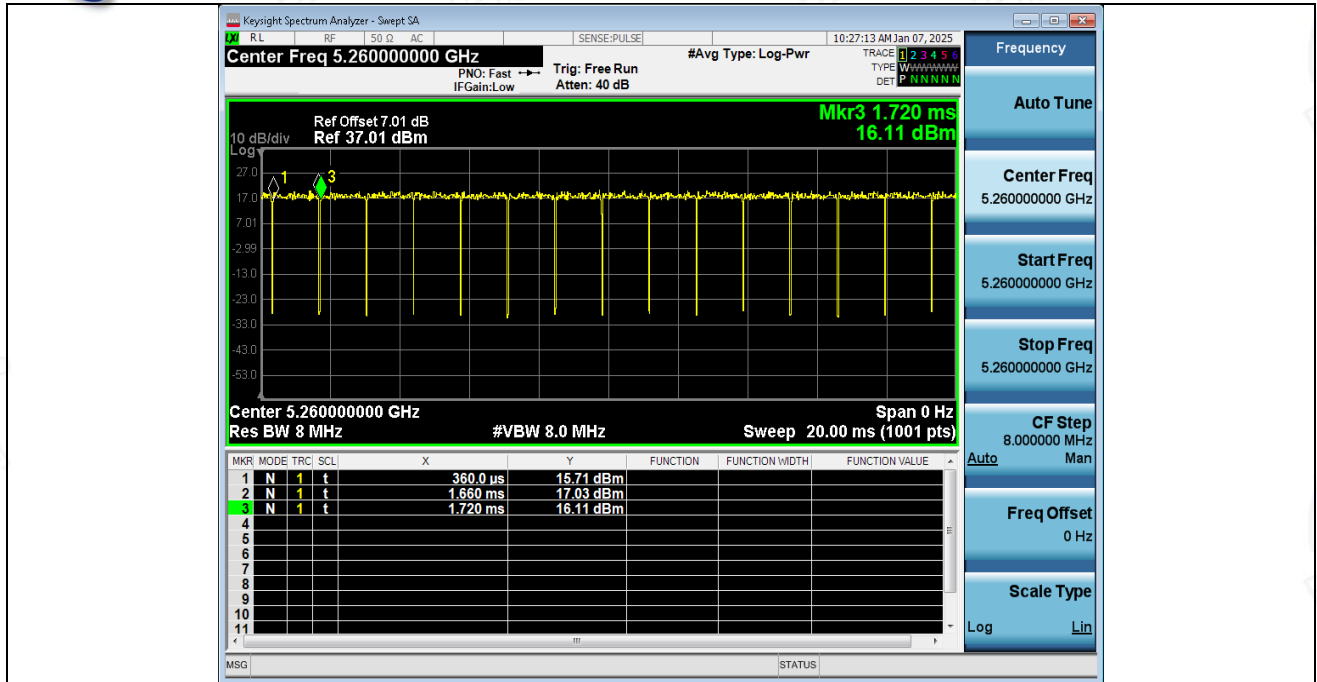


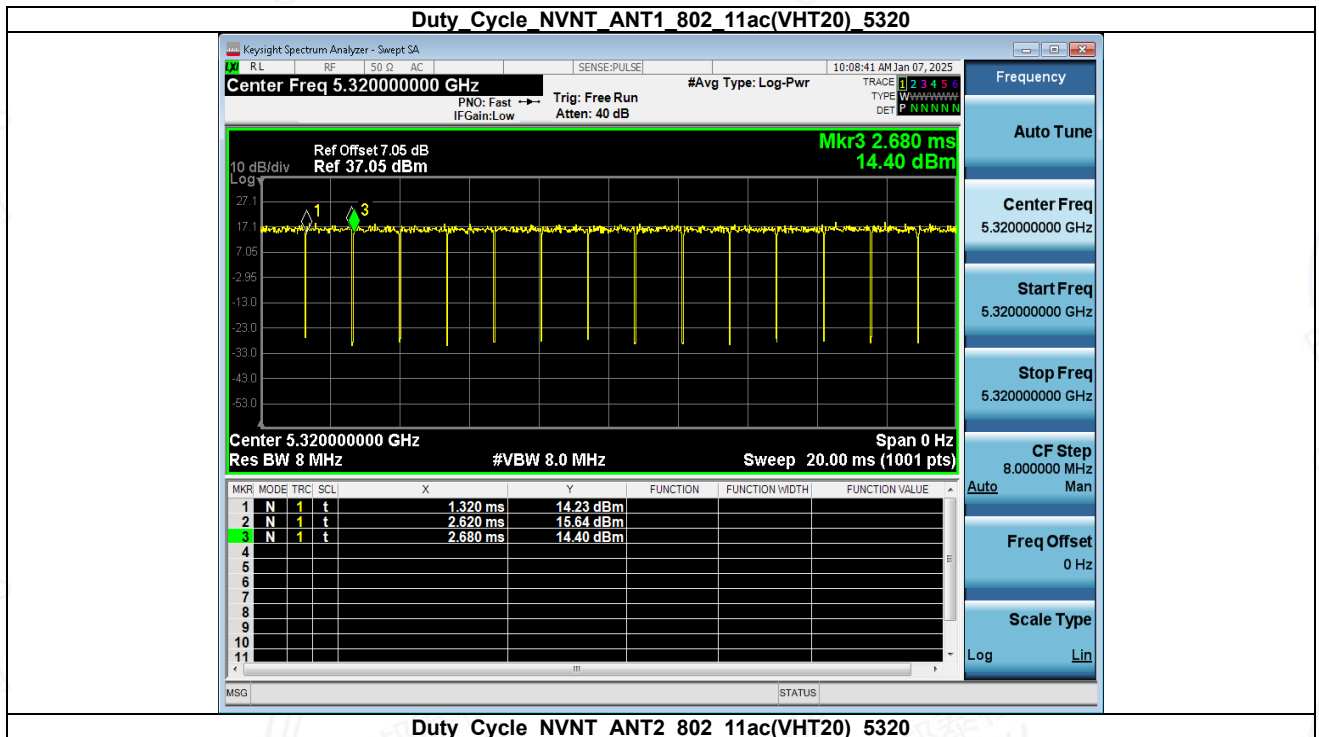
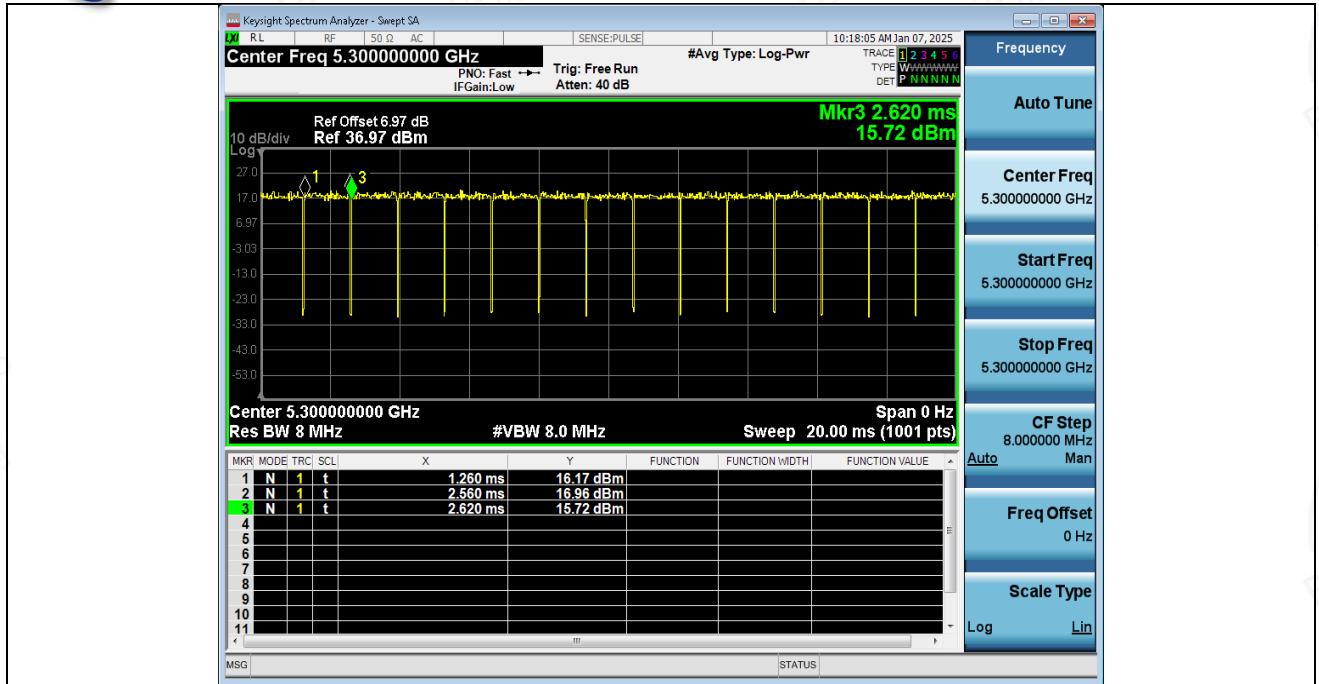


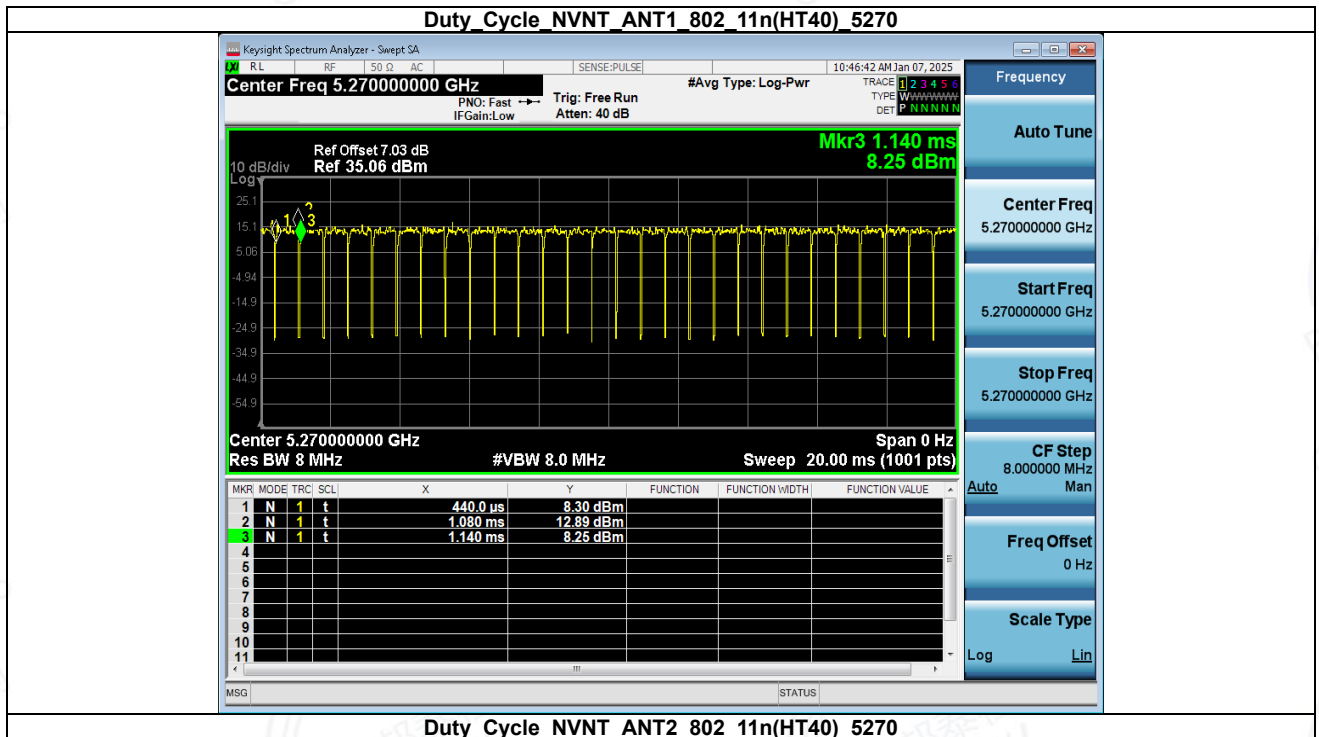
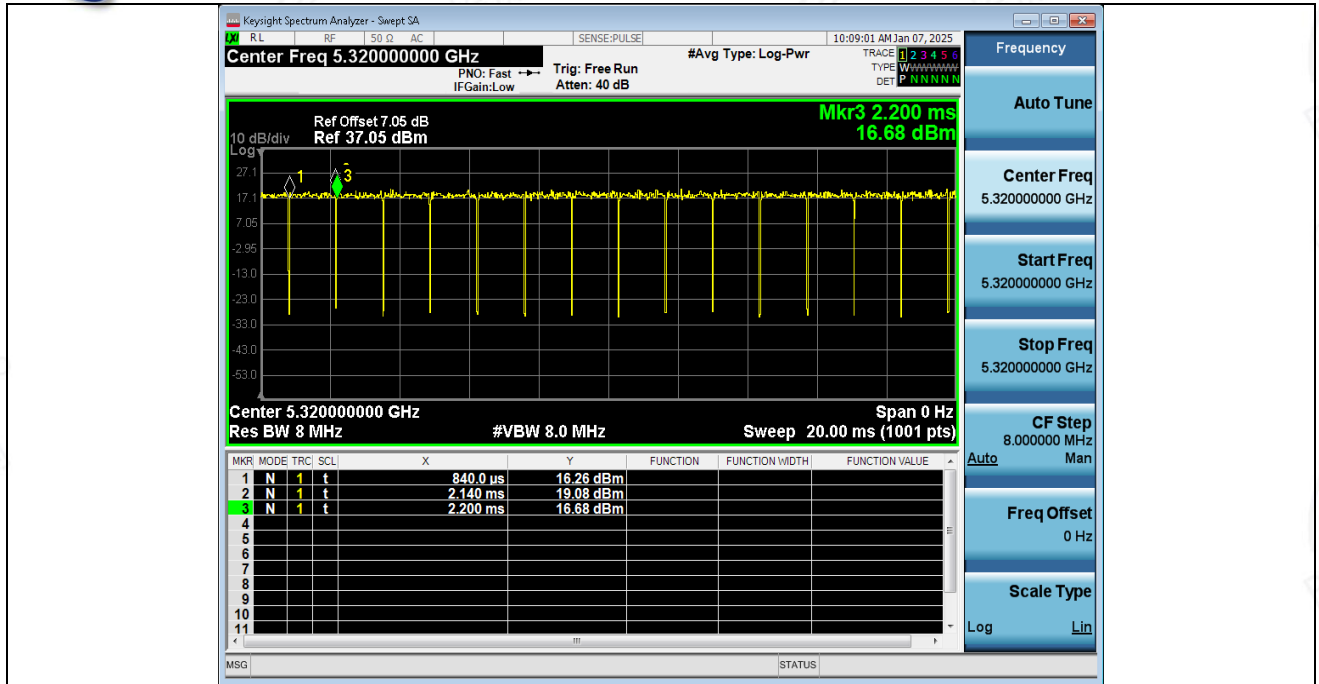


