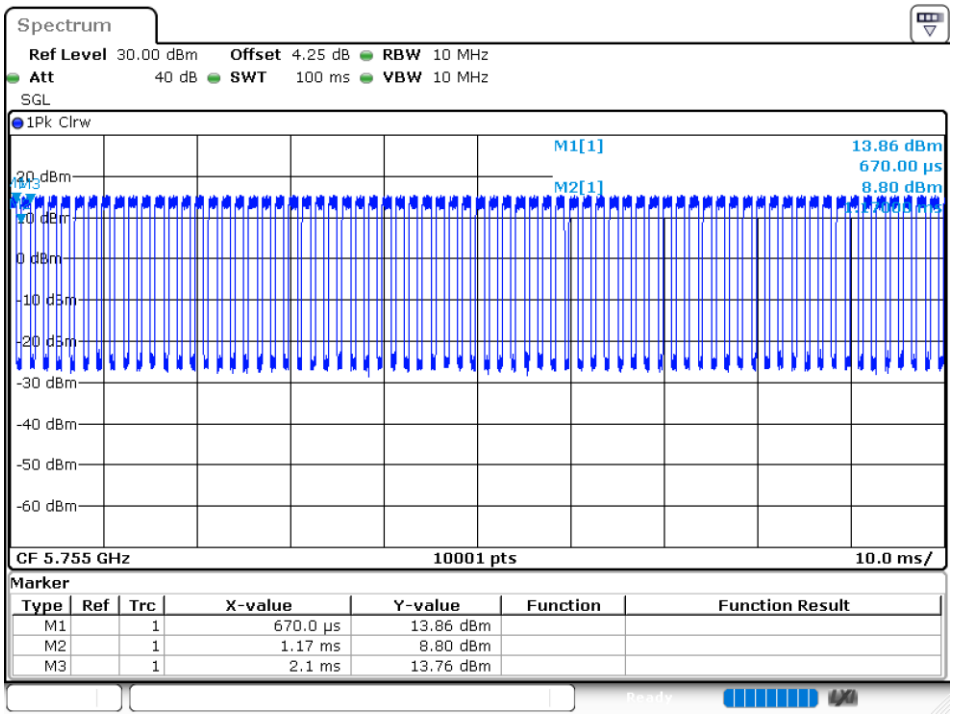
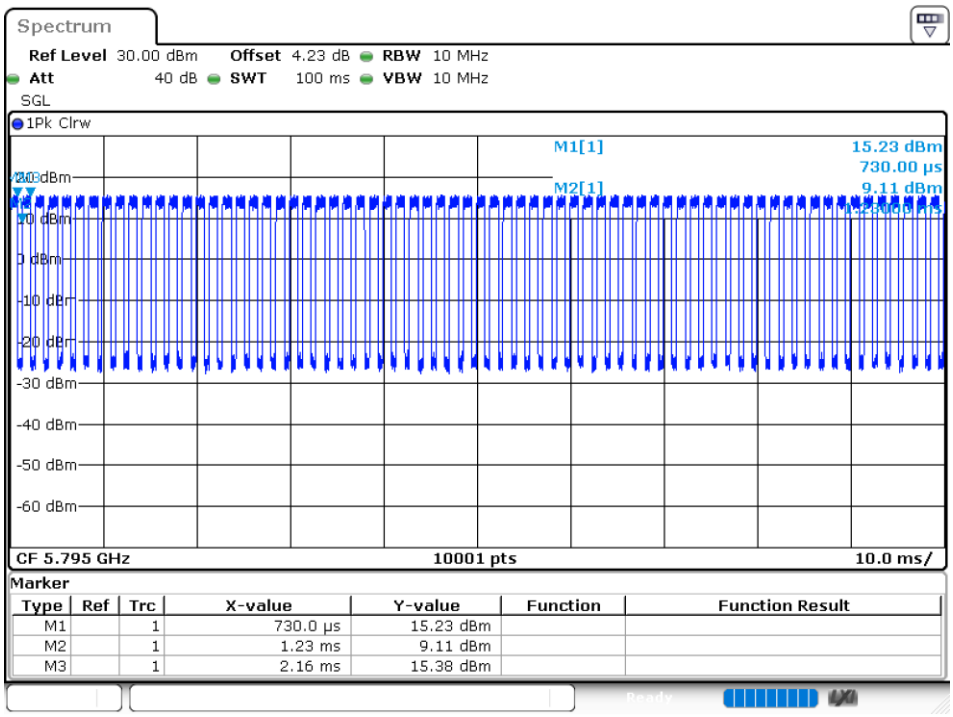
Duty Cycle NVNT n40 5755MHz Ant1




Duty Cycle NVNT n40 5795MHz Ant1



# Maximum Conducted Output Power

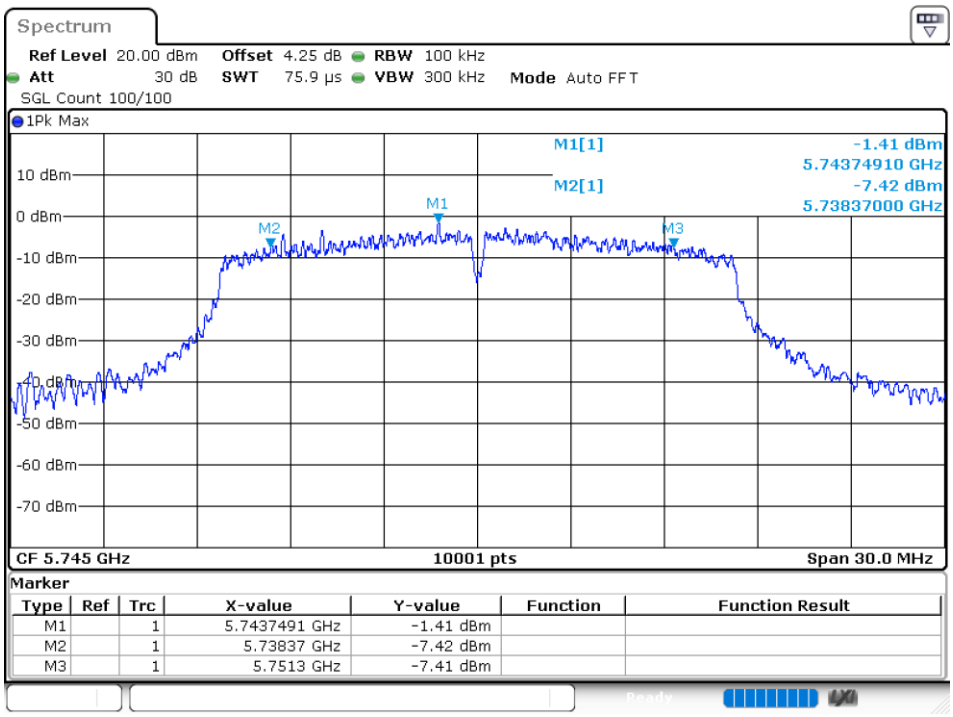
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | 11.36 | 30 | Pass |
| NVNT | a | 5785 | Ant1 | 11.54 | 30 | Pass |
| NVNT | a | 5825 | Ant1 | 11.98 | 30 | Pass |
| NVNT | n20 | 5745 | Ant1 | 11.08 | 30 | Pass |
| NVNT | n20 | 5785 | Ant1 | 11.33 | 30 | Pass |
| NVNT | n20 | 5825 | Ant1 | 11.72 | 30 | Pass |
| NVNT | n40 | 5755 | Ant1 | 11.37 | 30 | Pass |
| NVNT | n40 | 5795 | Ant1 | 11.43 | 30 | Pass |

# -6dB Bandwidth

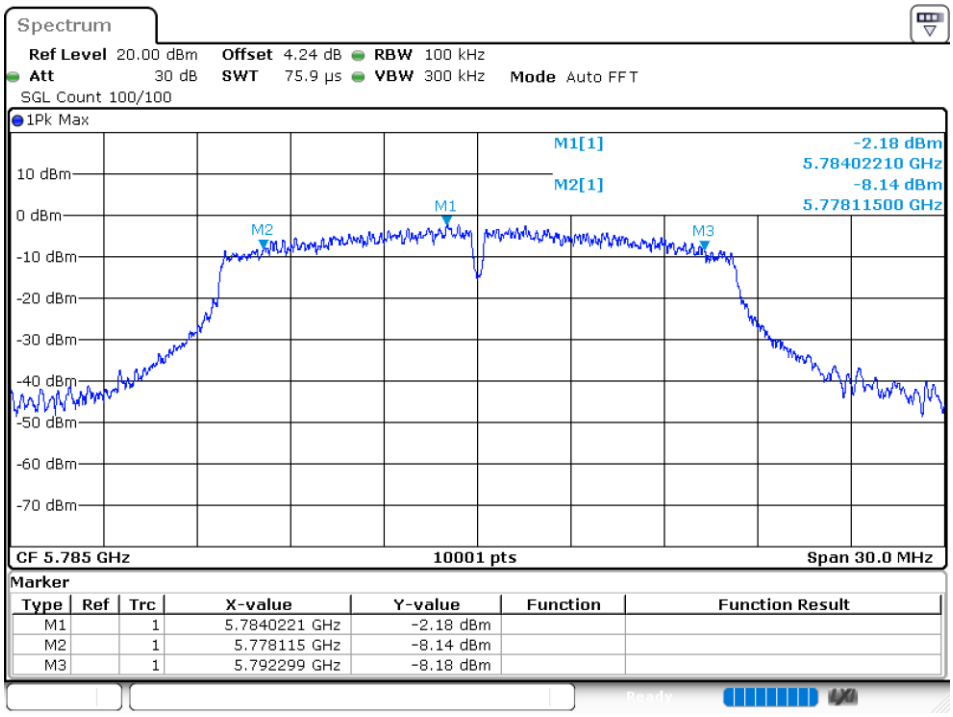
| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | 12.93 | 0.5 | Pass |
| NVNT | a | 5785 | Ant1 | 14.184 | 0.5 | Pass |
| NVNT | a | 5825 | Ant1 | 12.585 | 0.5 | Pass |
| NVNT | n20 | 5745 | Ant1 | 13.794 | 0.5 | Pass |
| NVNT | n20 | 5785 | Ant1 | 12.234 | 0.5 | Pass |
| NVNT | n20 | 5825 | Ant1 | 11.343 | 0.5 | Pass |
| NVNT | n40 | 5755 | Ant1 | 30.066 | 0.5 | Pass |
| NVNT | n40 | 5795 | Ant1 | 28.512 | 0.5 | Pass |