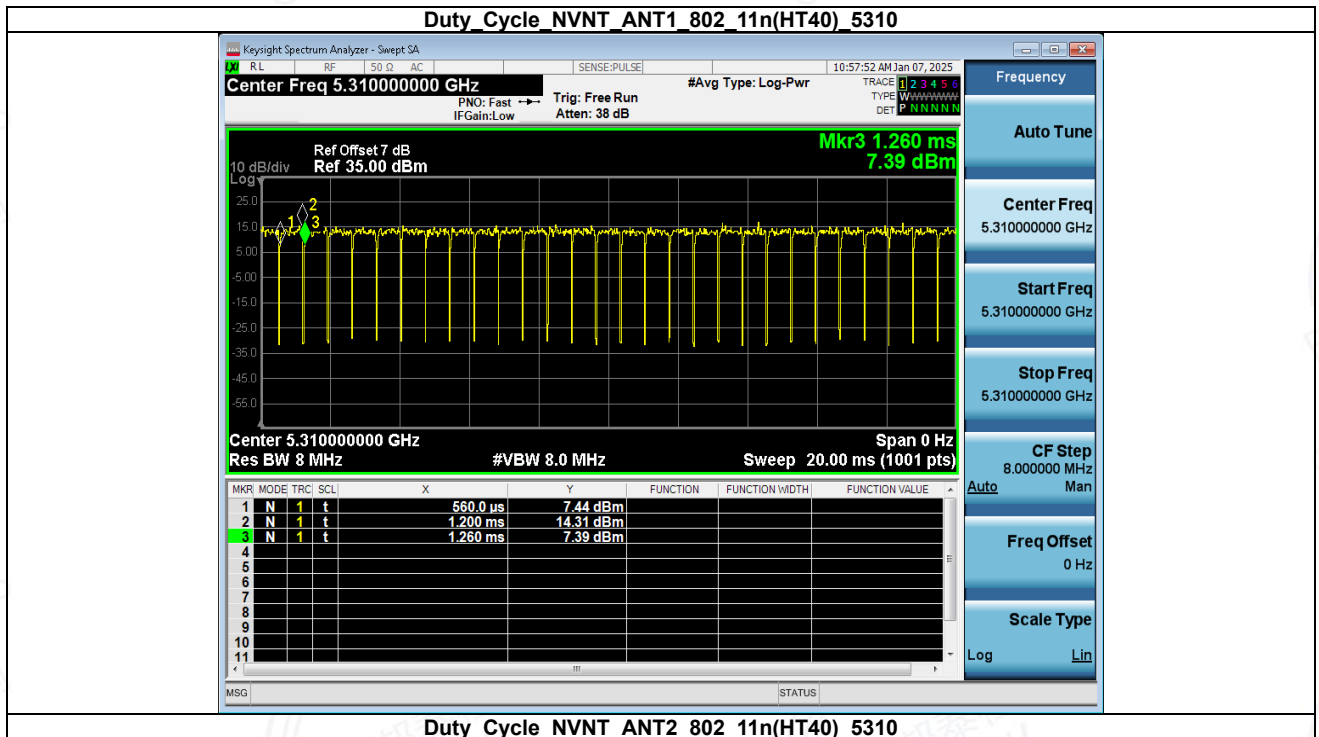
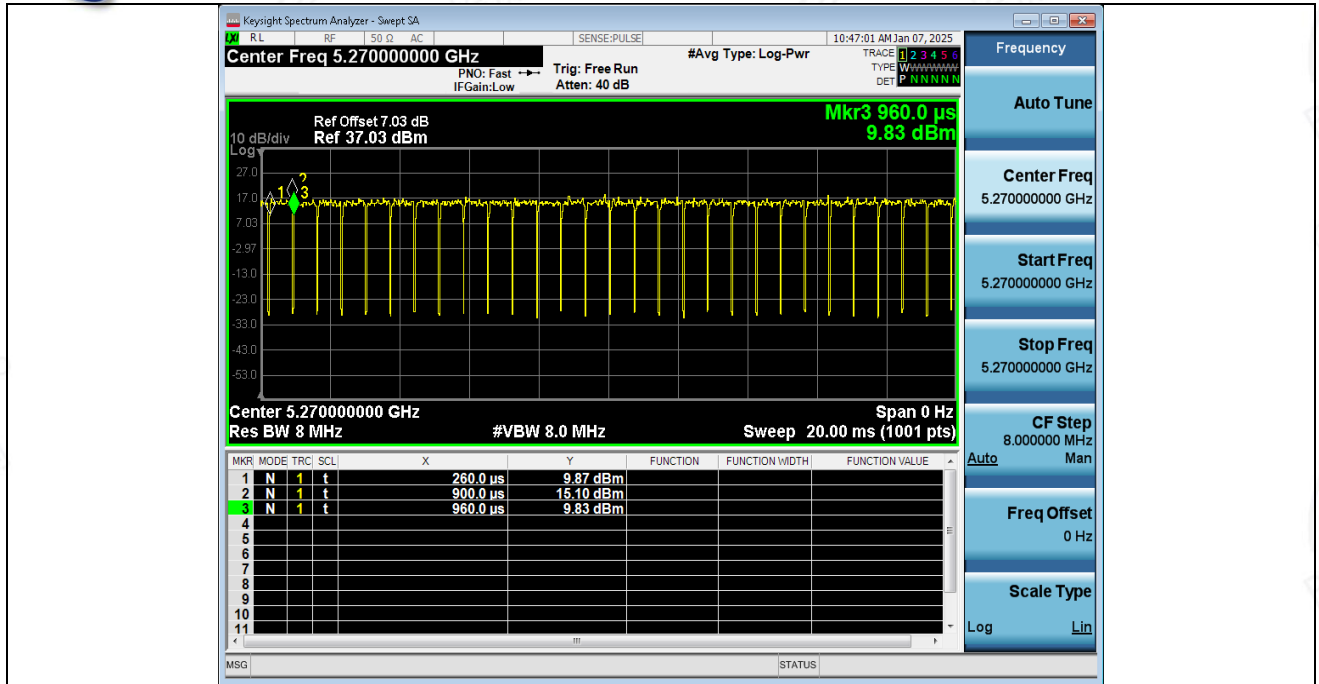


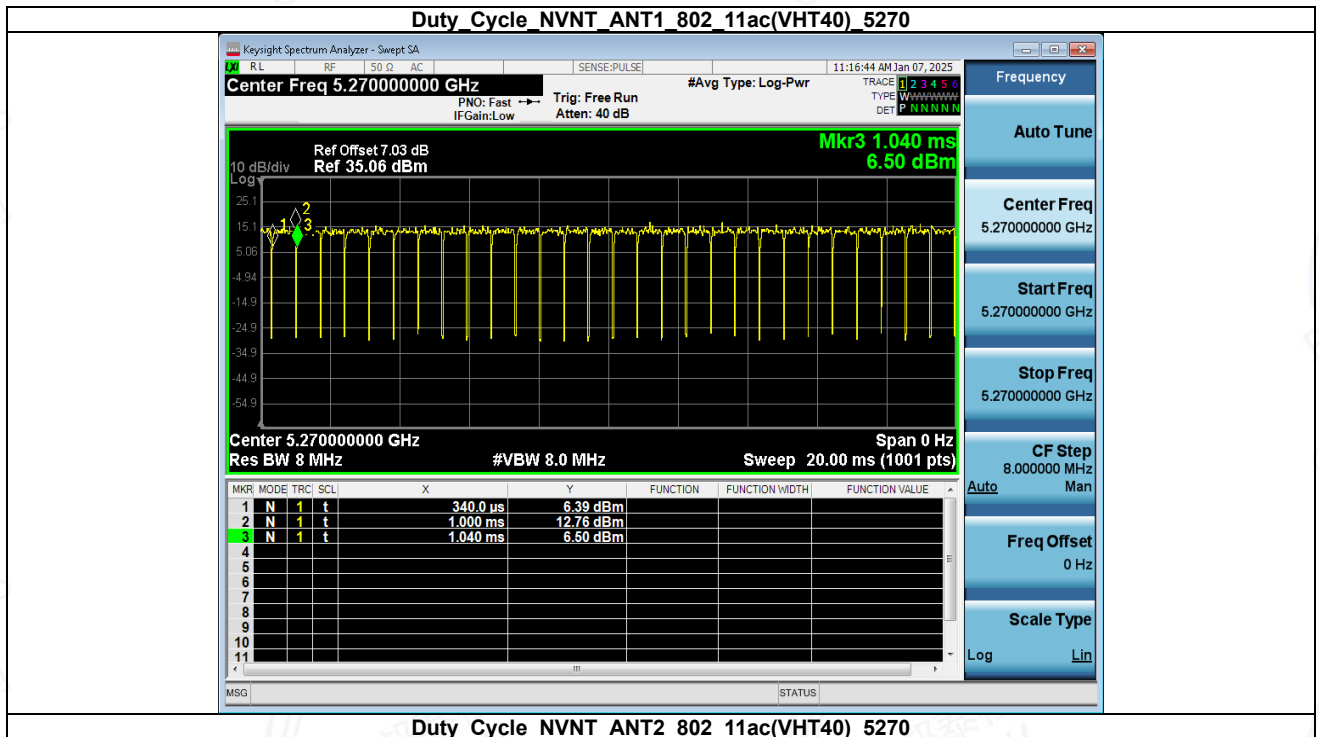
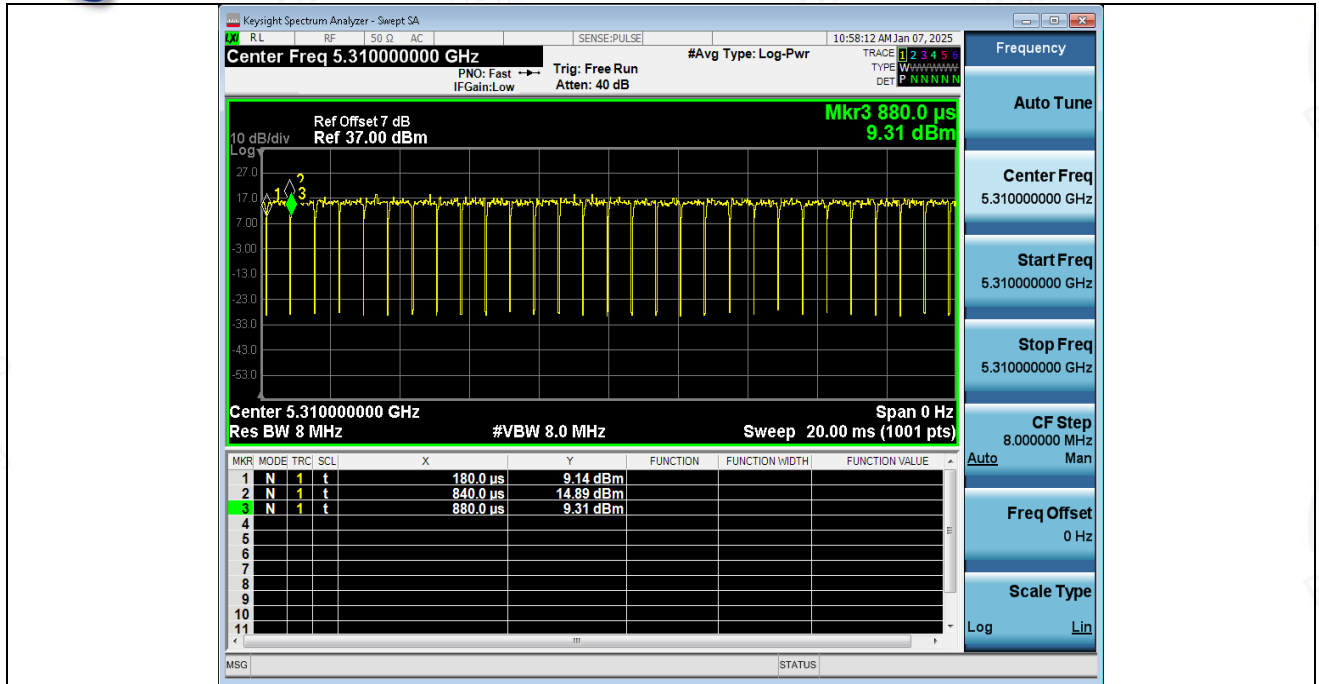




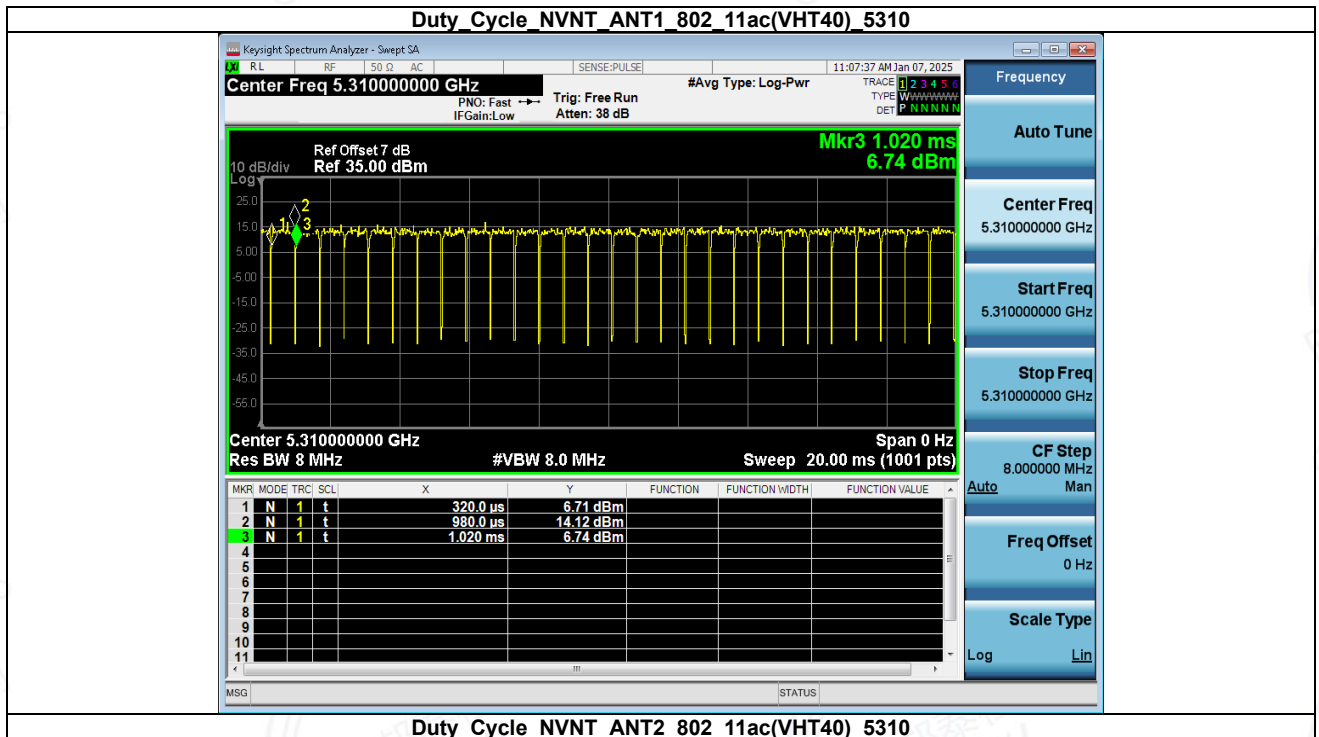
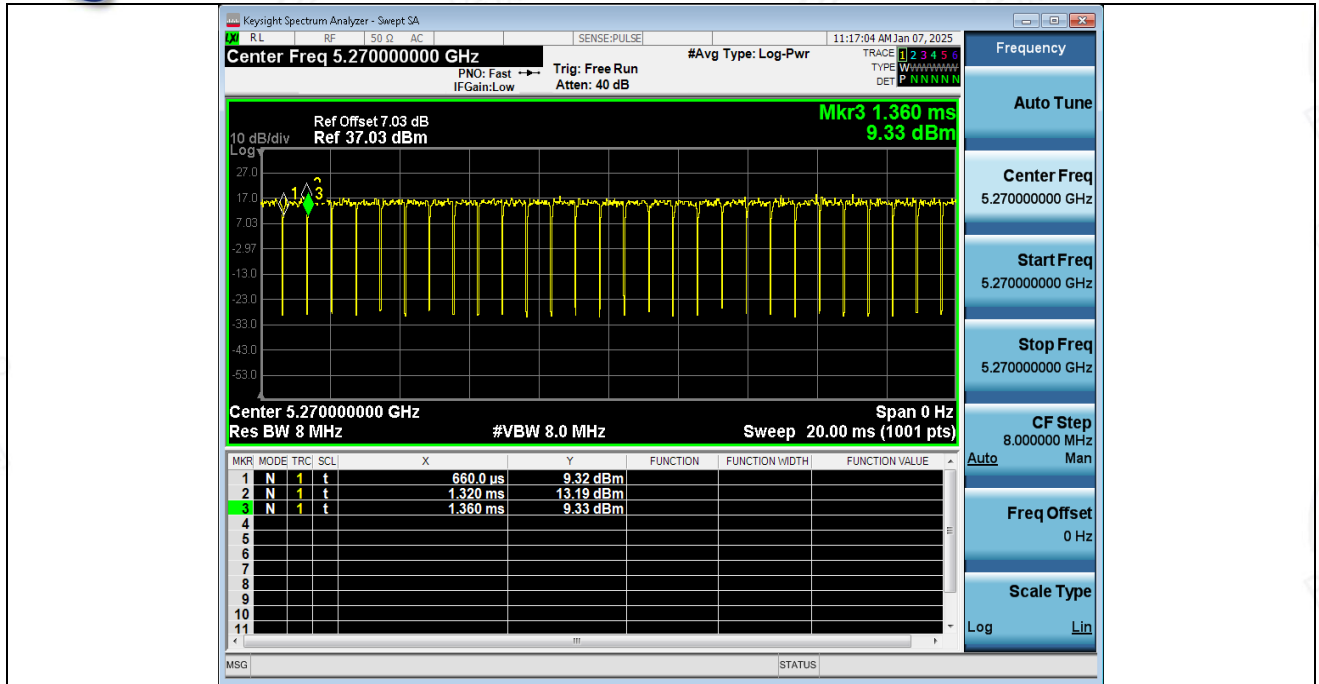