## Test Graphs

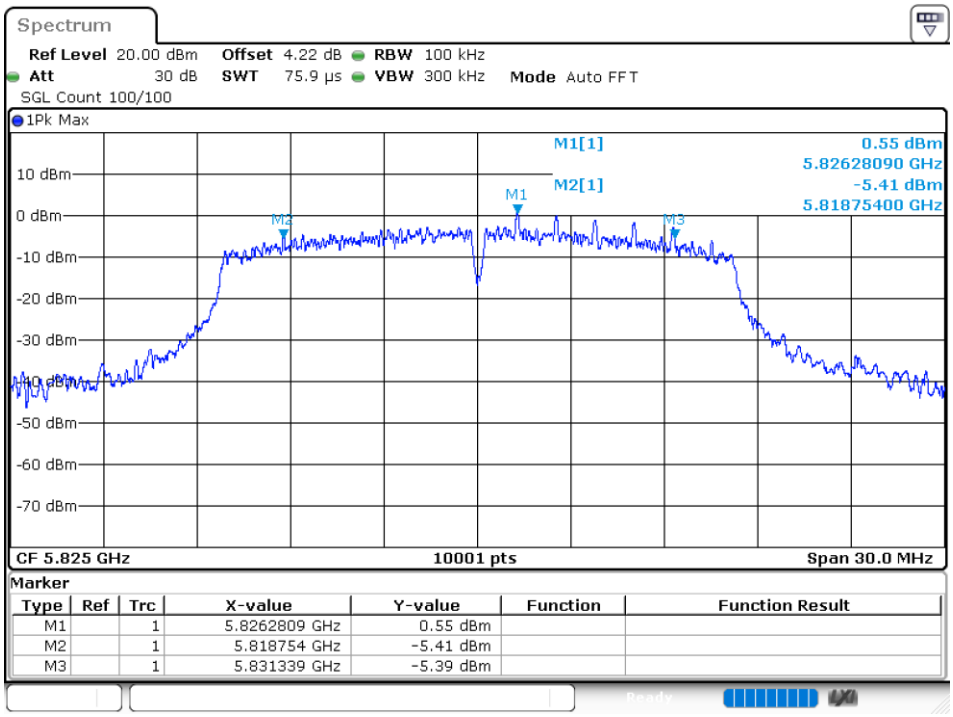
### -6dB Bandwidth NVNT a 5745MHz Ant1



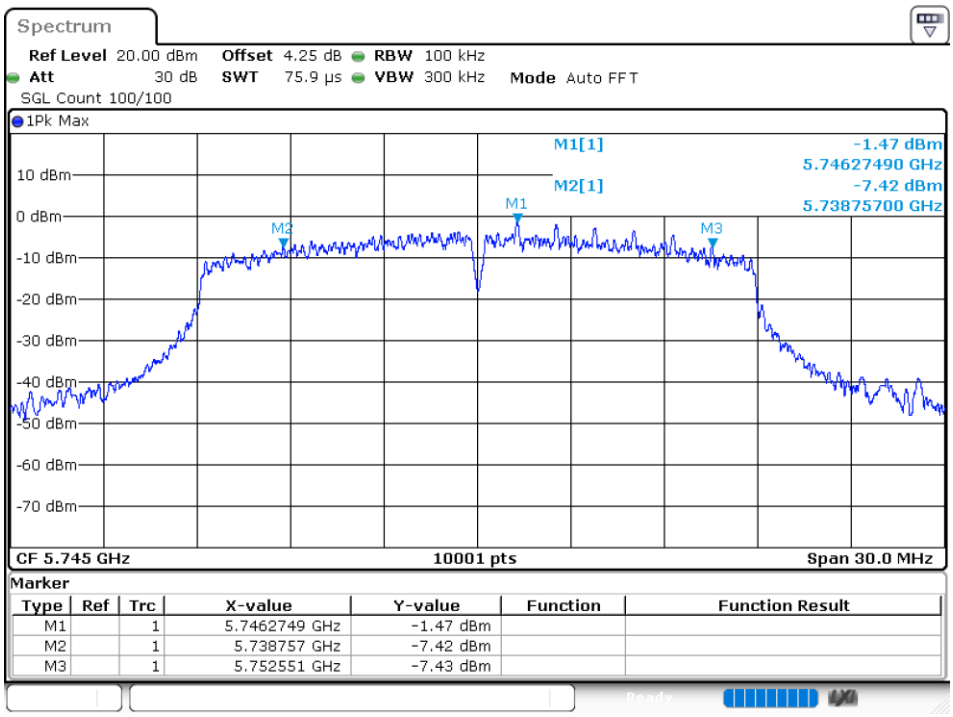

### -6dB Bandwidth NVNT a 5785MHz Ant1



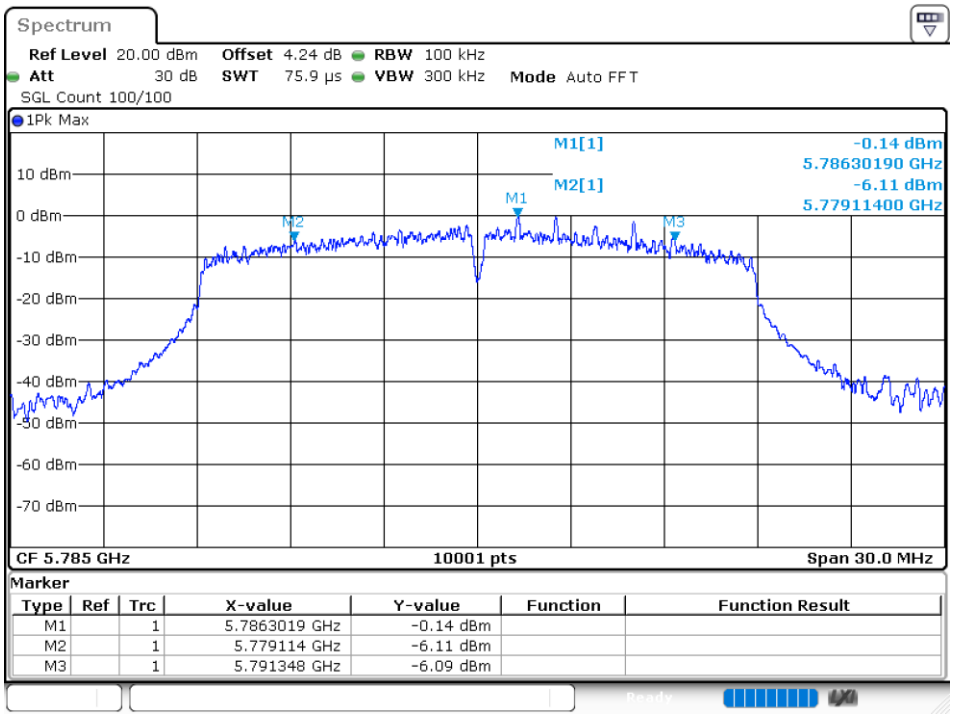
-6dB Bandwidth NVNT a 5825MHz Ant1



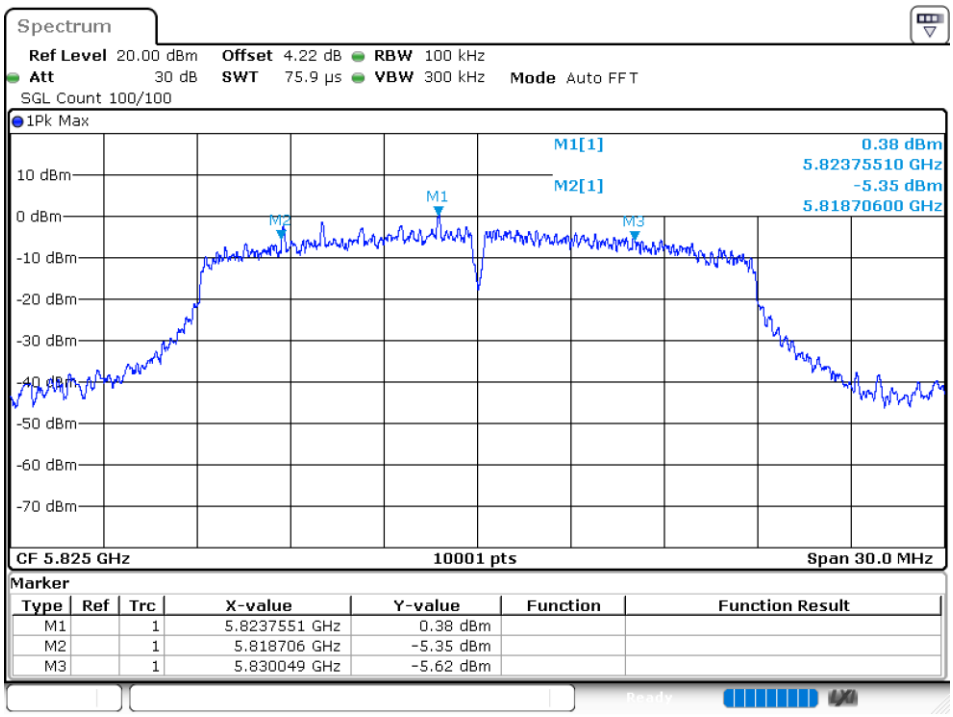

-6dB Bandwidth NVNT n20 5745MHz Ant1



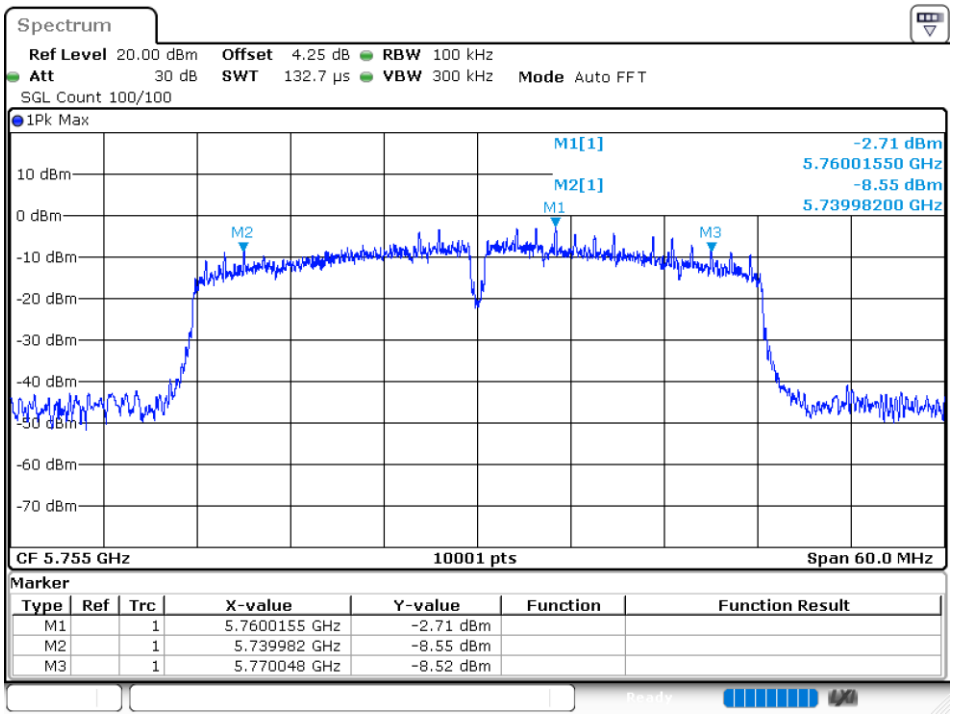
-6dB Bandwidth NVNT n20 5785MHz Ant1



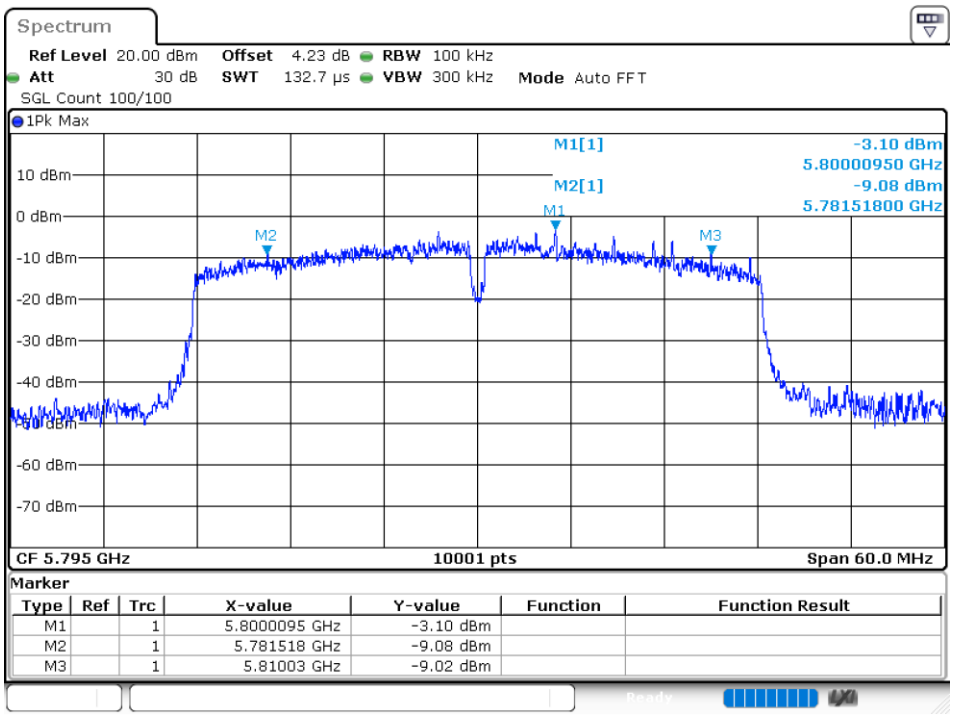

-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1




-6dB Bandwidth NVNT n40 5795MHz Ant1

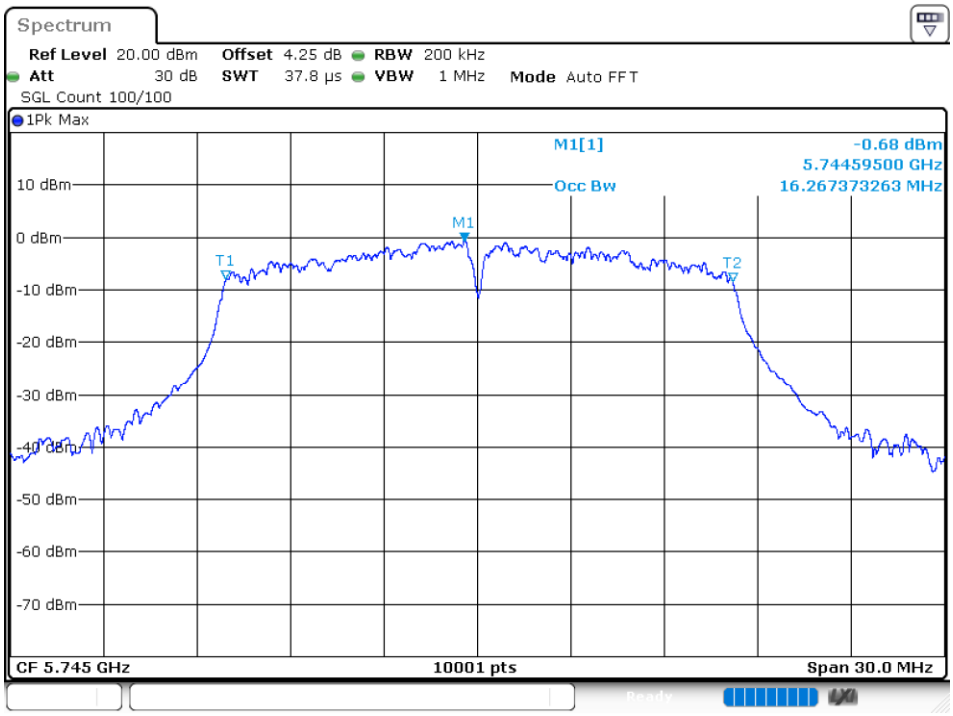


# Occupied Channel Bandwidth

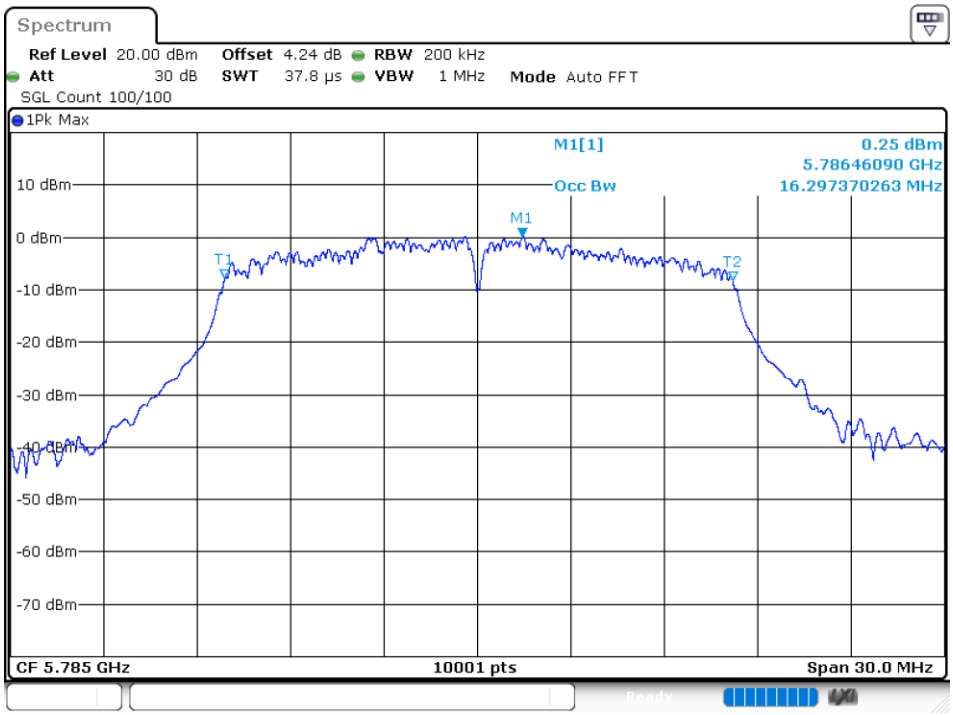
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | 16.267 |
| NVNT | a | 5785 | Ant1 | 16.297 |
| NVNT | a | 5825 | Ant1 | 16.195 |
| NVNT | n20 | 5745 | Ant1 | 17.278 |
| NVNT | n20 | 5785 | Ant1 | 17.47 |
| NVNT | n20 | 5825 | Ant1 | 17.359 |
| NVNT | n40 | 5755 | Ant1 | 35.246 |
| NVNT | n40 | 5795 | Ant1 | 35.234 |