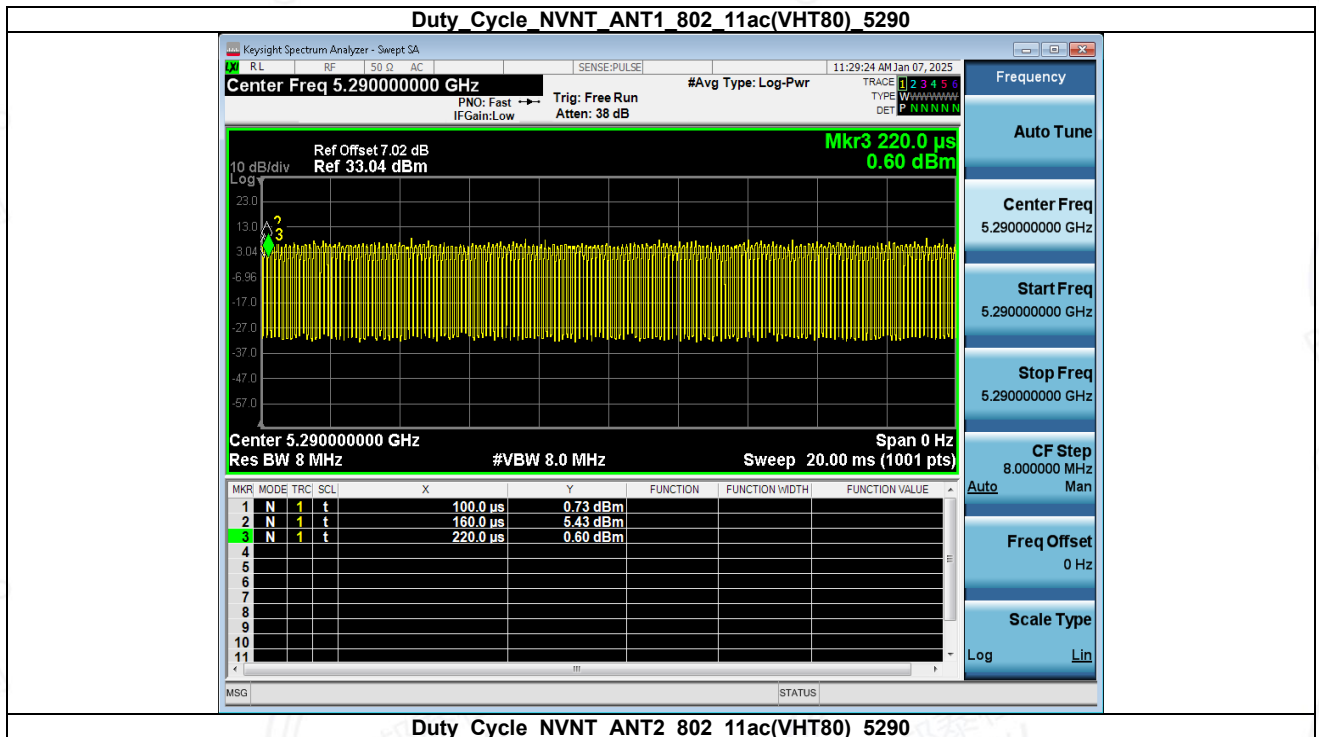
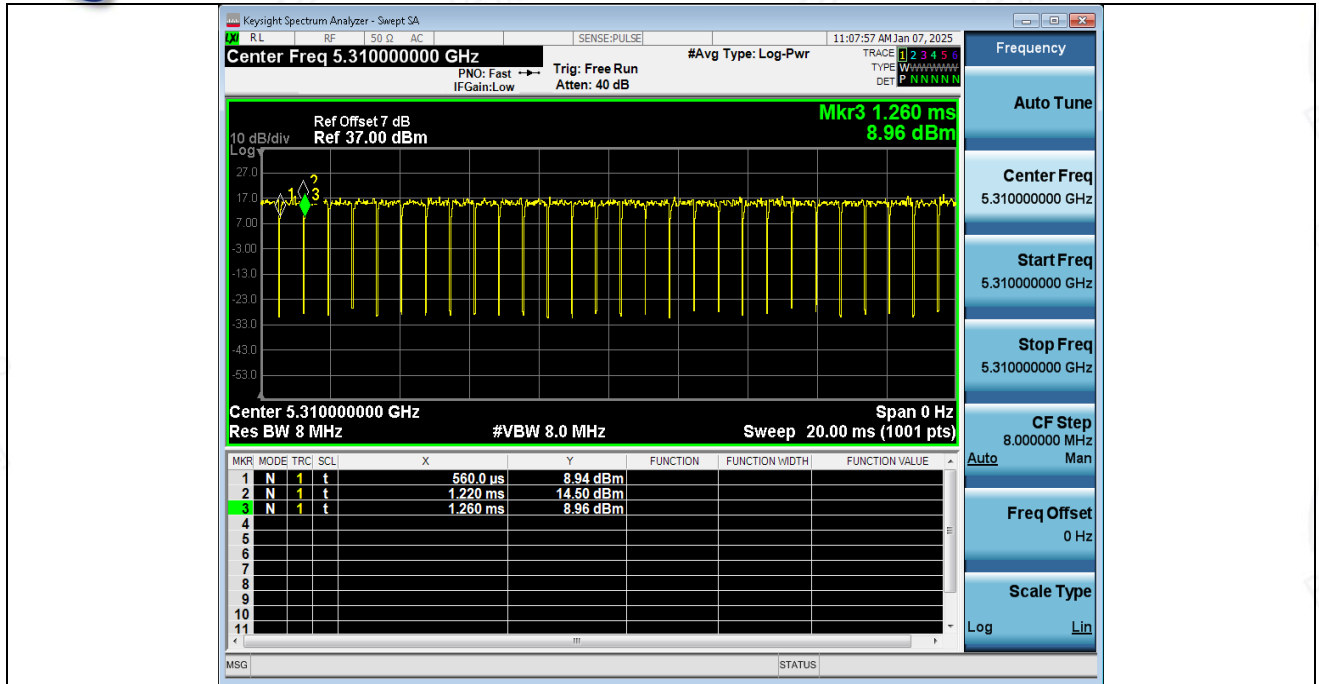


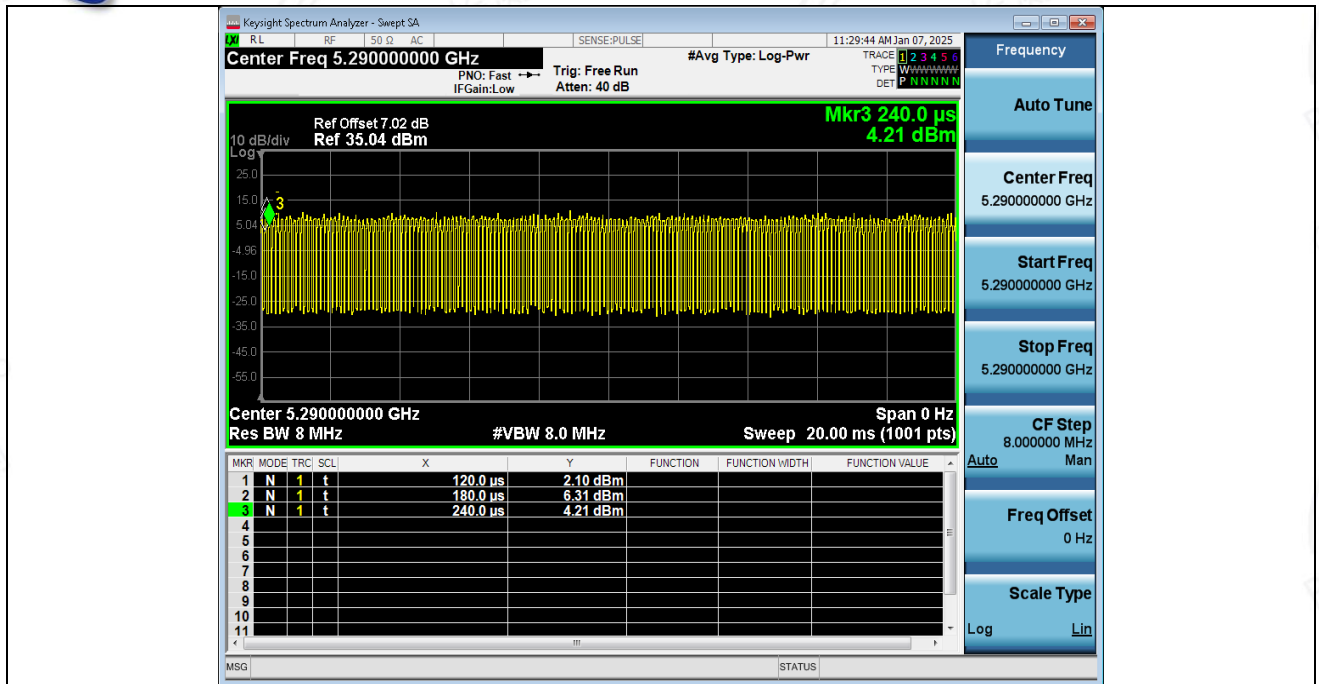






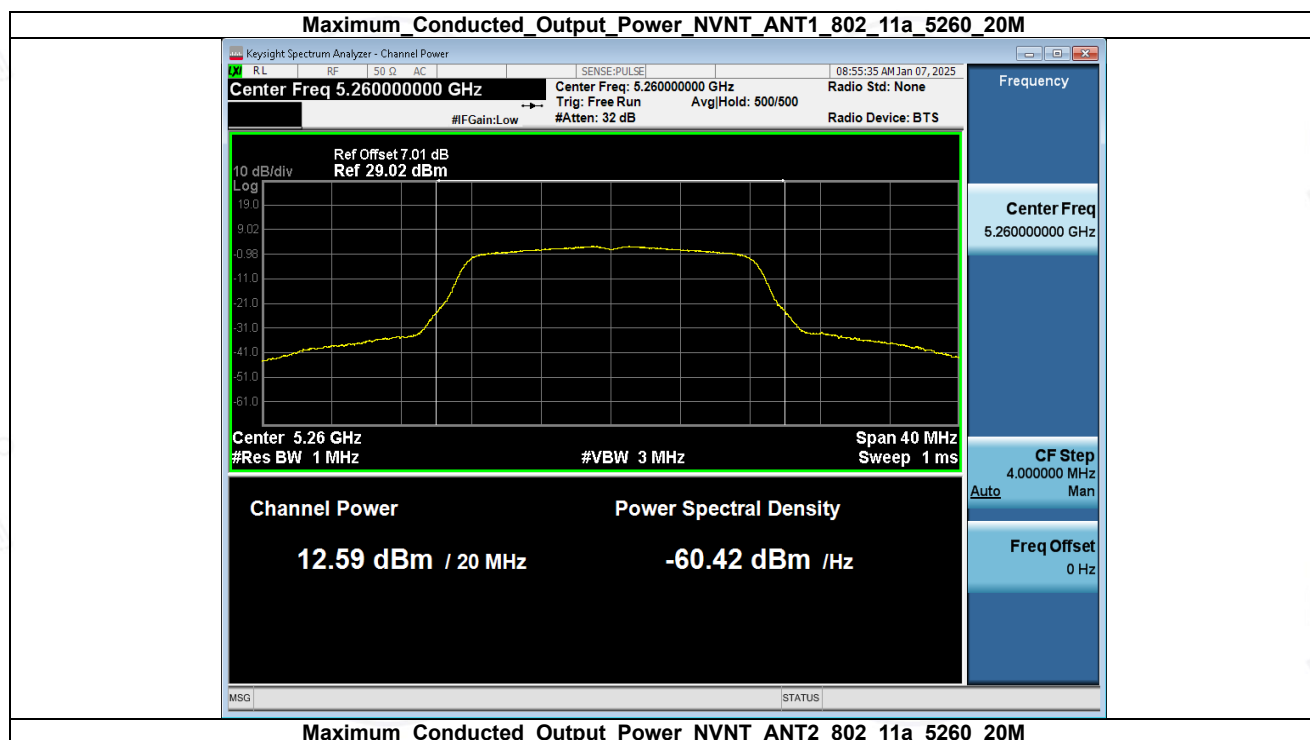


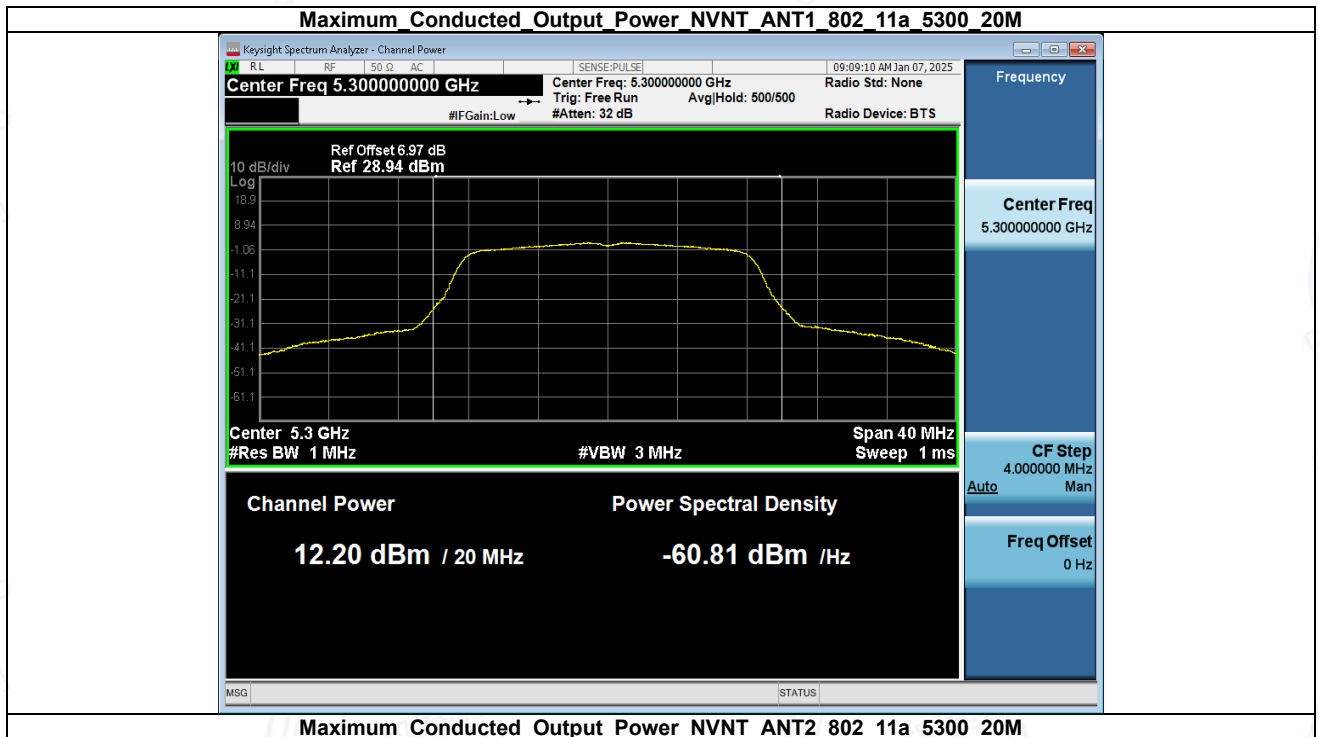
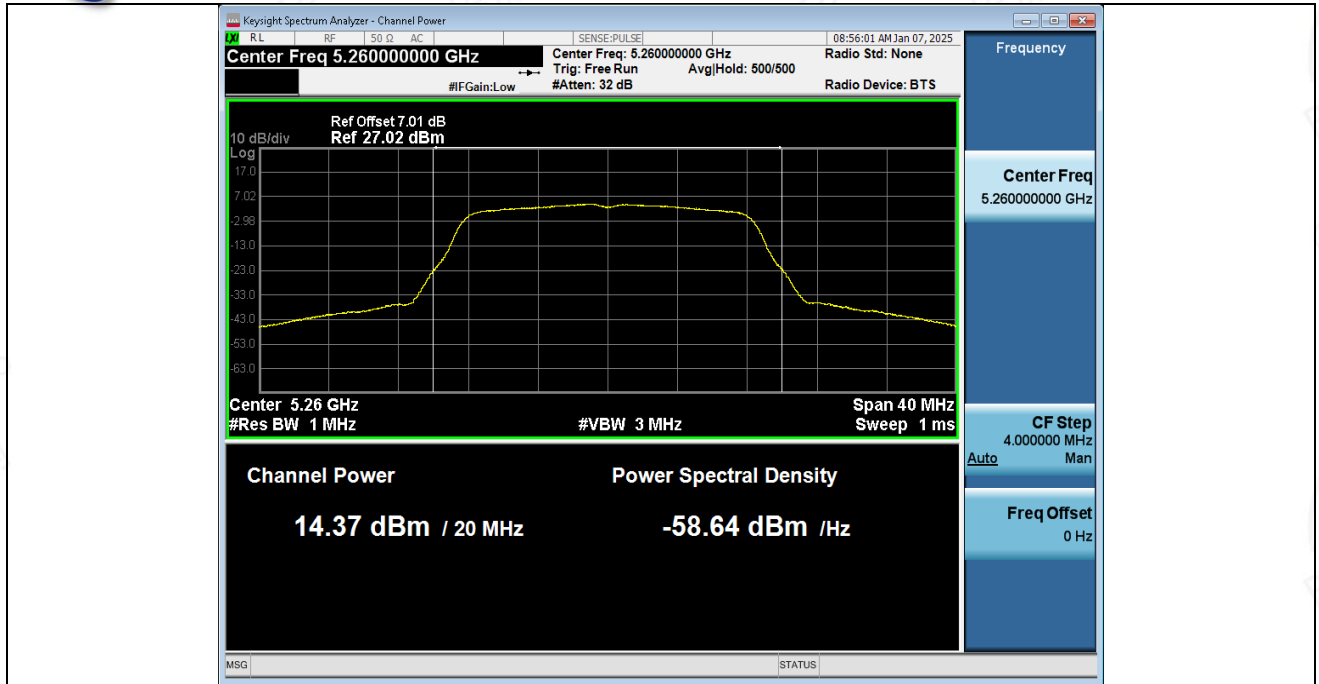