Test Graphs

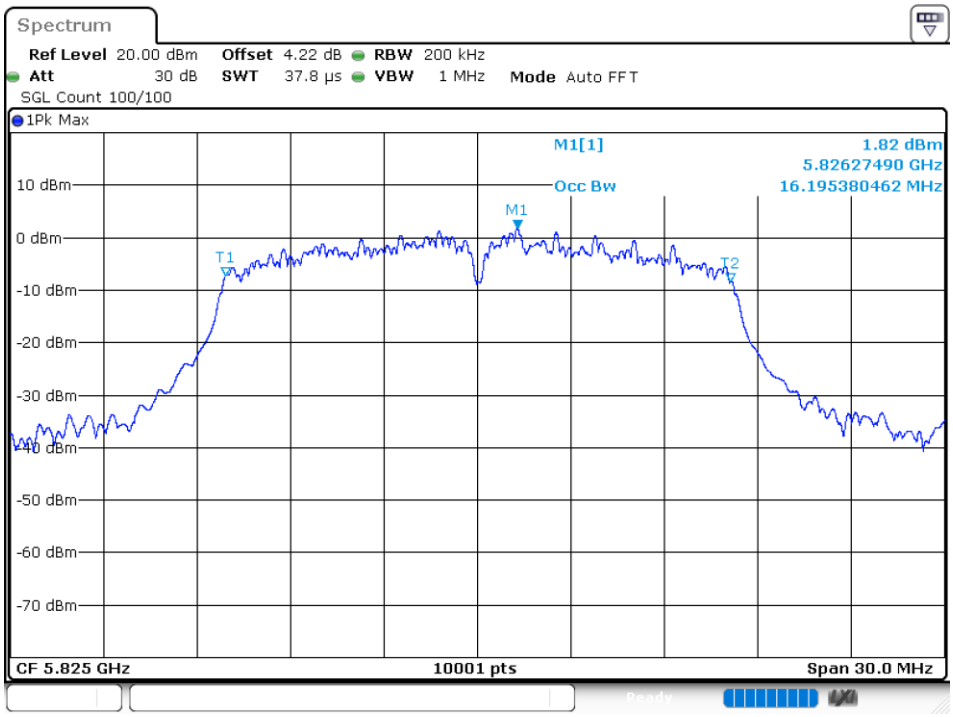
OBW NVNT a 5745MHz Ant1



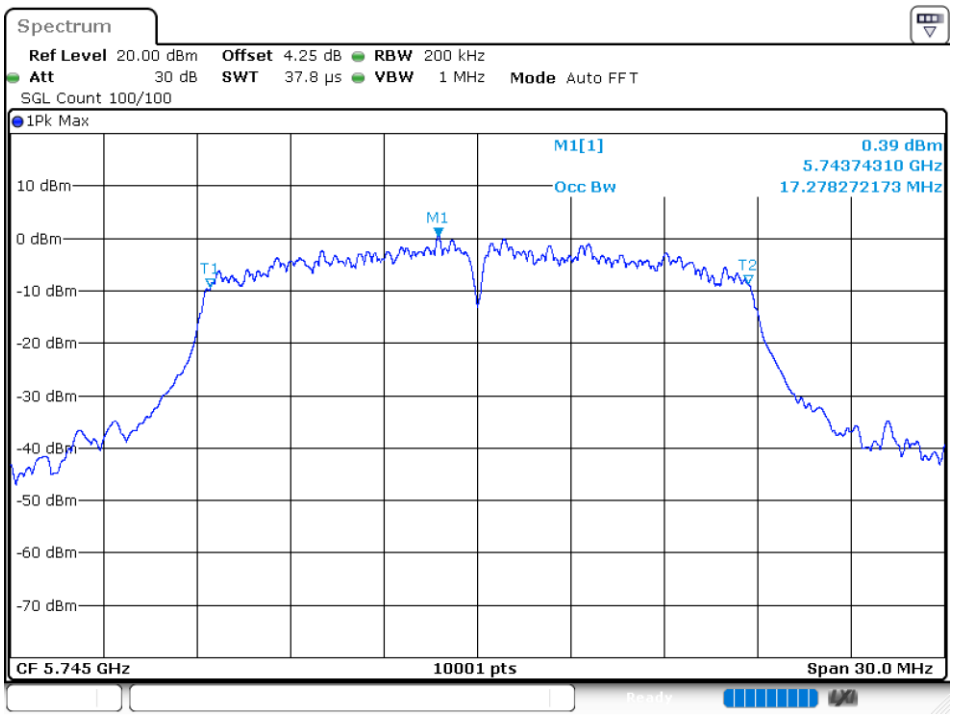

OBW NVNT a 5785MHz Ant1



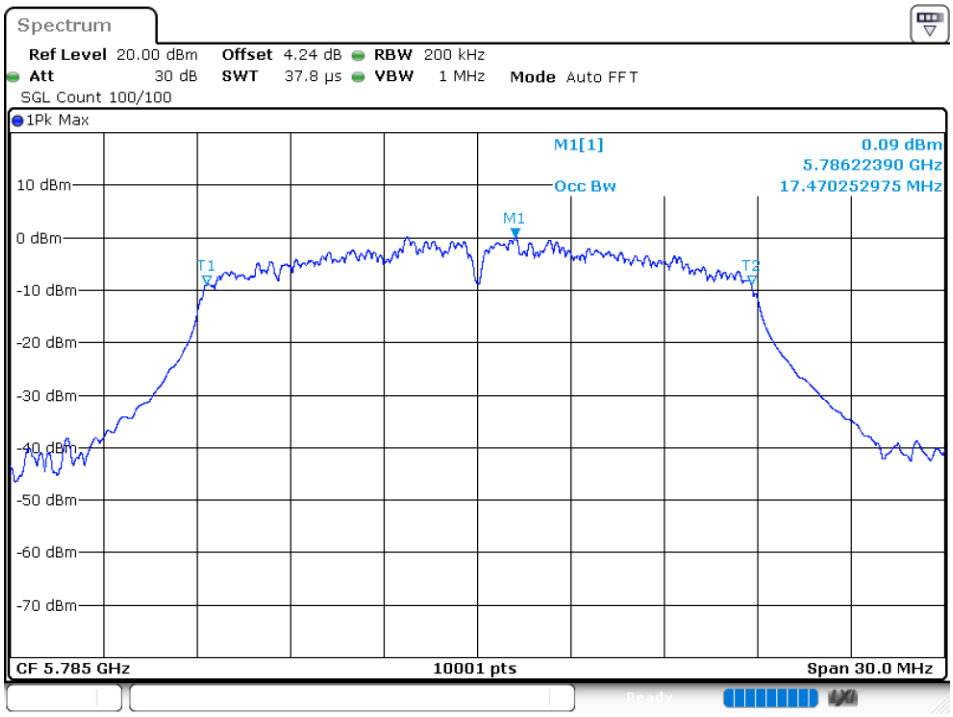
OBW NVNT a 5825MHz Ant1



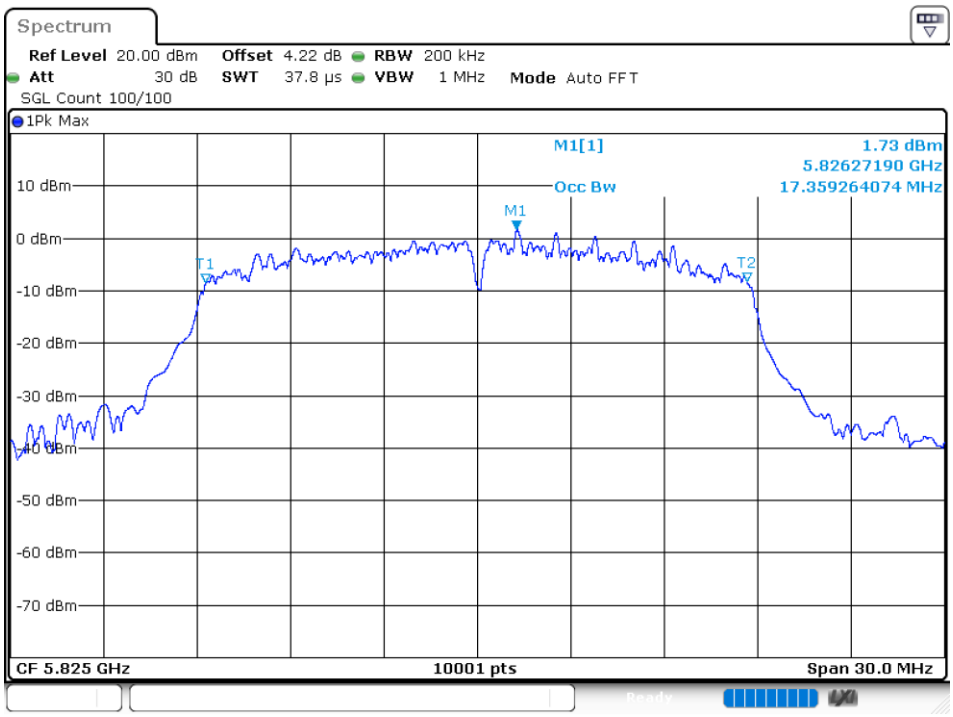

OBW NVNT n20 5745MHz Ant1



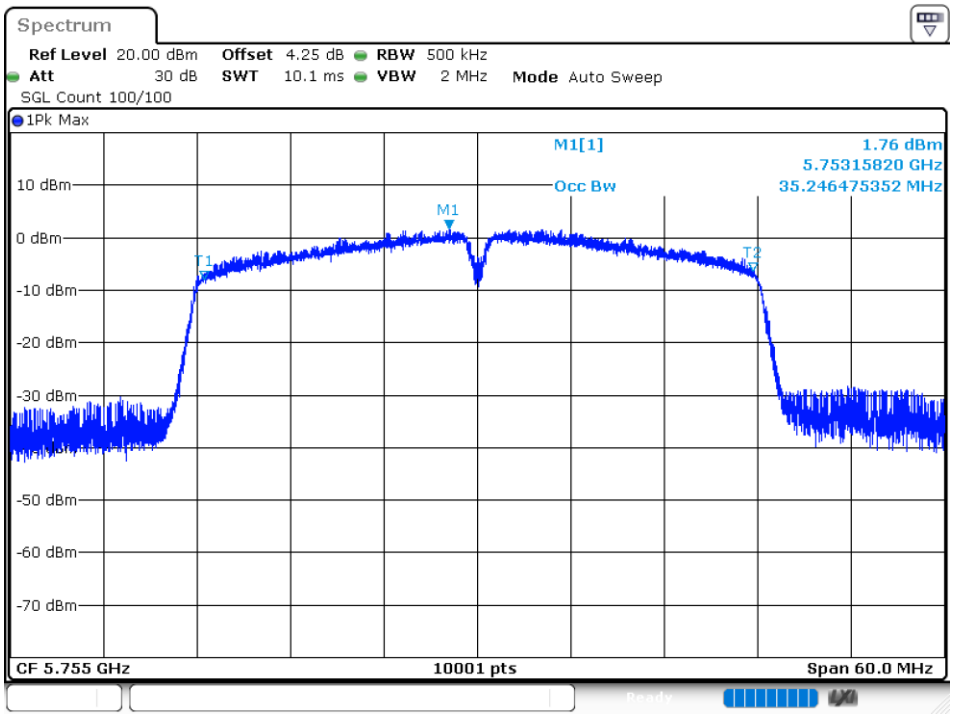
OBW NVNT n20 5785MHz Ant1



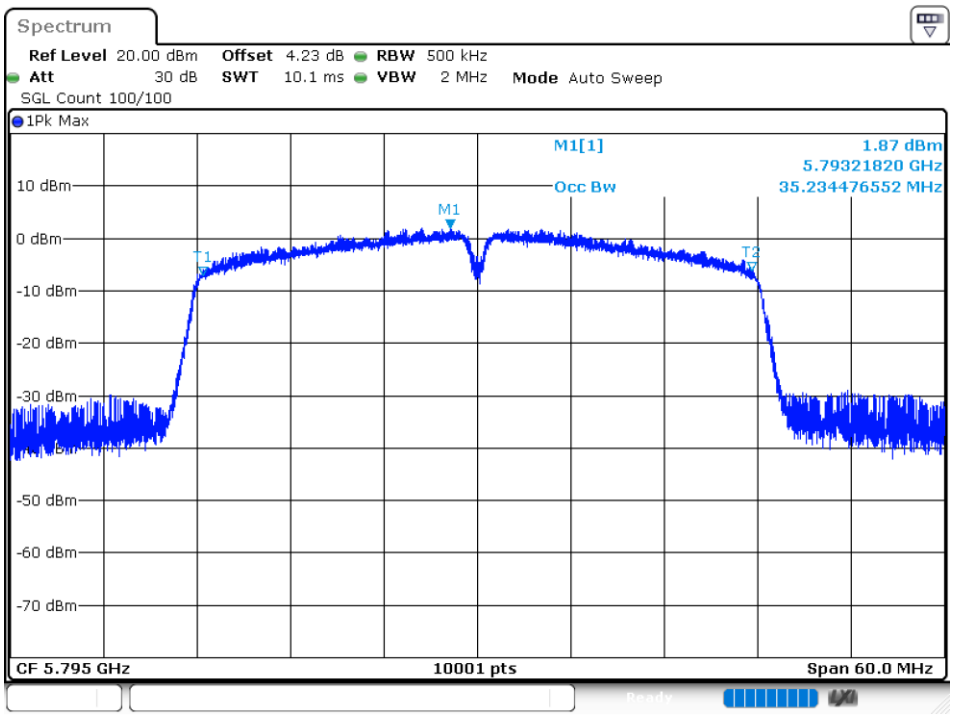

OBW NVNT n20 5825MHz Ant1



OBW NVNT n40 5755MHz Ant1



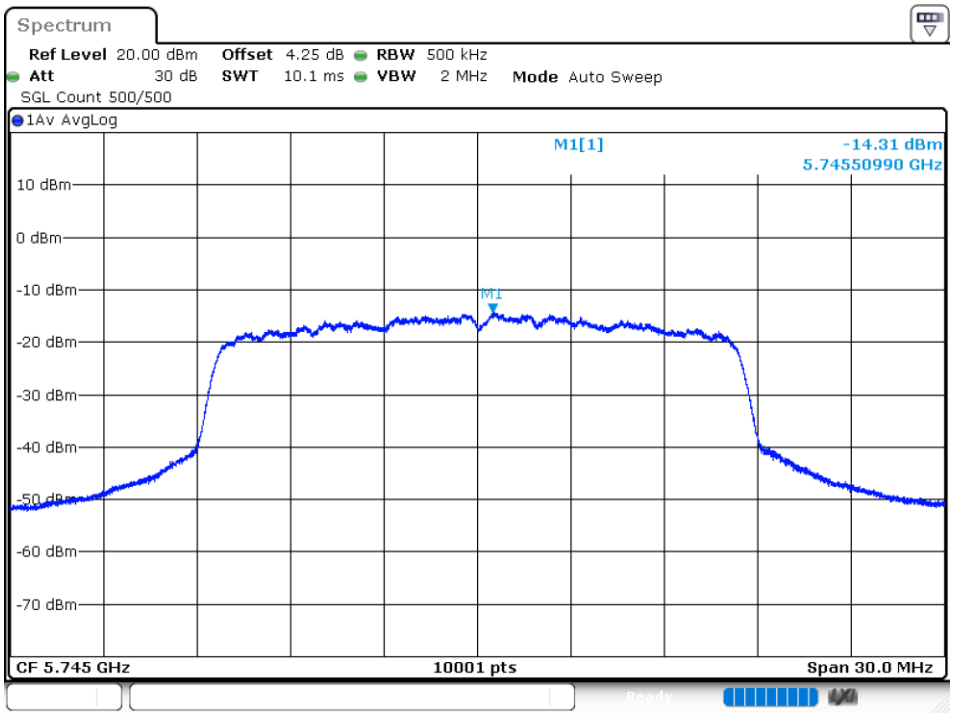

OBW NVNT n40 5795MHz Ant1



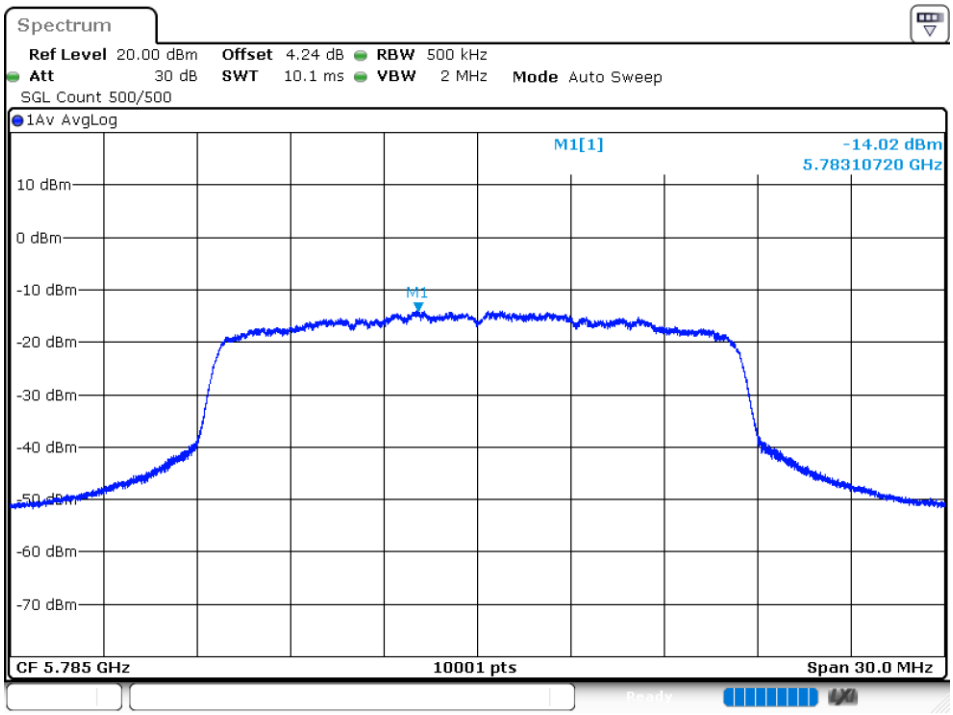
# Maximum Power Spectral Density Level

| Condition | Mode | Frequency (MHz) | Antenna | Conducted PSD (dBm) | Duty Factor (dB) | Total PSD (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | -14.31 | 0.93 | -13.38 | 30 | Pass |
| NVNT | a | 5785 | Ant1 | -14.02 | 0.93 | -13.09 | 30 | Pass |
| NVNT | a | 5825 | Ant1 | -13.26 | 0.95 | -12.31 | 30 | Pass |
| NVNT | n20 | 5745 | Ant1 | -14.86 | 1 | -13.86 | 30 | Pass |
| NVNT | n20 | 5785 | Ant1 | -14.56 | 1.01 | -13.55 | 30 | Pass |
| NVNT | n20 | 5825 | Ant1 | -14.51 | 1.01 | -13.5 | 30 | Pass |
| NVNT | n40 | 5755 | Ant1 | -23.9 | 1.83 | -22.07 | 30 | Pass |
| NVNT | n40 | 5795 | Ant1 | -23.82 | 1.83 | -21.99 | 30 | Pass |

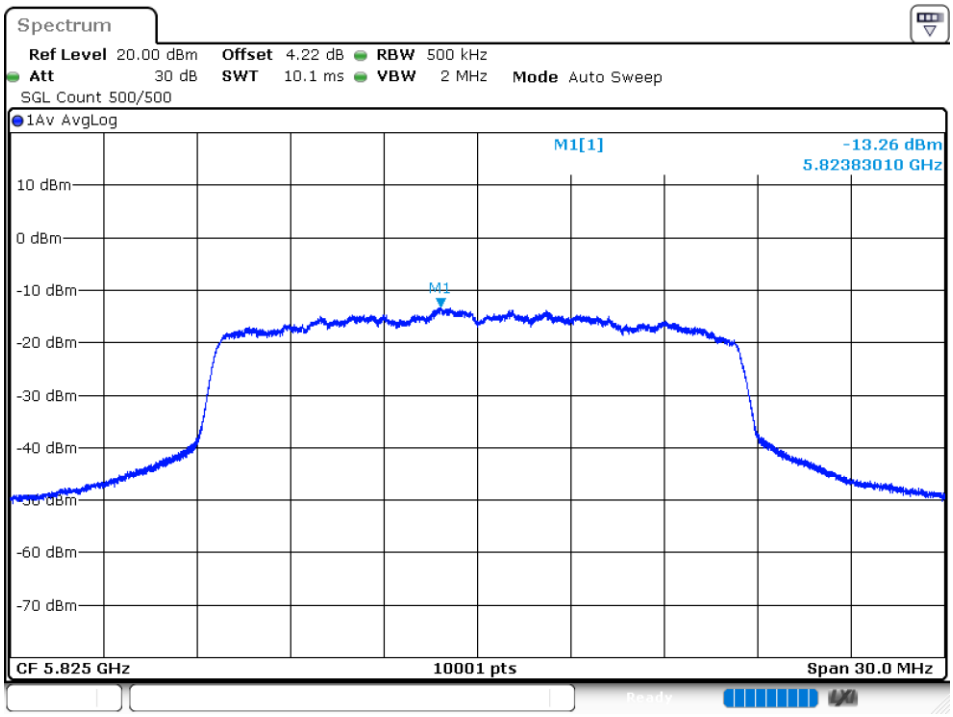
| Test Graphs |
|---|
| PSD NVNT a 5745MHz Ant1 |