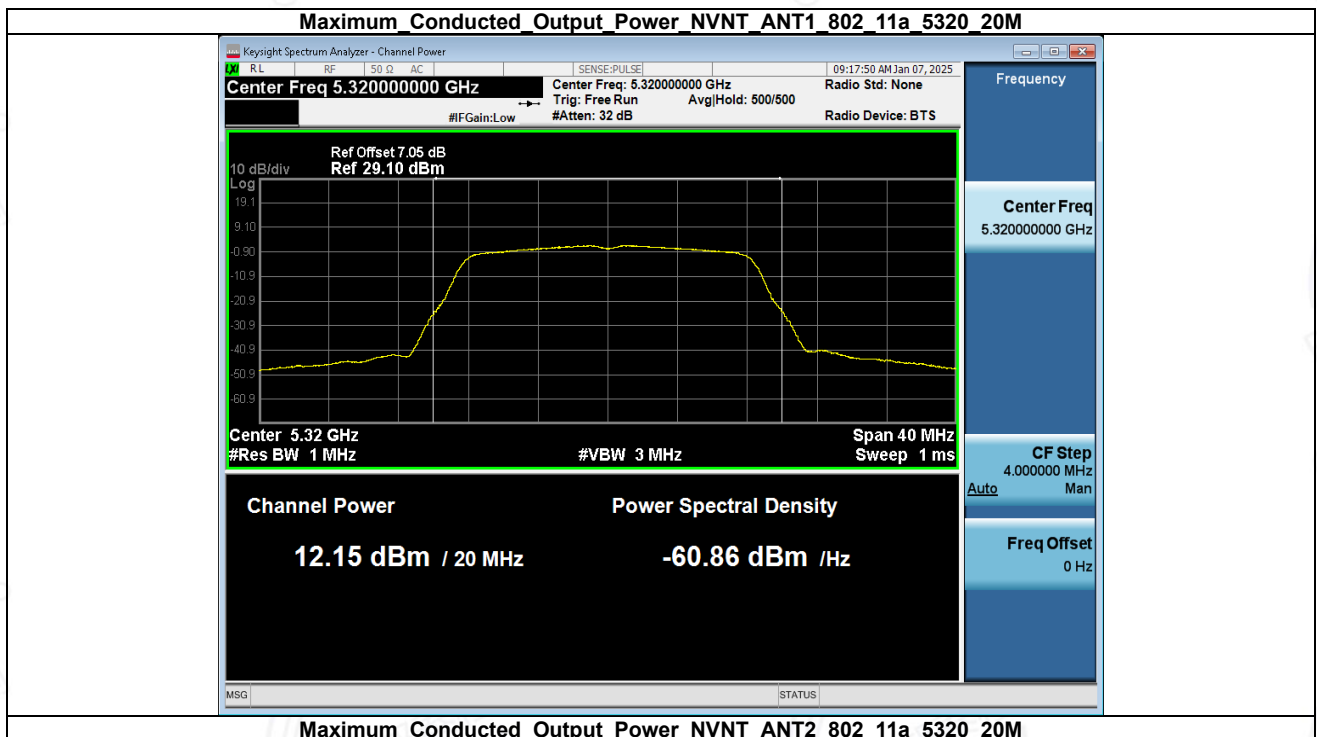
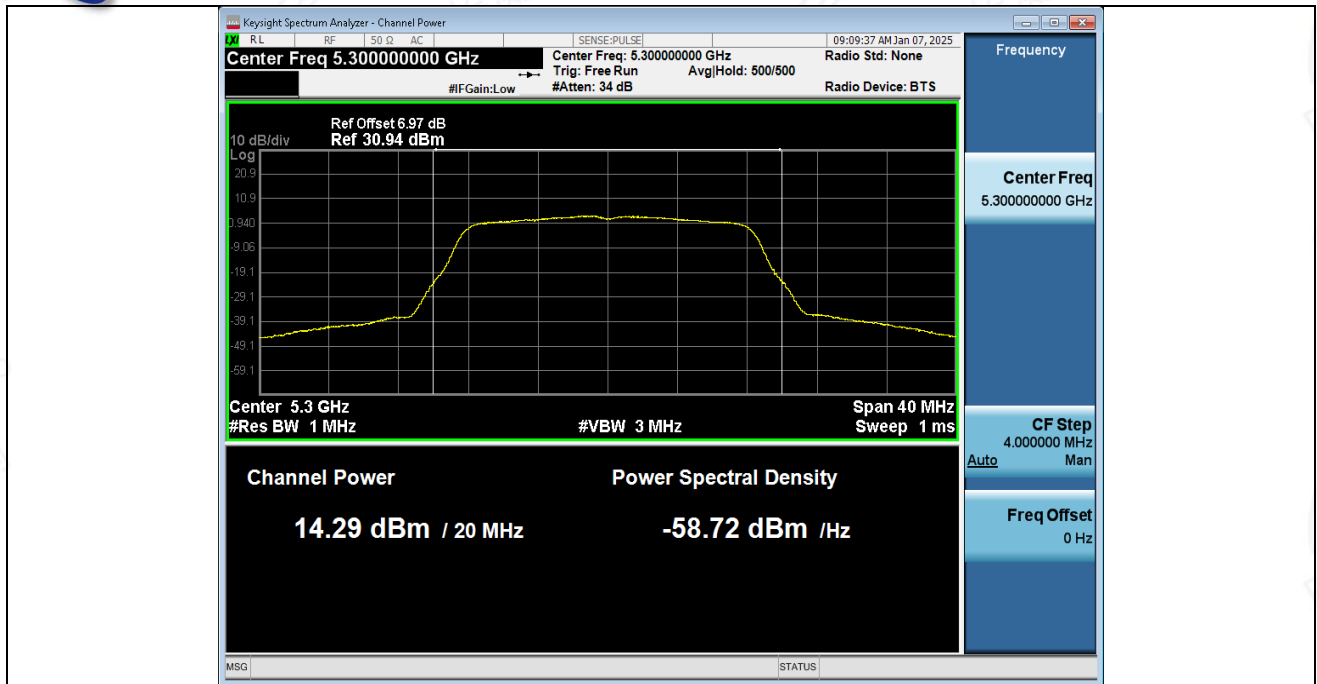
### 3. Maximum Conducted Output Power

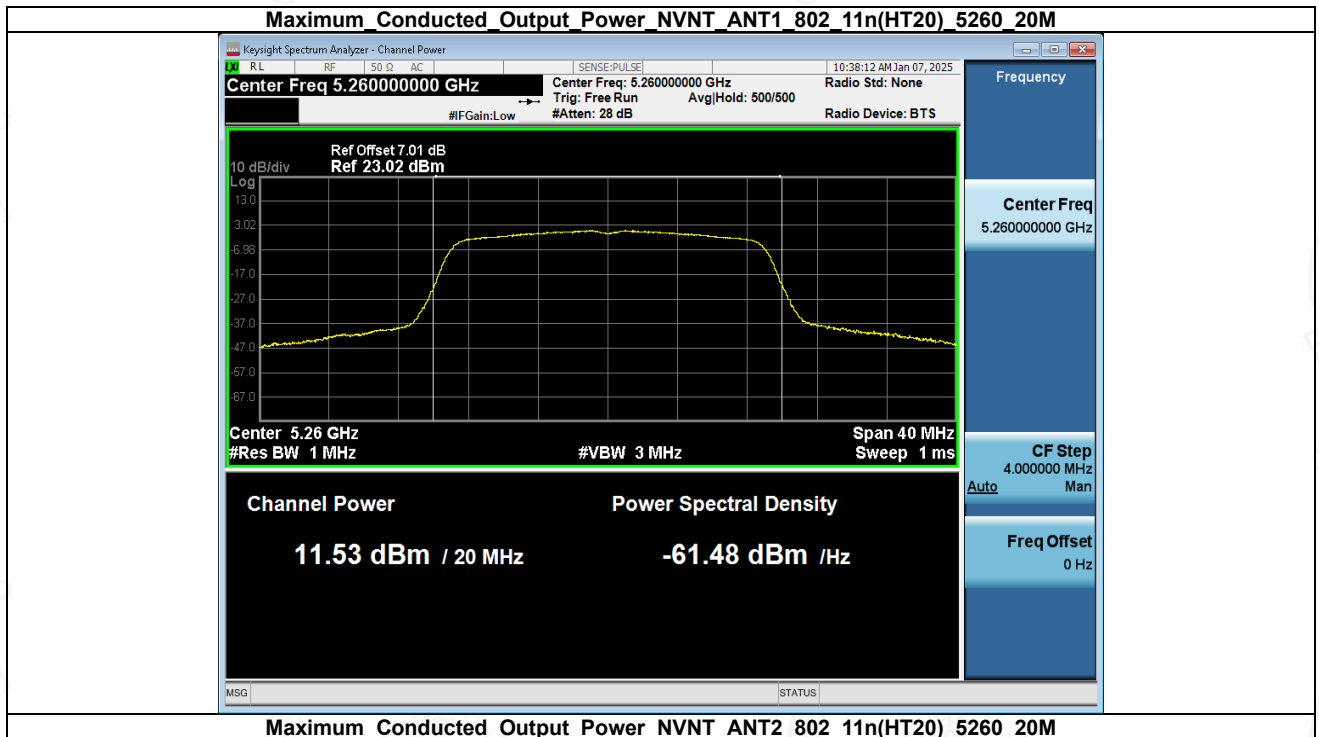
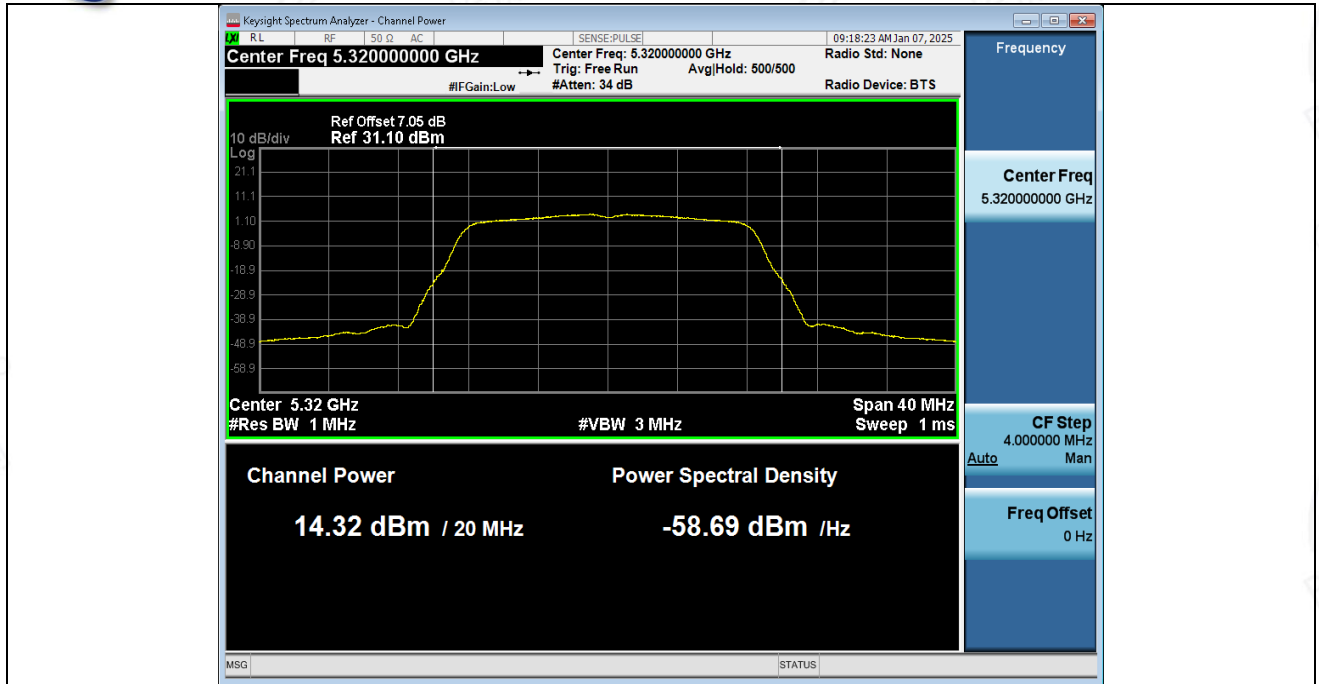
| Condition | Antenna | Modulation      | Frequency (MHz) | Conducted Power(dBm) | Duty factor(dB) | Total Power(dBm) | limit(dBm) | Result |
|-----------|---------|-----------------|-----------------|----------------------|-----------------|------------------|------------|--------|
| NVNT      | ANT1    | 802.11a         | 5260.00         | 12.59                | 0.18            | 12.77            | 24         | Pass   |
| NVNT      | ANT2    | 802.11a         | 5260.00         | 14.37                | 0.18            | 14.55            | 24         | Pass   |
| NVNT      | ANT1    | 802.11a         | 5300.00         | 12.20                | 0.18            | 12.38            | 24         | Pass   |
| NVNT      | ANT2    | 802.11a         | 5300.00         | 14.29                | 0.12            | 14.41            | 24         | Pass   |
| NVNT      | ANT1    | 802.11a         | 5320.00         | 12.15                | 0.18            | 12.33            | 24         | Pass   |
| NVNT      | ANT2    | 802.11a         | 5320.00         | 14.32                | 0.18            | 14.50            | 24         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5260.00         | 11.53                | 0.13            | 11.66            | 24         | Pass   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5260.00         | 13.39                | 0.13            | 13.52            | 24         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5300.00         | 10.95                | 0.20            | 11.15            | 24         | Pass   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5300.00         | 13.09                | 0.13            | 13.22            | 24         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5320.00         | 11.01                | 0.20            | 11.21            | 24         | Pass   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5320.00         | 13.33                | 0.20            | 13.53            | 24         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5260.00         | 11.52                | 0.20            | 11.72            | 24         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5260.00         | 13.41                | 0.20            | 13.61            | 24         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5300.00         | 10.94                | 0.20            | 11.14            | 24         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5300.00         | 13.07                | 0.20            | 13.27            | 24         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5320.00         | 11.01                | 0.20            | 11.21            | 24         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5320.00         | 13.35                | 0.20            | 13.55            | 24         | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5270.00         | 11.32                | 0.39            | 11.71            | 24         | Pass   |
| NVNT      | ANT2    | 802.11n(HT40)   | 5270.00         | 13.15                | 0.39            | 13.54            | 24         | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5310.00         | 11.20                | 0.39            | 11.59            | 24         | Pass   |
| NVNT      | ANT2    | 802.11n(HT40)   | 5310.00         | 13.27                | 0.26            | 13.53            | 24         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5270.00         | 11.35                | 0.26            | 11.61            | 24         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5270.00         | 13.27                | 0.26            | 13.53            | 24         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5310.00         | 11.22                | 0.26            | 11.48            | 24         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5310.00         | 13.32                | 0.26            | 13.58            | 24         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5290.00         | 5.71                 | 3.01            | 8.72             | 24         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT80) | 5290.00         | 7.66                 | 3.01            | 10.67            | 24         | Pass   |