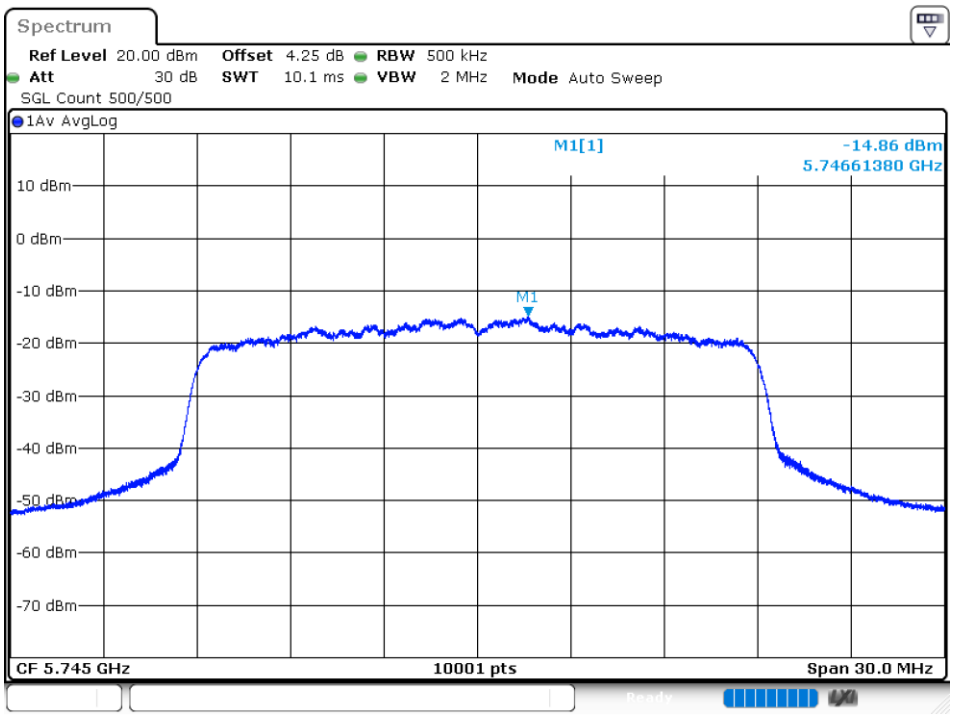

| PSD NVNT a 5785MHz Ant1 |
|---|



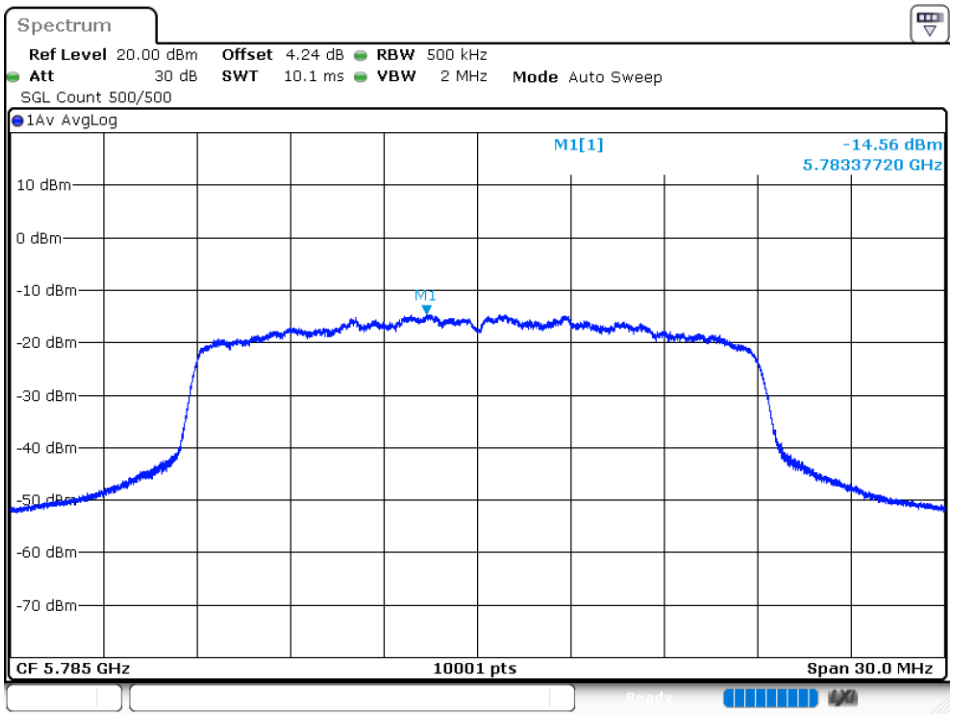
PSD NVNT a 5825MHz Ant1



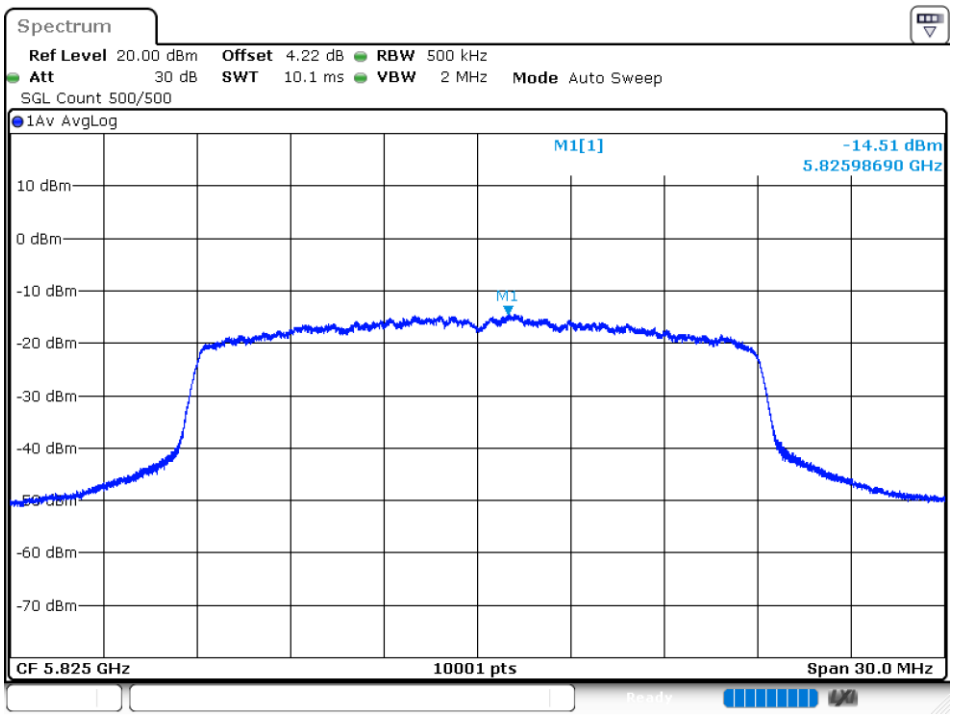

PSD NVNT n20 5745MHz Ant1



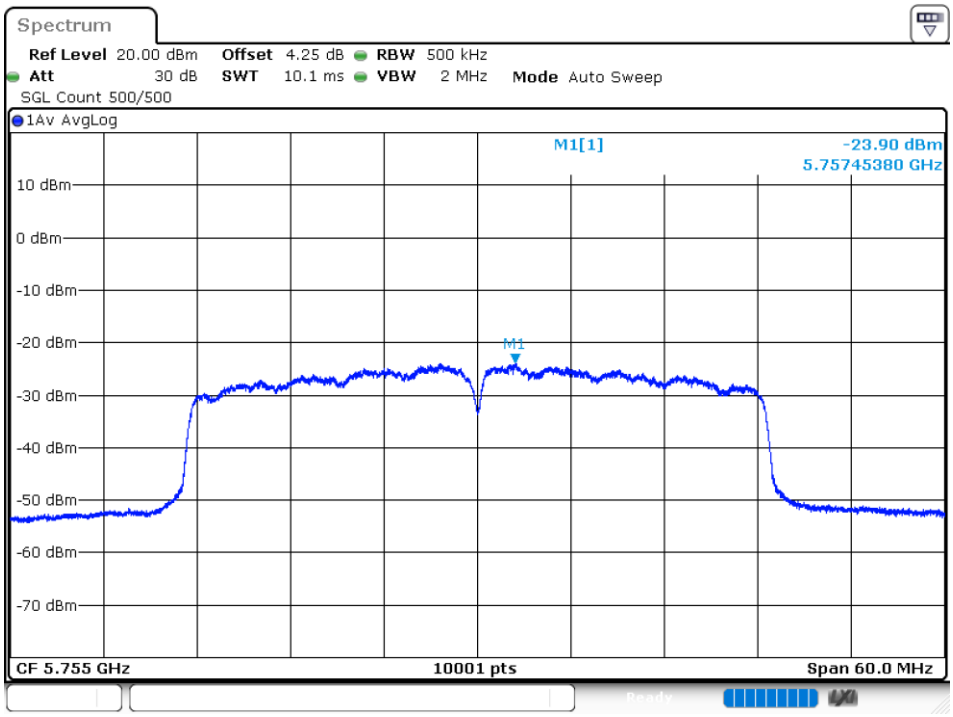
PSD NVNT n20 5785MHz Ant1



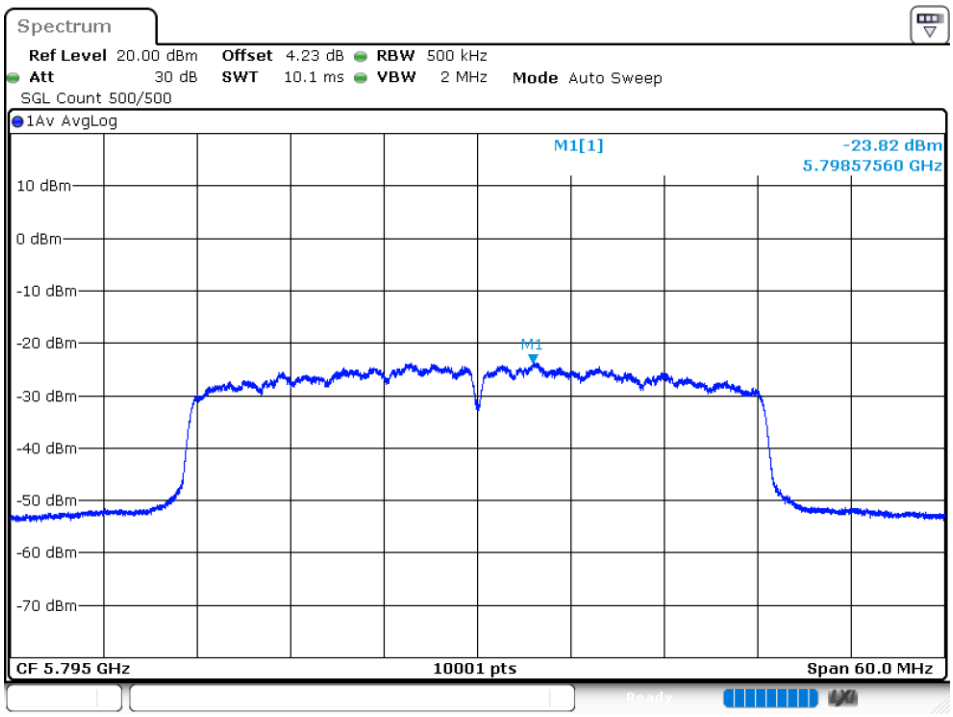

PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1




PSD NVNT n40 5795MHz Ant1



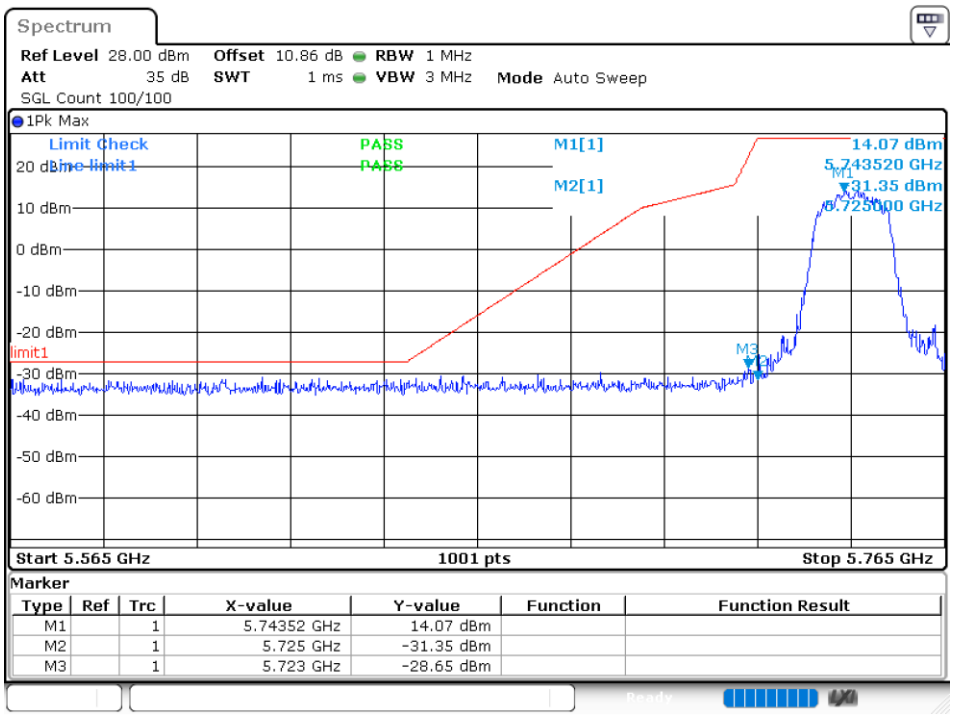
# Band Edge

| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | -28.65 | | Pass |
| NVNT | a | 5825 | Ant1 | -28.73 | | Pass |
| NVNT | n20 | 5745 | Ant1 | -28.92 | | Pass |
| NVNT | n20 | 5825 | Ant1 | -28.23 | | Pass |
| NVNT | n40 | 5755 | Ant1 | -23.42 | | Pass |
| NVNT | n40 | 5795 | Ant1 | -27.69 | | Pass |

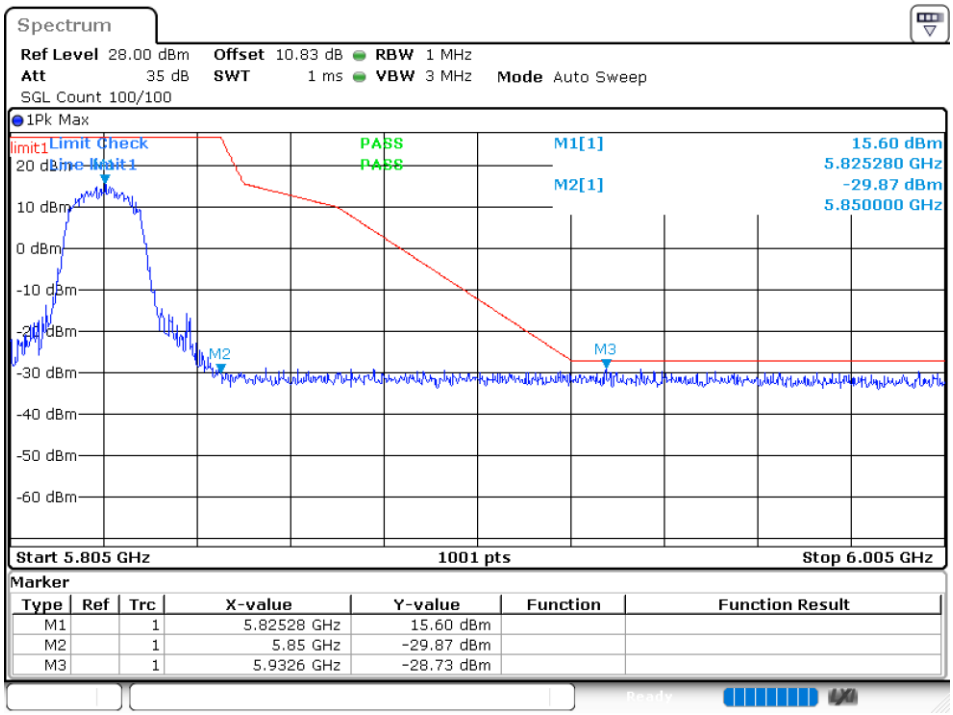
Note: Tested with increased antenna gain.