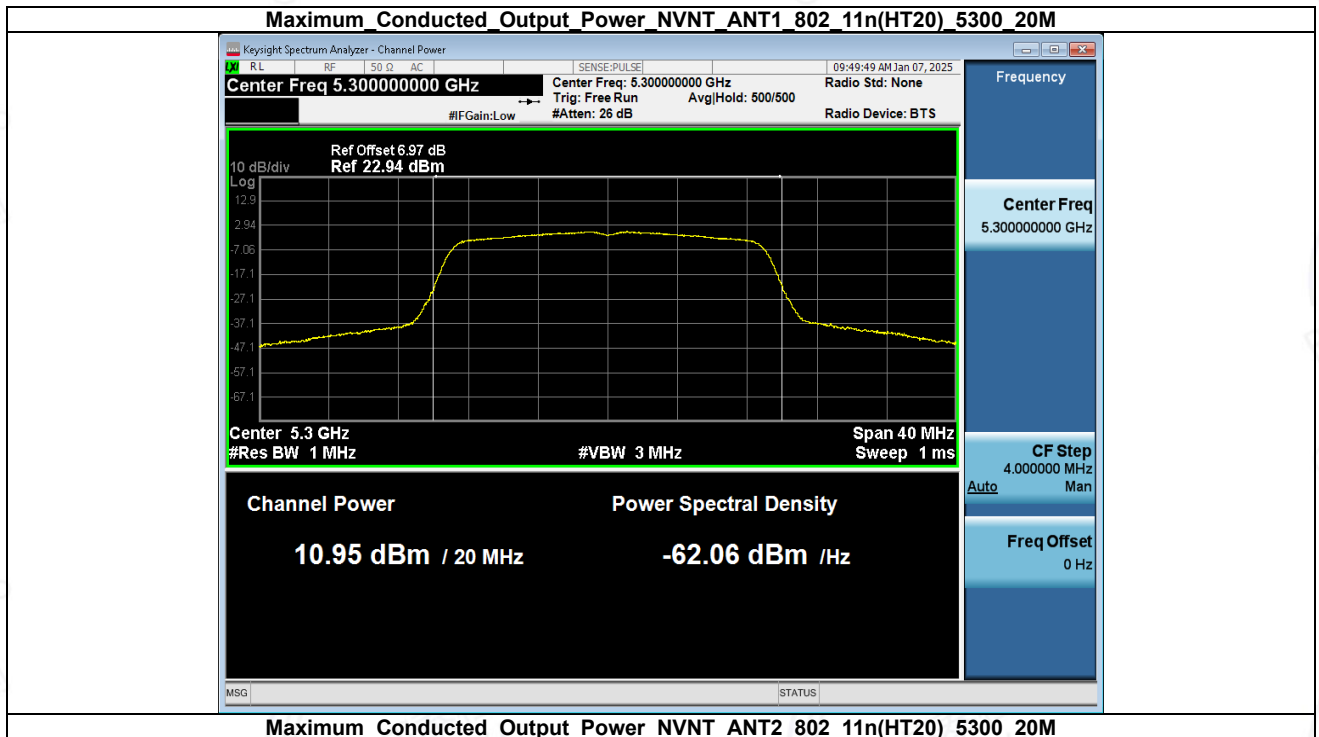
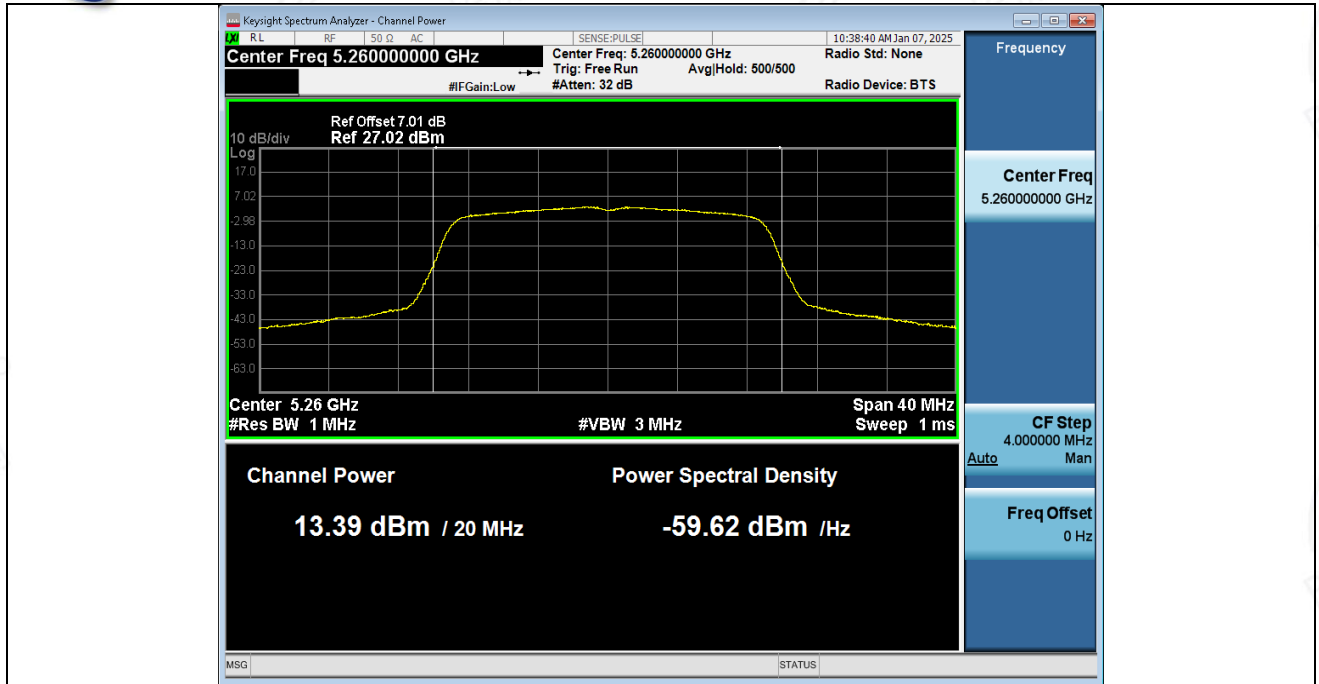


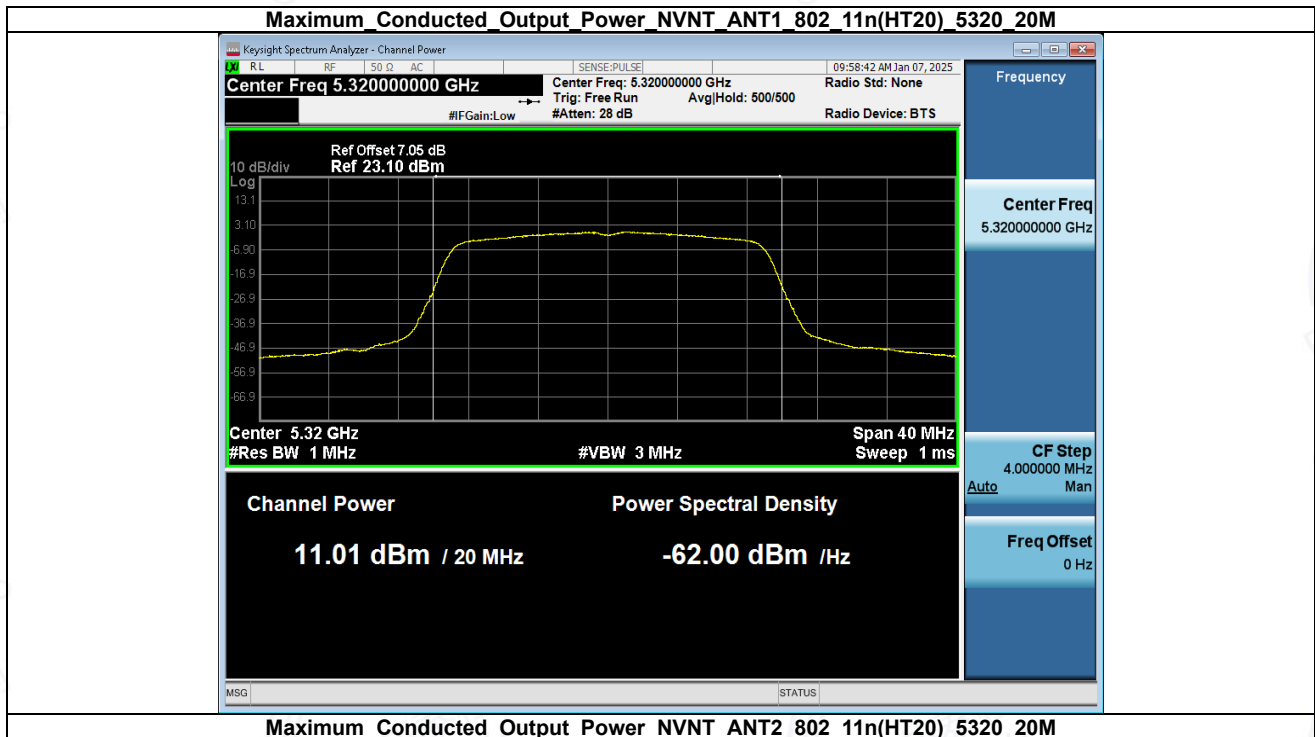
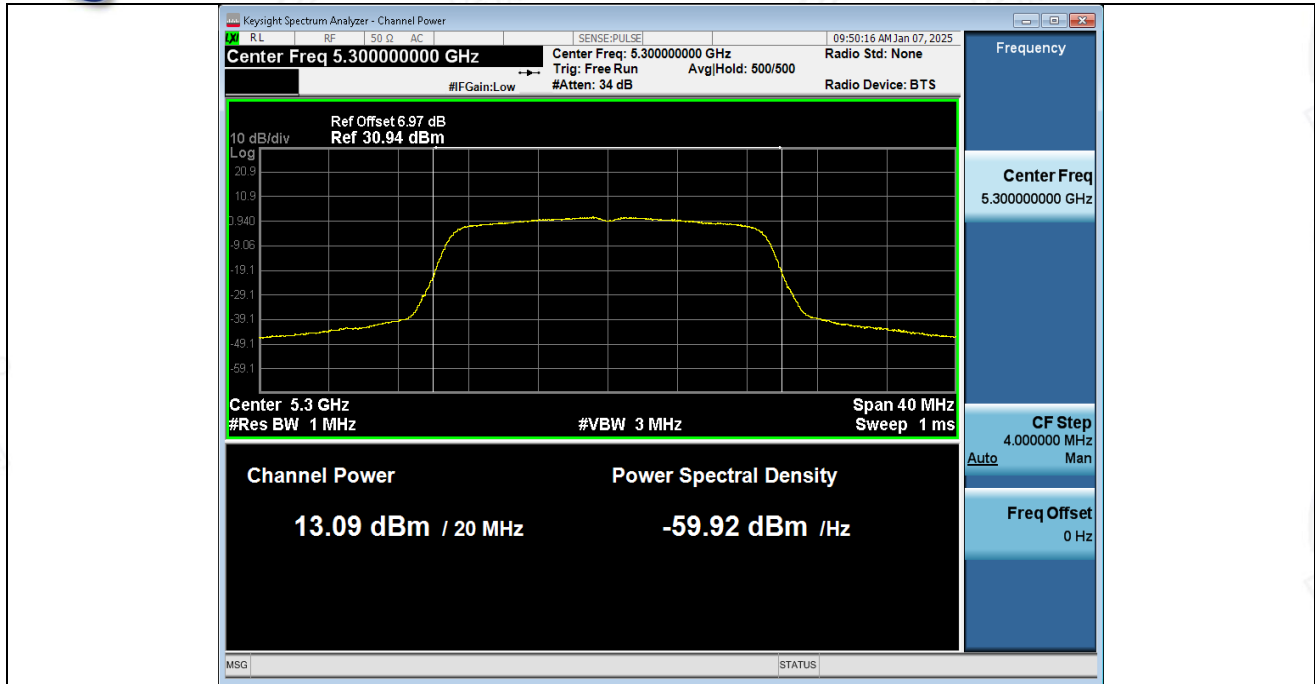


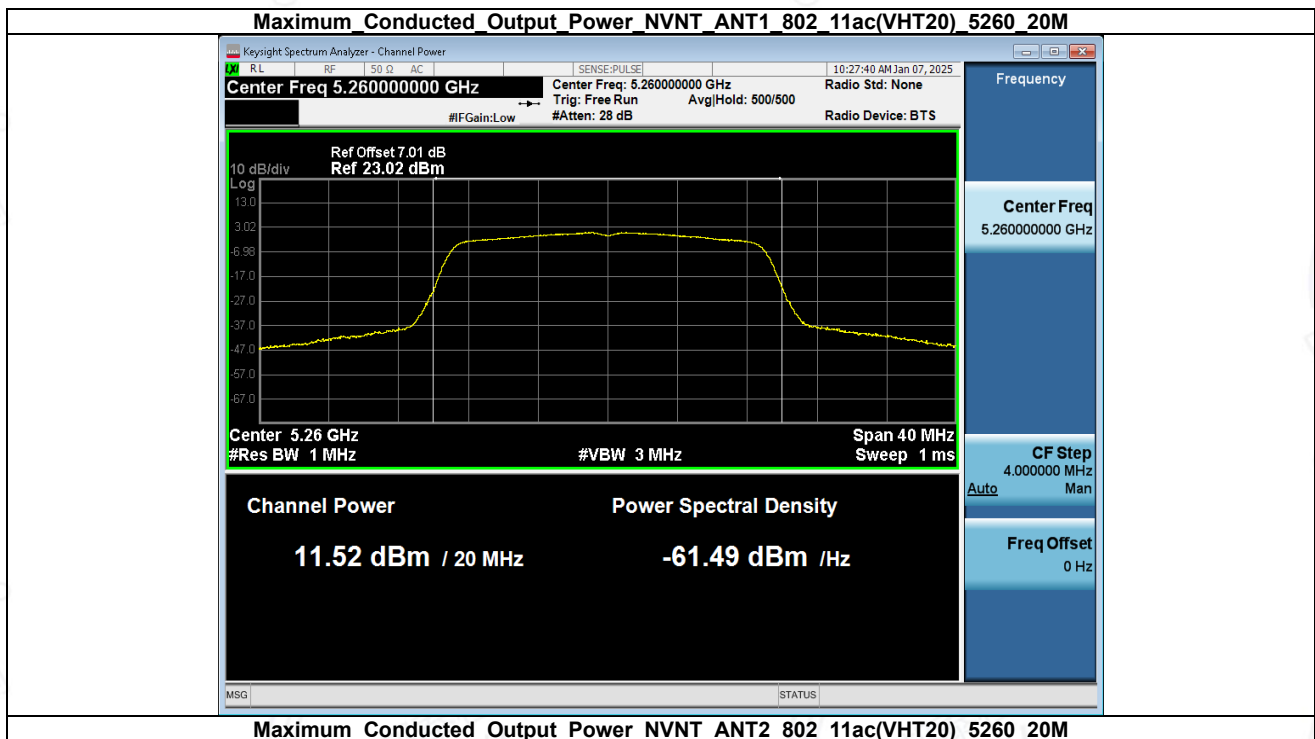
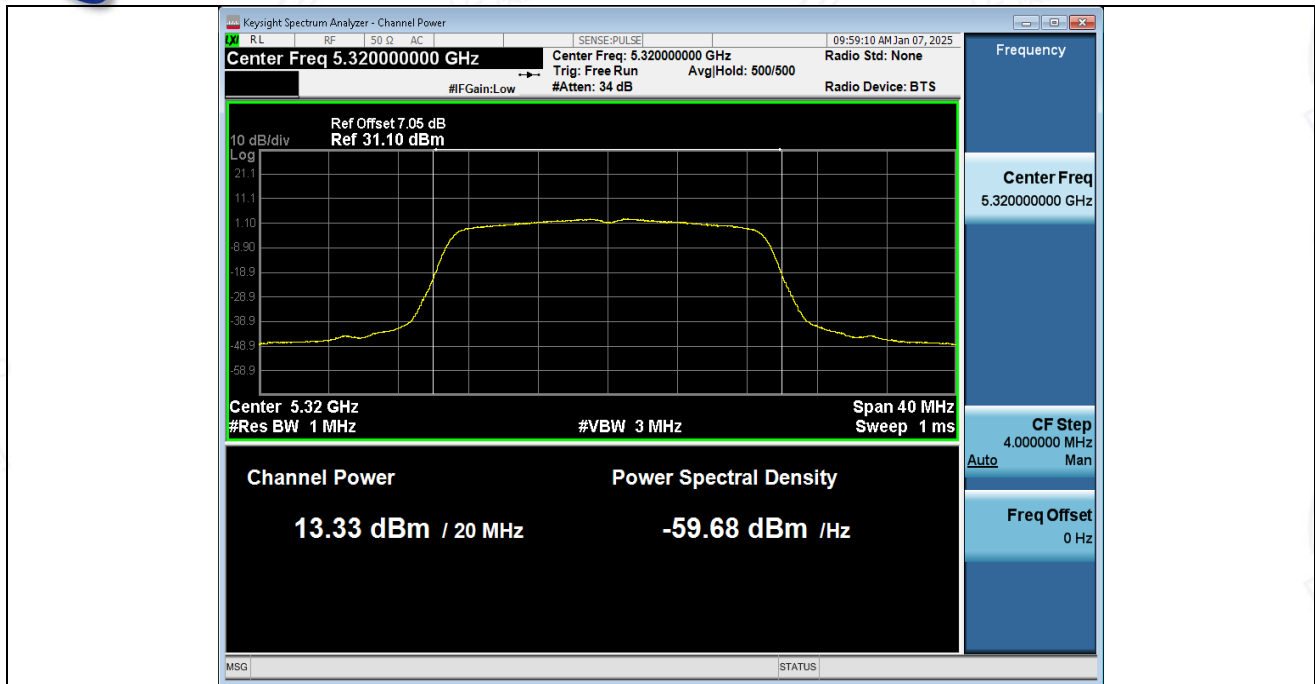




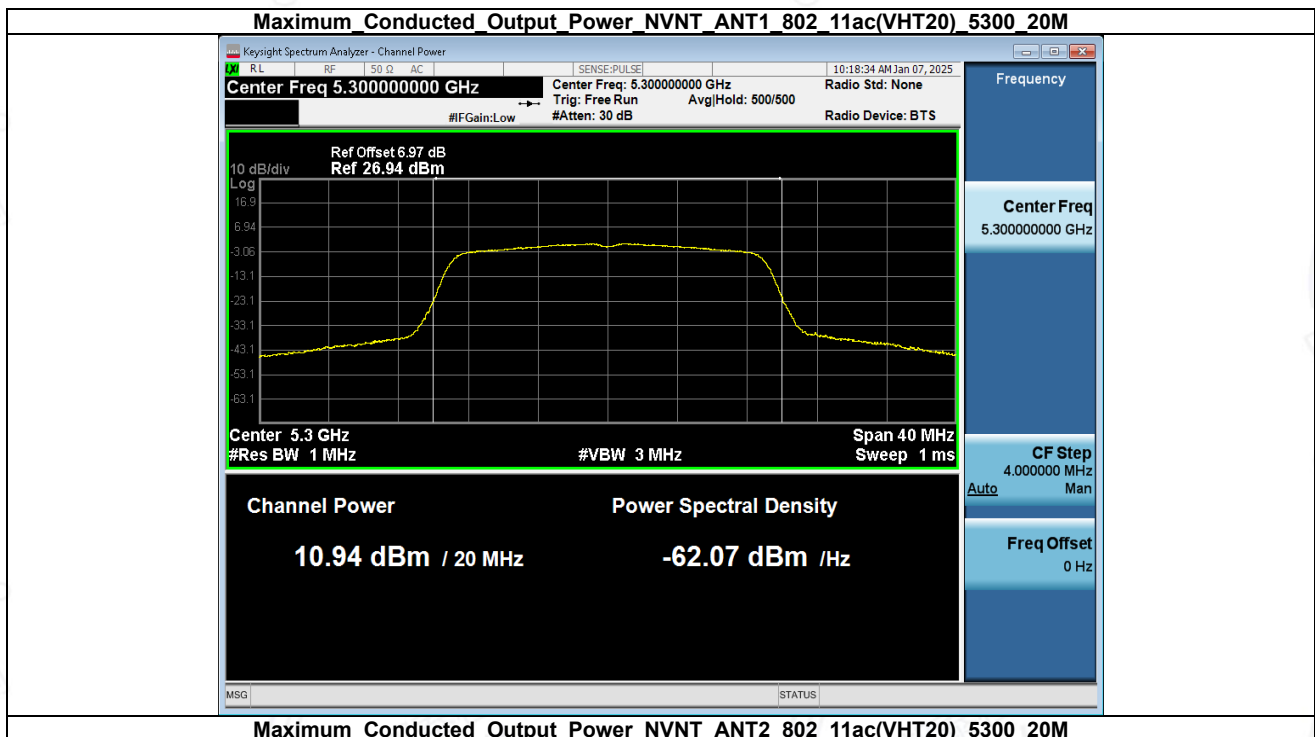
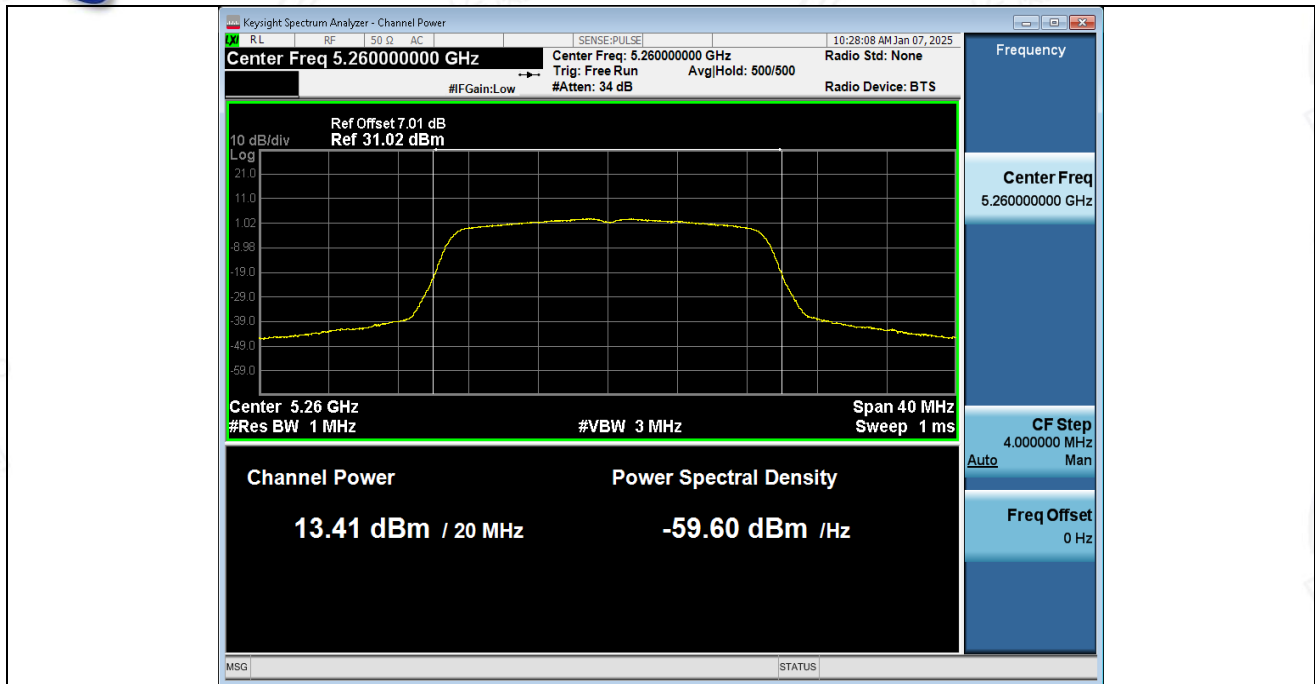


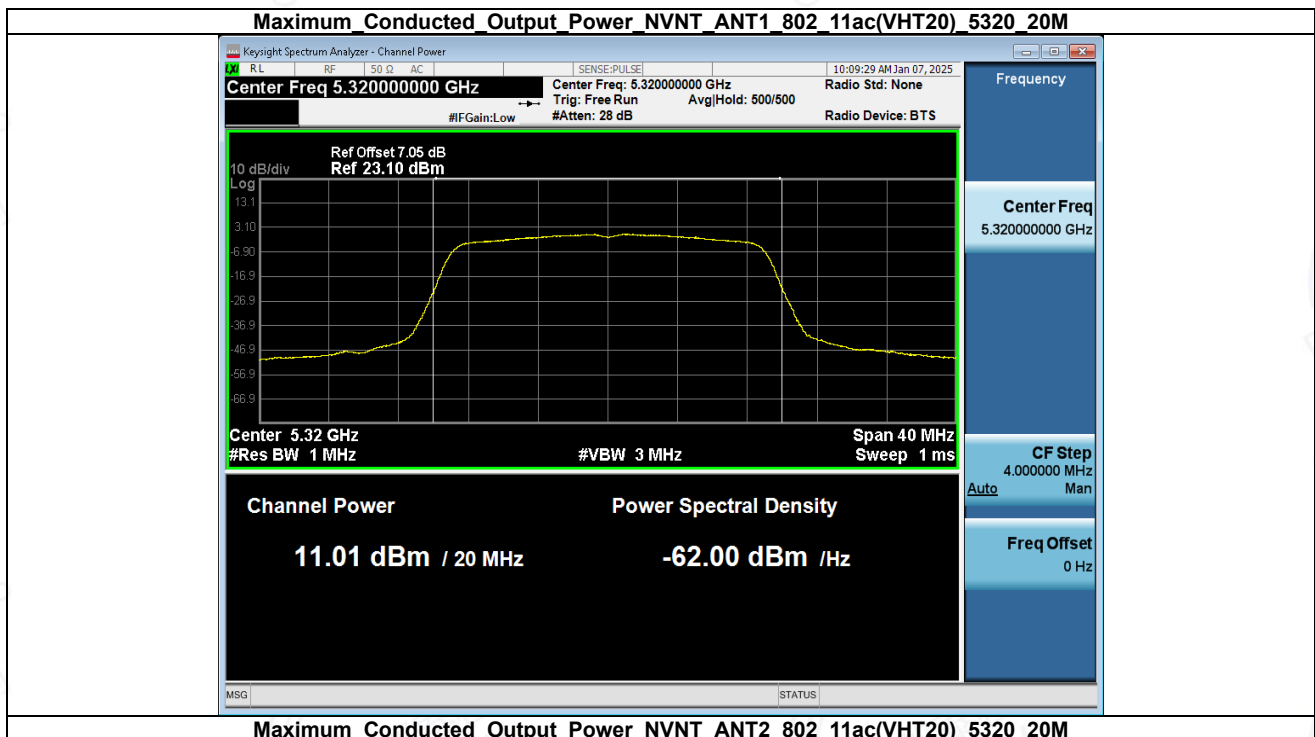
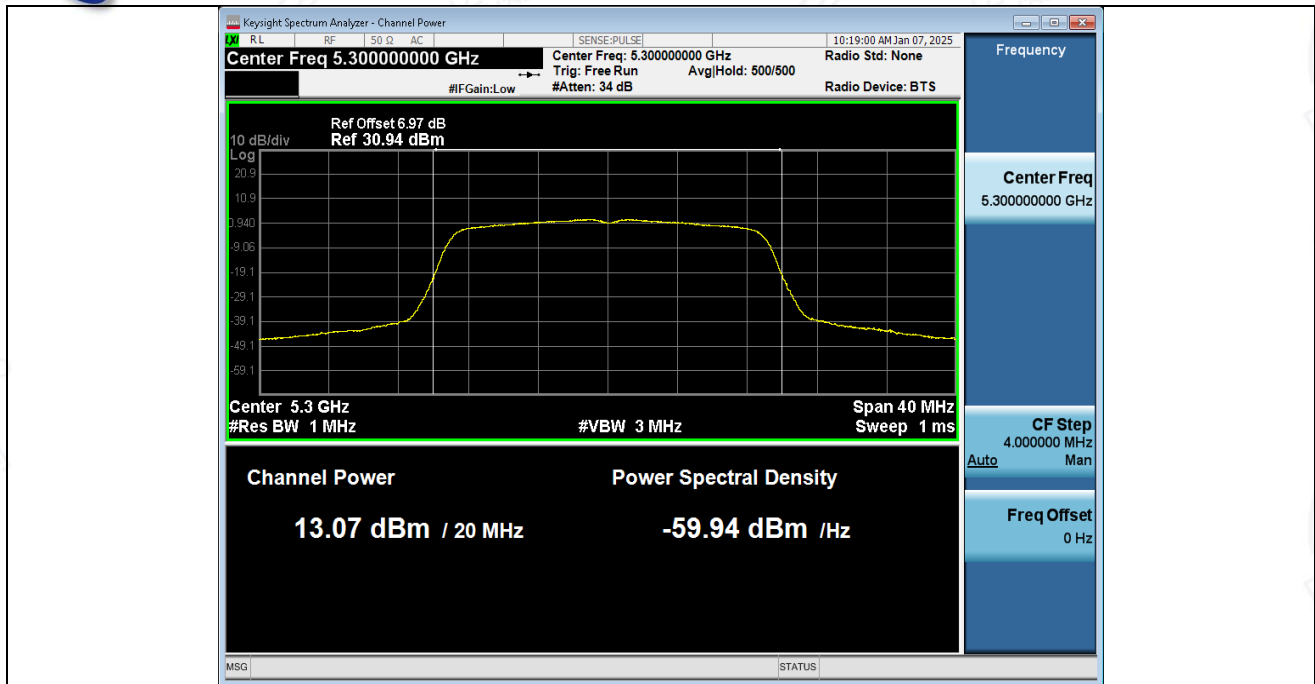


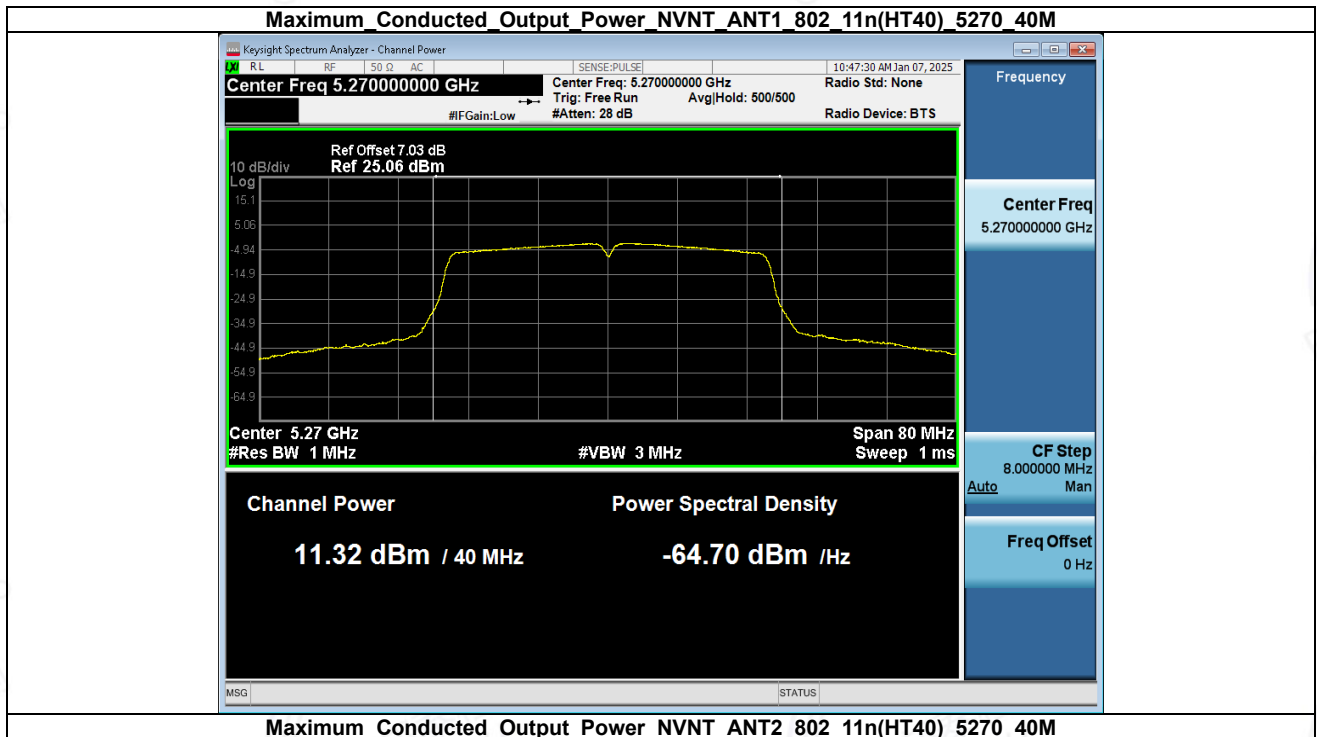
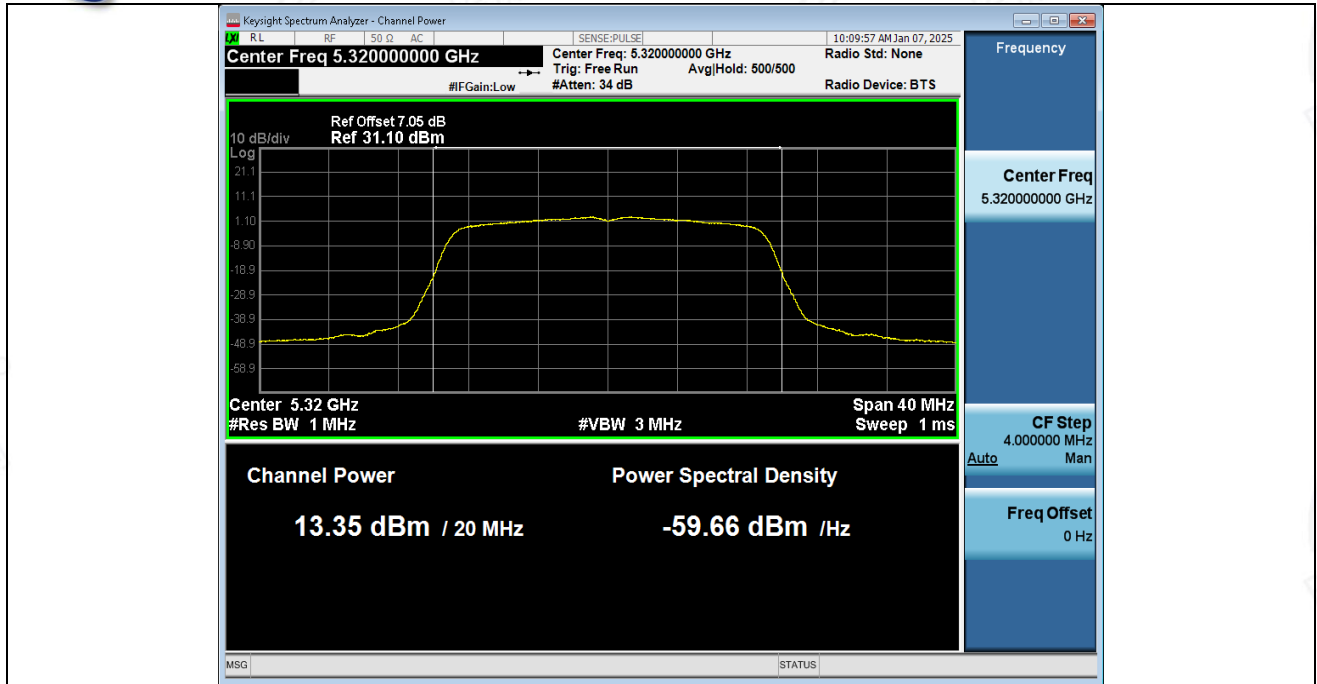


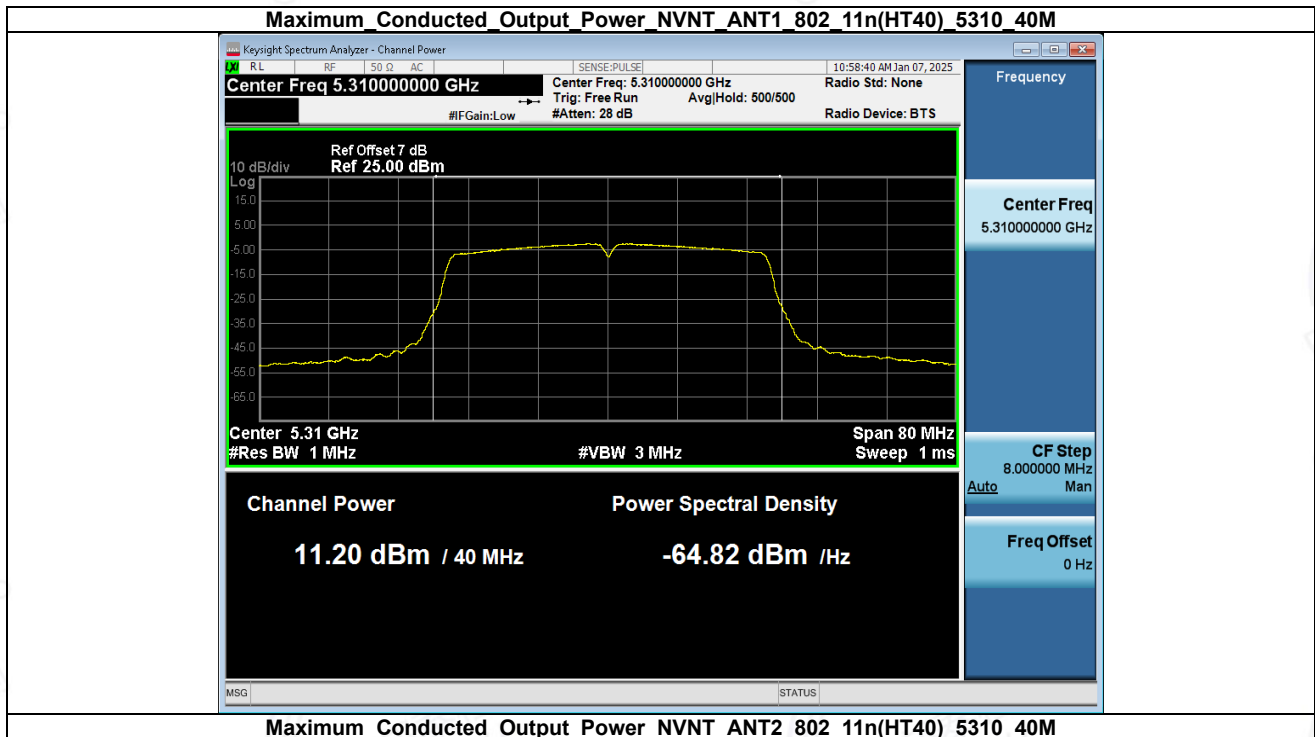
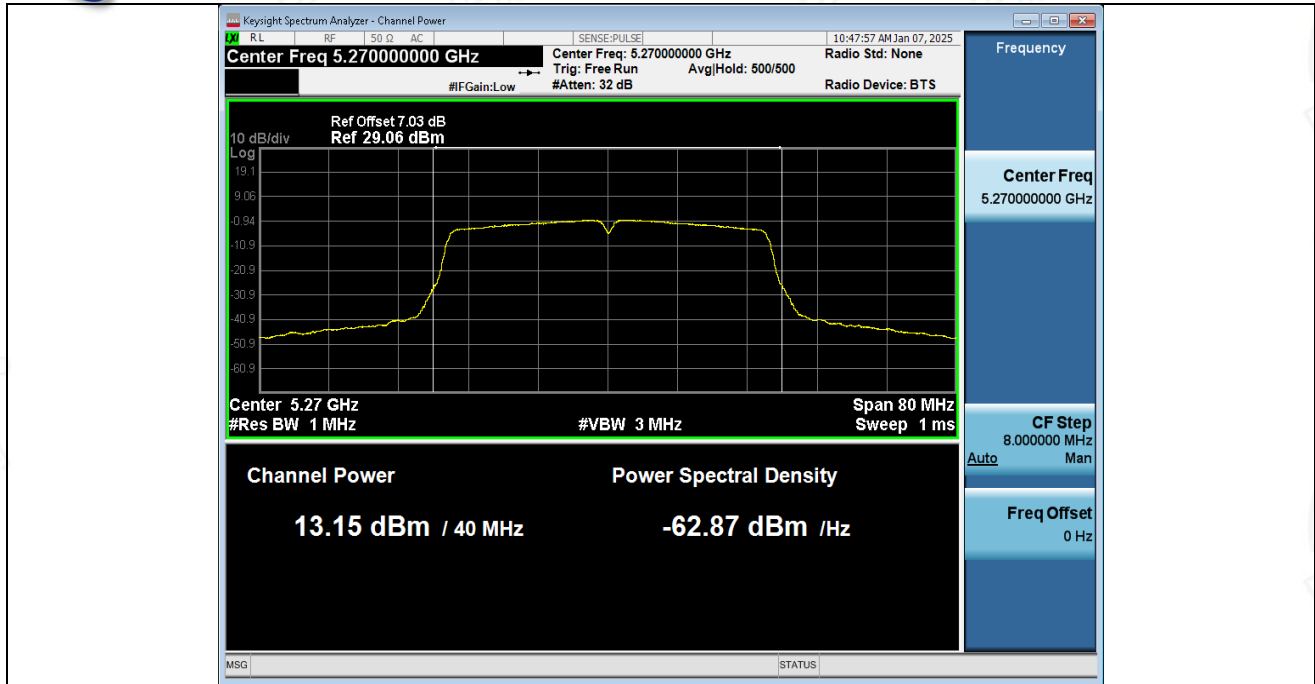


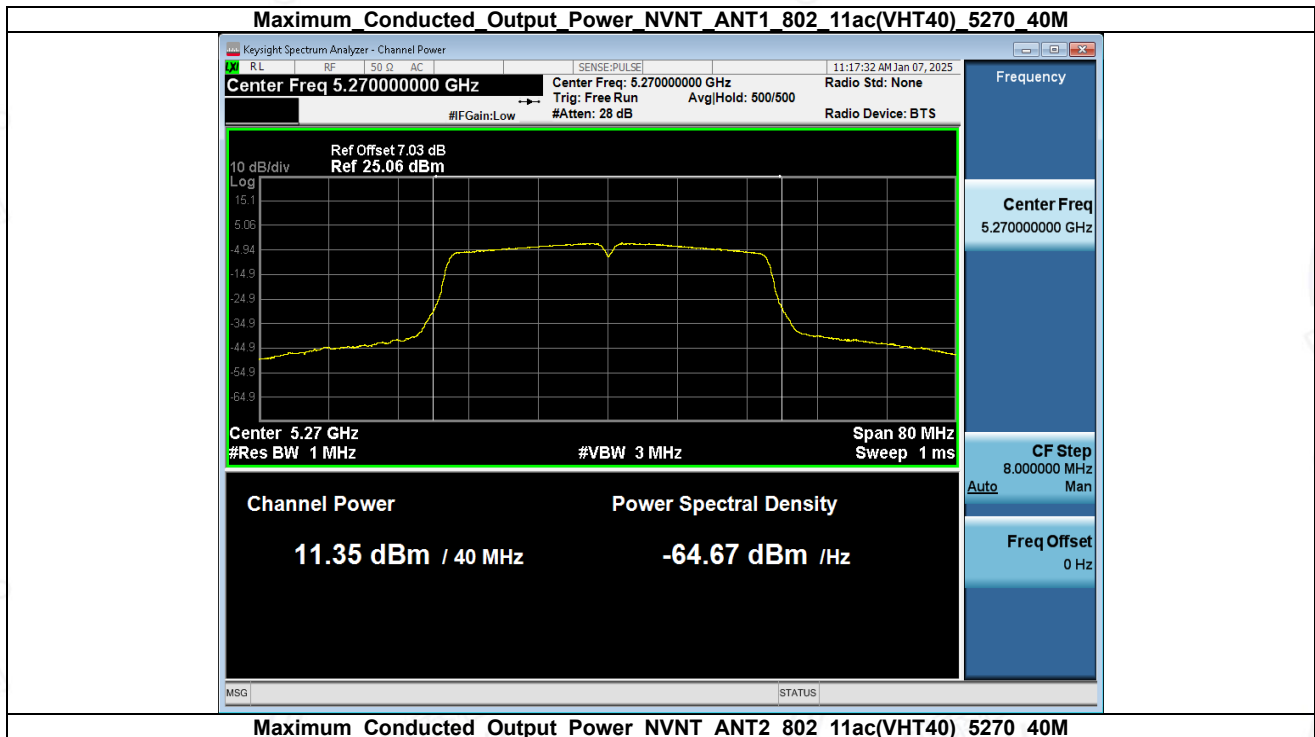
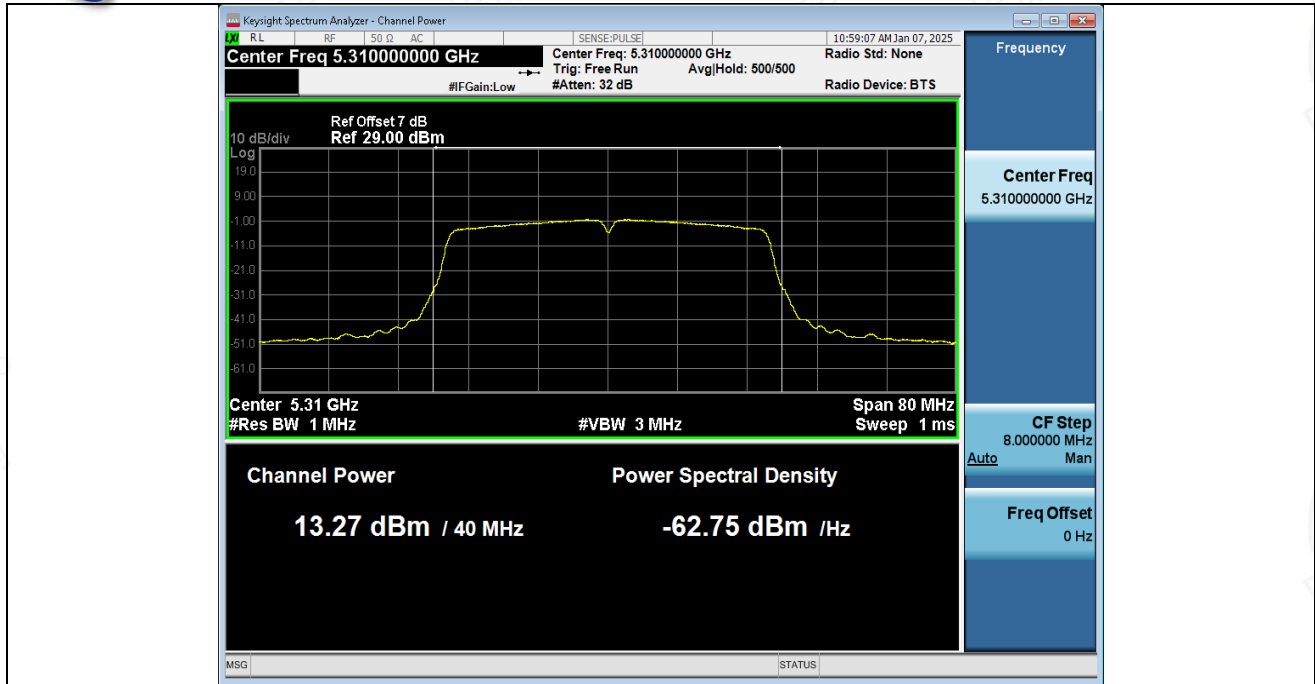




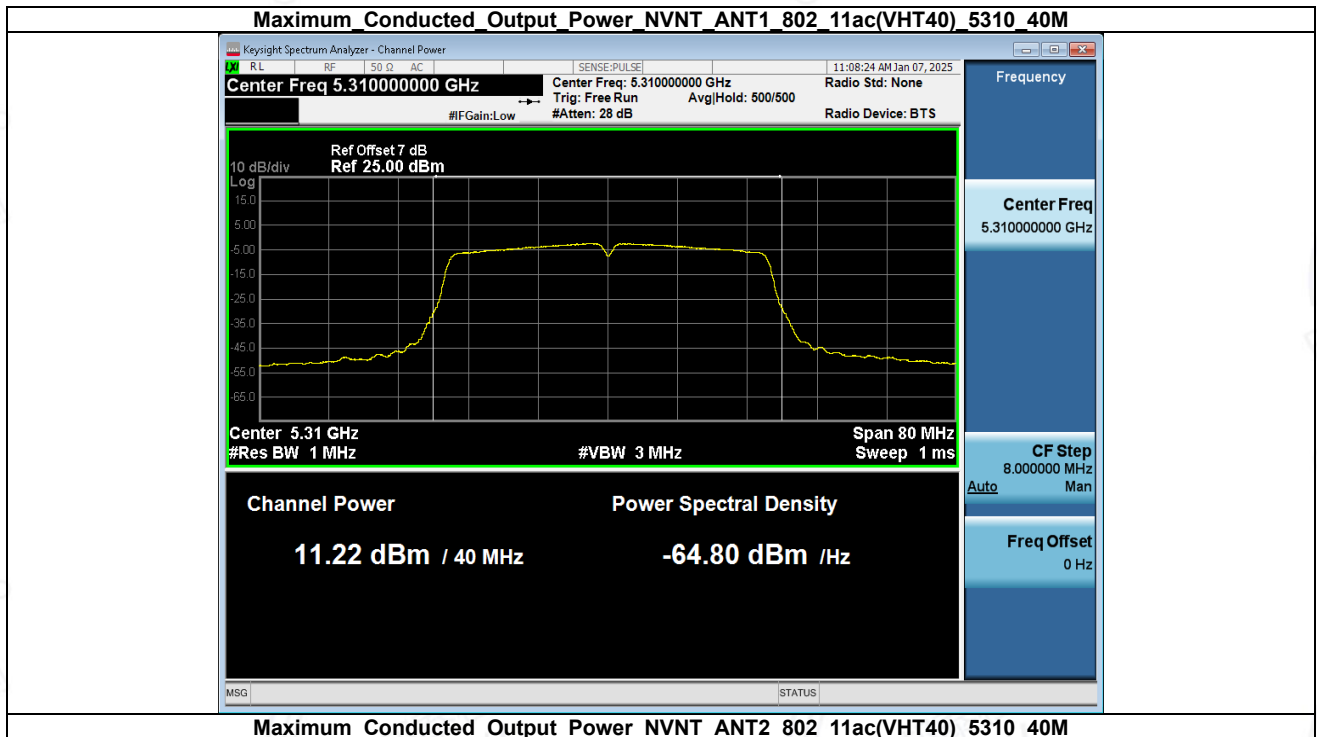
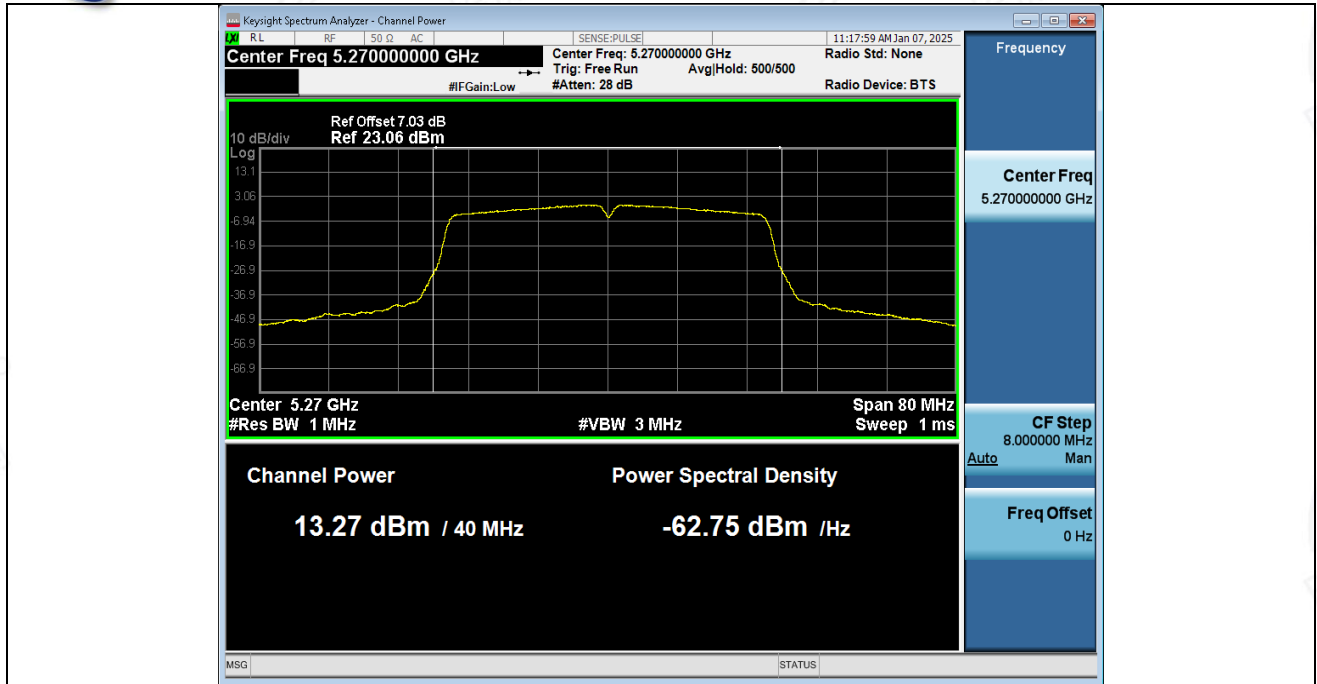


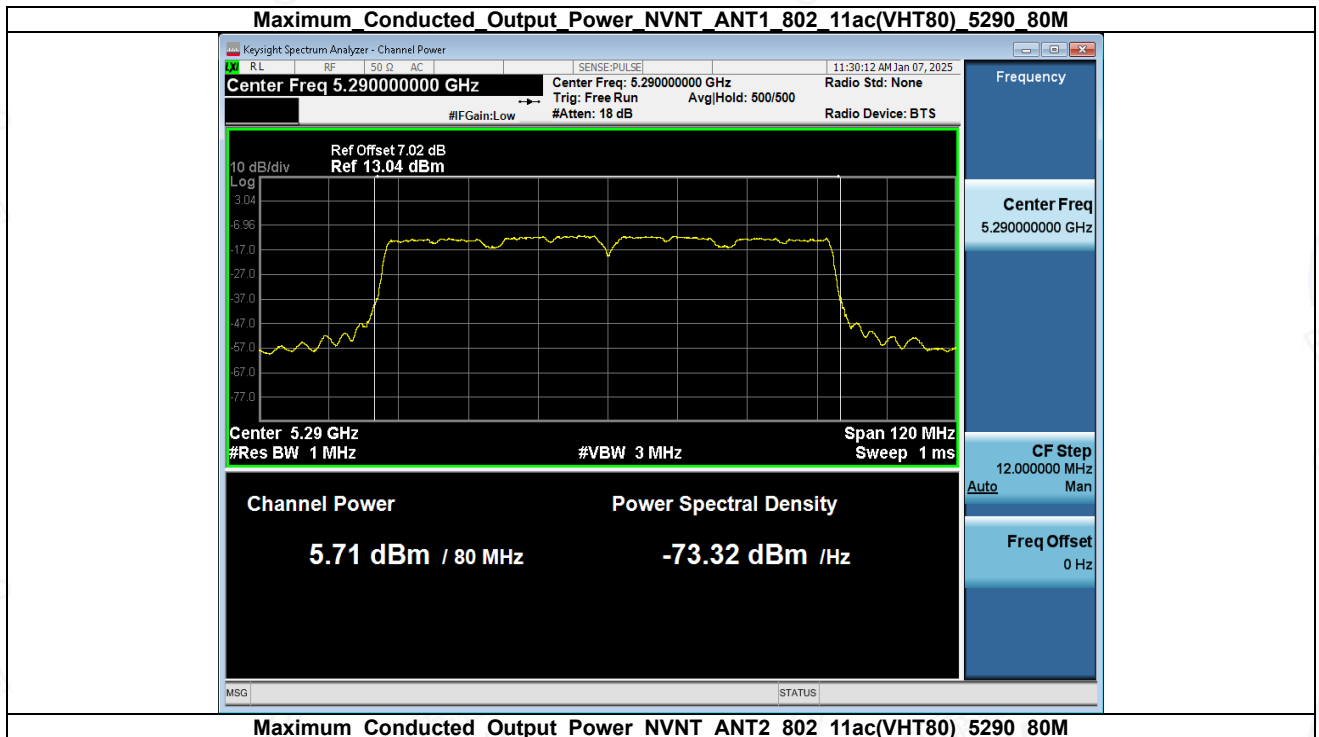
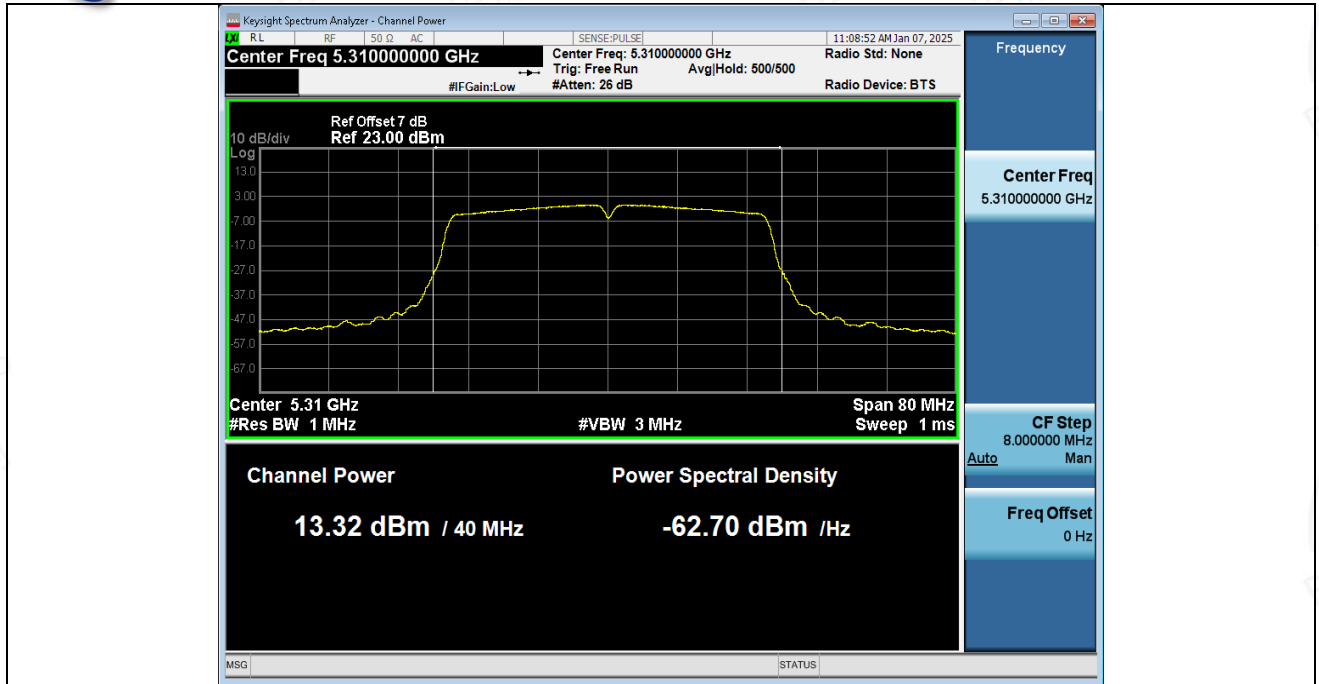


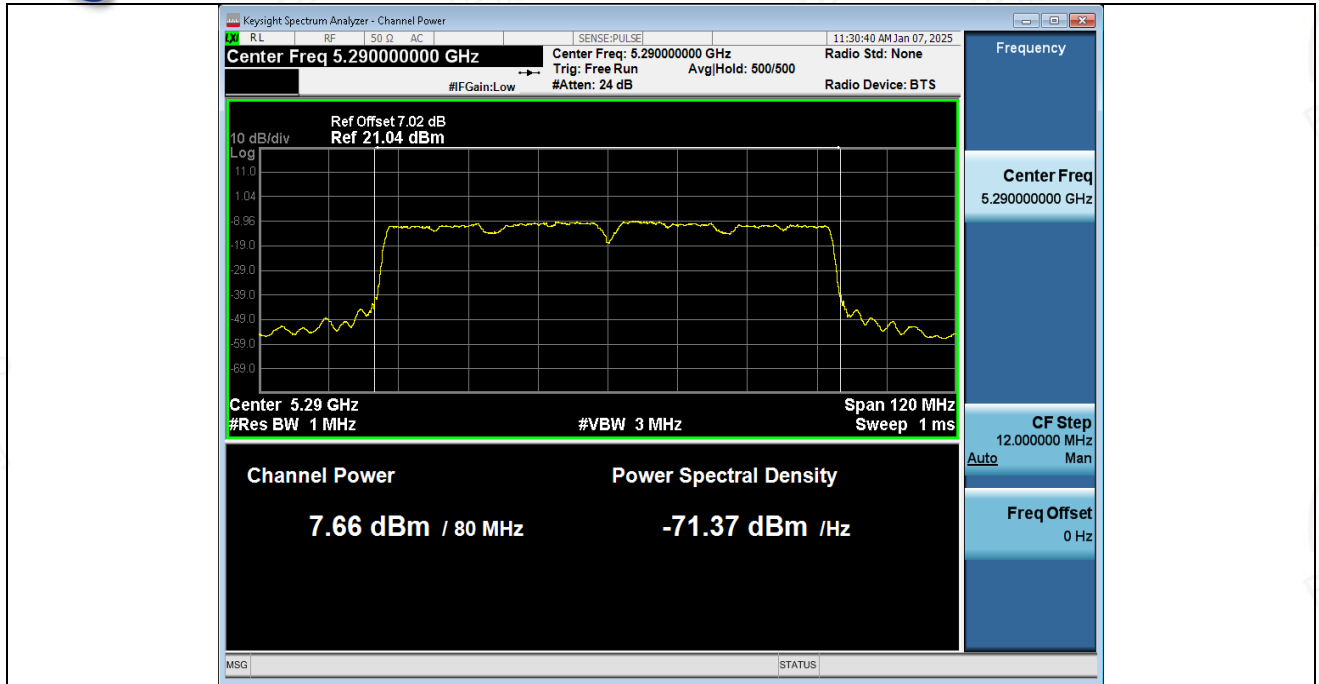












| Condition | Antenna | Mode            | Frequency(MHz) | MIMO_Conducted_Power(dBm) | Limit(dBm) | Result |
|-----------|---------|-----------------|----------------|---------------------------|------------|--------|
| NVNT      | MIMO_TX | 802.11n(HT20)   | 5260.00        | 15.70                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11n(HT20)   | 5300.00        | 15.32                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11n(HT20)   | 5320.00        | 15.53                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11ac(VHT20) | 5260.00        | 15.77                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11ac(VHT20) | 5300.00        | 15.34                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11ac(VHT20) | 5320.00        | 15.55                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11n(HT40)   | 5270.00        | 15.73                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11n(HT40)   | 5310.00        | 15.68                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11ac(VHT40) | 5270.00        | 15.69                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11ac(VHT40) | 5310.00        | 15.67                     | 30         | Pass   |
| NVNT      | MIMO_TX | 802.11ac(VHT80) | 5290.00        | 12.81                     | 30         | Pass   |



#### 4. Power Spectral Density

| Condition | Antenna | Modulation      | Frequency (MHz) | PSD(dBm/MHz) | Duty factor(dB) | Total PSD(dBm/MHz) | limit(dBm) | Result |
|-----------|---------|-----------------|-----------------|--------------|-----------------|--------------------|------------|--------|
| NVNT      | ANT1    | 802.11a         | 5260.00         | -0.38        | 0.18            | -0.20              | 11         | Pass   |
| NVNT      | ANT2    | 802.11a         | 5260.00         | 0.88         | 0.18            | 1.06               | 11         | Pass   |
| NVNT      | ANT1    | 802.11a         | 5300.00         | -0.72        | 0.18            | -0.54              | 11         | Pass   |
| NVNT      | ANT2    | 802.11a         | 5300.00         | 0.44         | 0.12            | 0.56               | 11         | Pass   |
| NVNT      | ANT1    | 802.11a         | 5320.00         | -1.88        | 0.18            | -1.70              | 11         | Pass   |
| NVNT      | ANT2    | 802.11a         | 5320.00         | 0.82         | 0.18            | 1.00               | 11         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5260.00         | -2.45        | 0.13            | -2.32              | 11         | Pass   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5260.00         | -0.27        | 0.13            | -0.14              | 11         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5300.00         | -2.84        | 0.20            | -2.64              | 11         | Pass   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5300.00         | -1.60        | 0.13            | -1.47              | 11         | Pass   |
| NVNT      | ANT1    | 802.11n(HT20)   | 5320.00         | -3.21        | 0.20            | -3.01              | 11         | Pass   |
| NVNT      | ANT2    | 802.11n(HT20)   | 5320.00         | 0.27         | 0.20            | 0.47               | 11         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5260.00         | -2.66        | 0.20            | -2.46              | 11         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5260.00         | -0.93        | 0.20            | -0.73              | 11         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5300.00         | -3.04        | 0.20            | -2.84              | 11         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5300.00         | -0.30        | 0.20            | -0.10              | 11         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT20) | 5320.00         | -3.14        | 0.20            | -2.94              | 11         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT20) | 5320.00         | -1.28        | 0.20            | -1.08              | 11         | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5270.00         | -6.02        | 0.39            | -5.63              | 11         | Pass   |
| NVNT      | ANT2    | 802.11n(HT40)   | 5270.00         | -4.48        | 0.39            | -4.09              | 11         | Pass   |
| NVNT      | ANT1    | 802.11n(HT40)   | 5310.00         | -6.41        | 0.39            | -6.02              | 11         | Pass   |
| NVNT      | ANT2    | 802.11n(HT40)   | 5310.00         | -5.49        | 0.26            | -5.23              | 11         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5270.00         | -6.51        | 0.26            | -6.25              | 11         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5270.00         | -4.29        | 0.26            | -4.04              | 11         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT40) | 5310.00         | -7.04        | 0.26            | -6.78              | 11         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT40) | 5310.00         | -4.82        | 0.26            | -4.56              | 11         | Pass   |
| NVNT      | ANT1    | 802.11ac(VHT80) | 5290.00         | -29.01       | 3.01            | -26.00             | 11         | Pass   |
| NVNT      | ANT2    | 802.11ac(VHT80) | 5290.00         | -28.83       | 3.01            | -25.82             | 11         | Pass   |