## Test Graphs

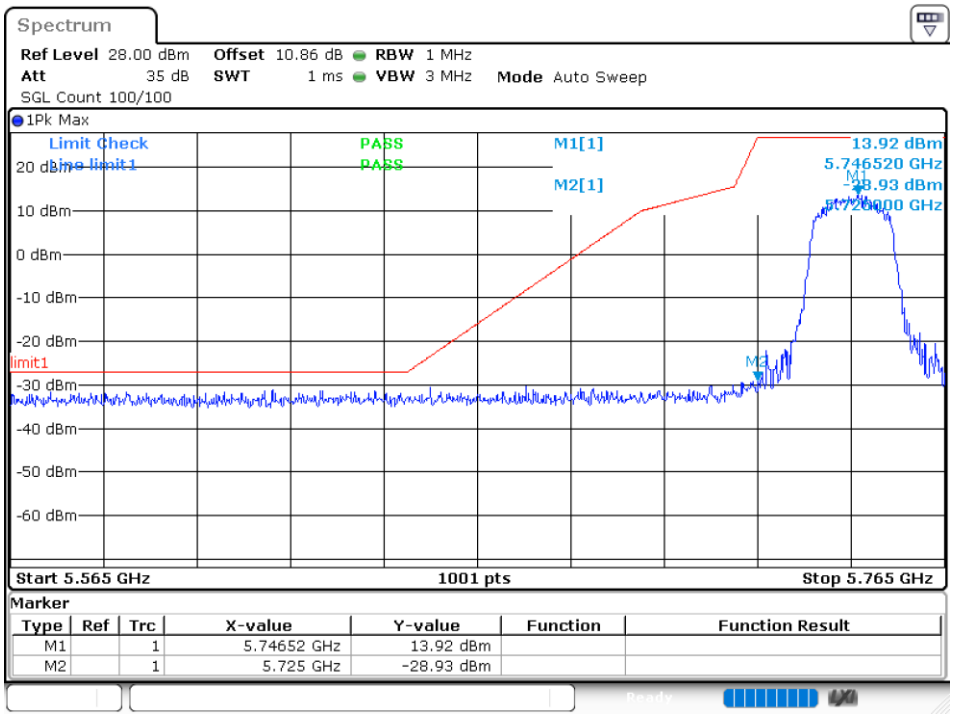
### Band Edge NVNT a 5745MHz Low Ant1



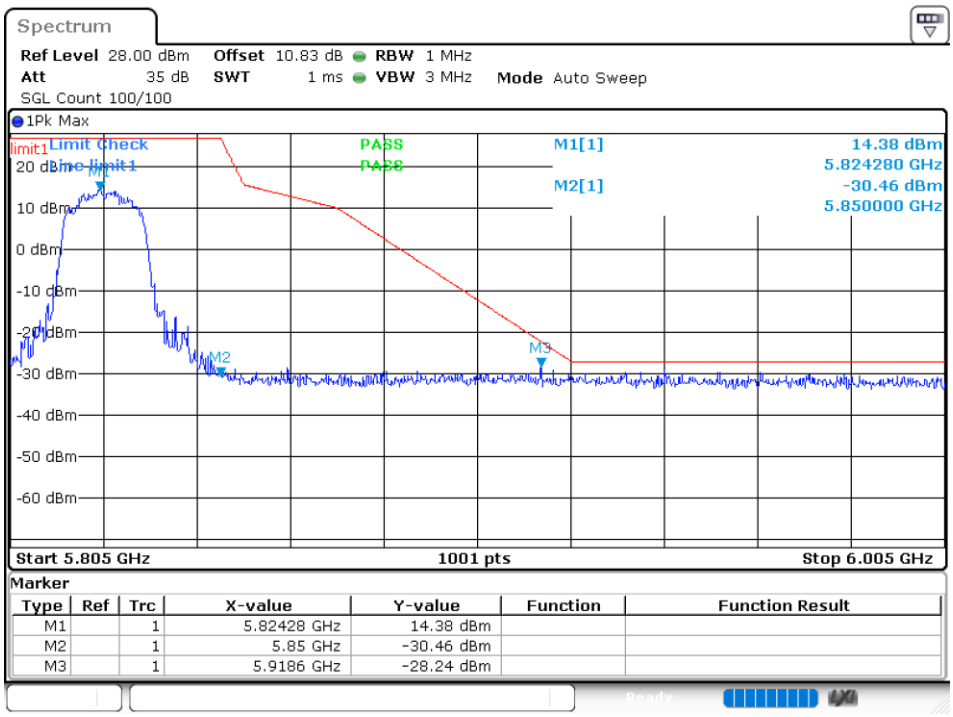

### Band Edge NVNT a 5825MHz High Ant1



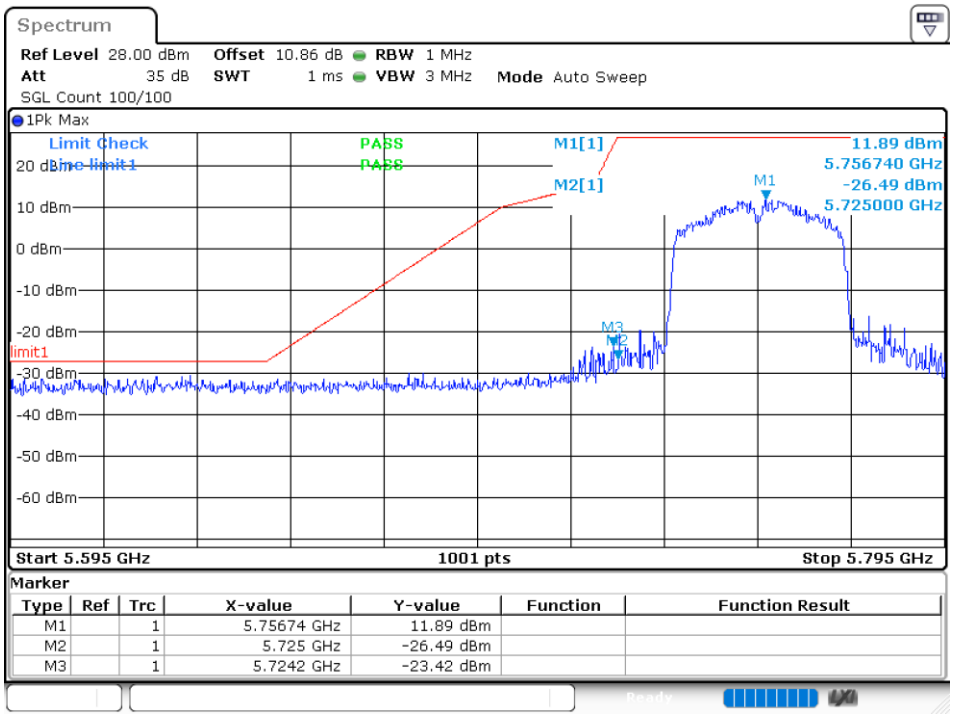
Band Edge NVNT n20 5745MHz Low Ant1




Band Edge NVNT n20 5825MHz High Ant1



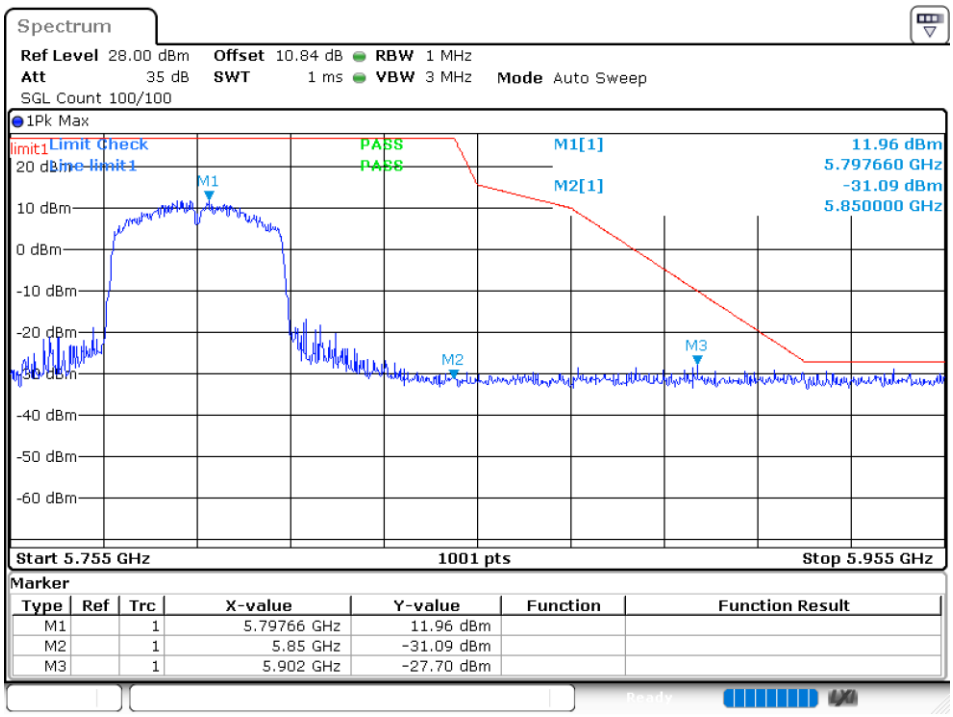
Band Edge NVNT n40 5755MHz Low Ant1




Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 5.75674 GHz | 11.89 dBm | | |
| M2 | | 1 | 5.725 GHz | -26.49 dBm | | |
| M3 | | 1 | 5.7242 GHz | -23.42 dBm | | |

Band Edge NVNT n40 5795MHz High Ant1




Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 5.79766 GHz | 11.96 dBm | | |
| M2 | | 1 | 5.85 GHz | -31.09 dBm | | |
| M3 | | 1 | 5.902 GHz | -27.70 dBm | | |

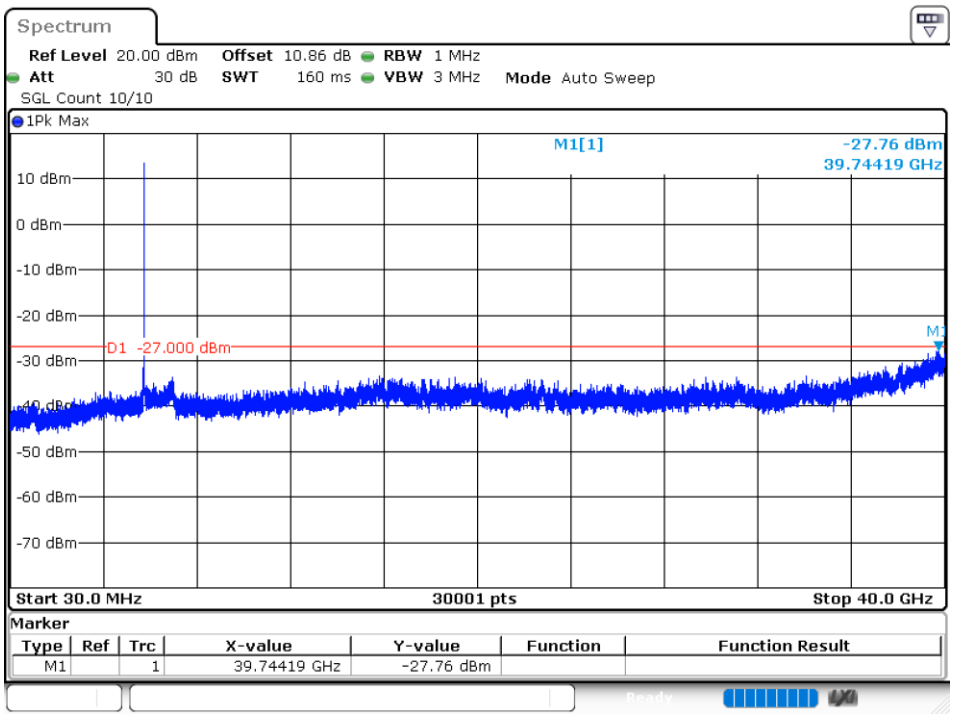
# Conducted RF Spurious Emission

| Condition | Mode | Frequency (MHz) | Antenna | Max Value (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|---|
| NVNT | a | 5745 | Ant1 | -27.75 | -27 | Pass |
| NVNT | a | 5785 | Ant1 | -27.72 | -27 | Pass |
| NVNT | a | 5825 | Ant1 | -27.47 | -27 | Pass |
| NVNT | n20 | 5745 | Ant1 | -27.9 | -27 | Pass |
| NVNT | n20 | 5785 | Ant1 | -28.3 | -27 | Pass |
| NVNT | n20 | 5825 | Ant1 | -28.26 | -27 | Pass |
| NVNT | n40 | 5755 | Ant1 | -28.03 | -27 | Pass |
| NVNT | n40 | 5795 | Ant1 | -27.75 | -27 | Pass |

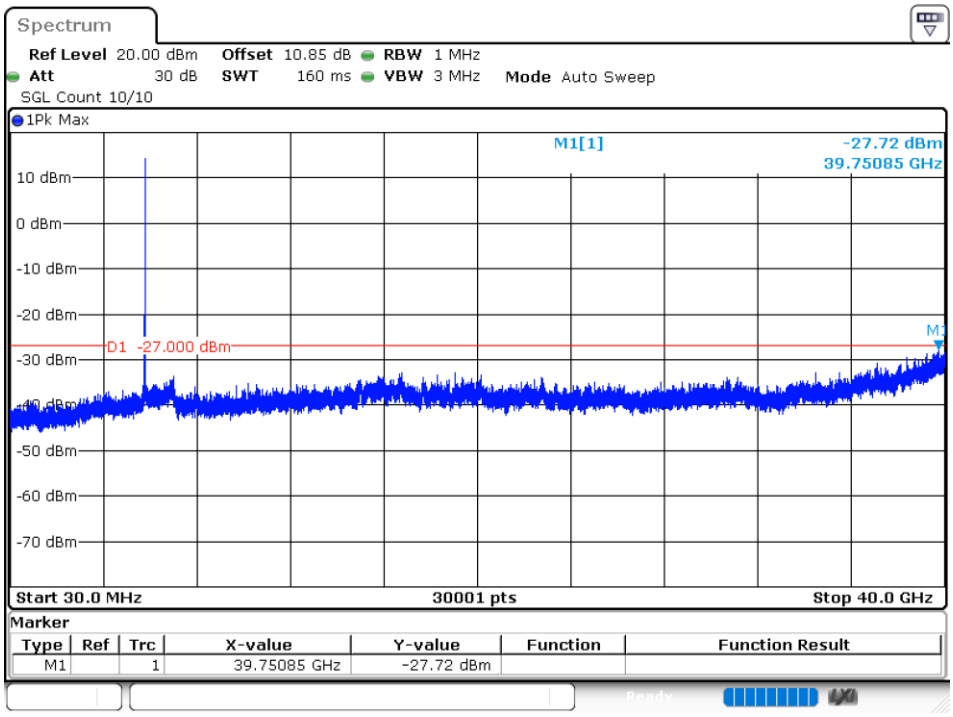
Note: Tested with increased antenna gain.

## Test Graphs

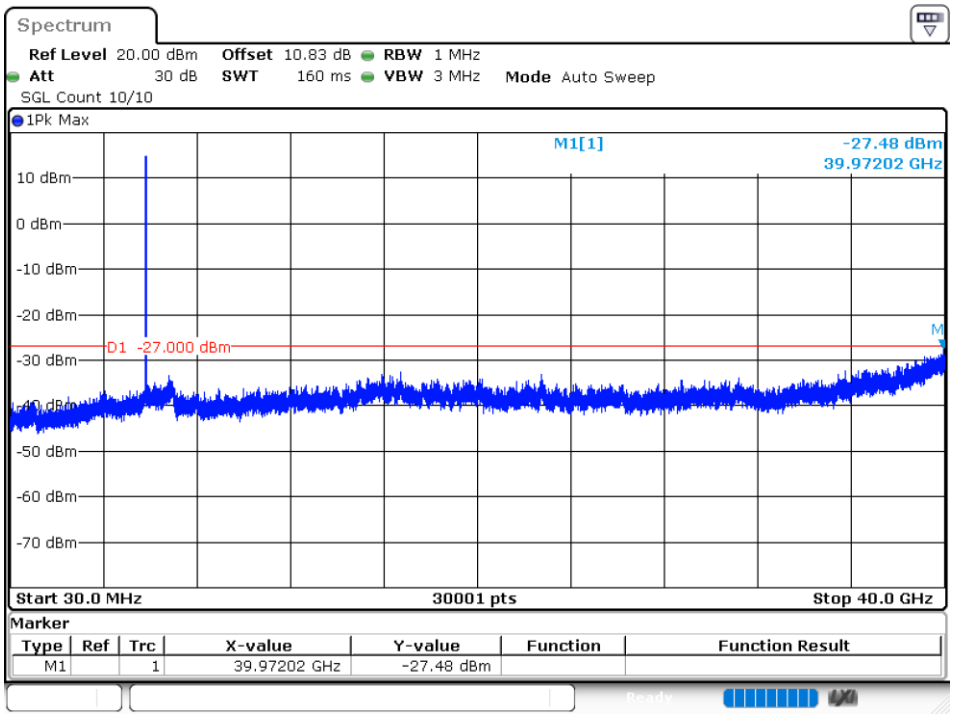
### Tx. Spurious NVNT a 5745MHz Ant1 Emission



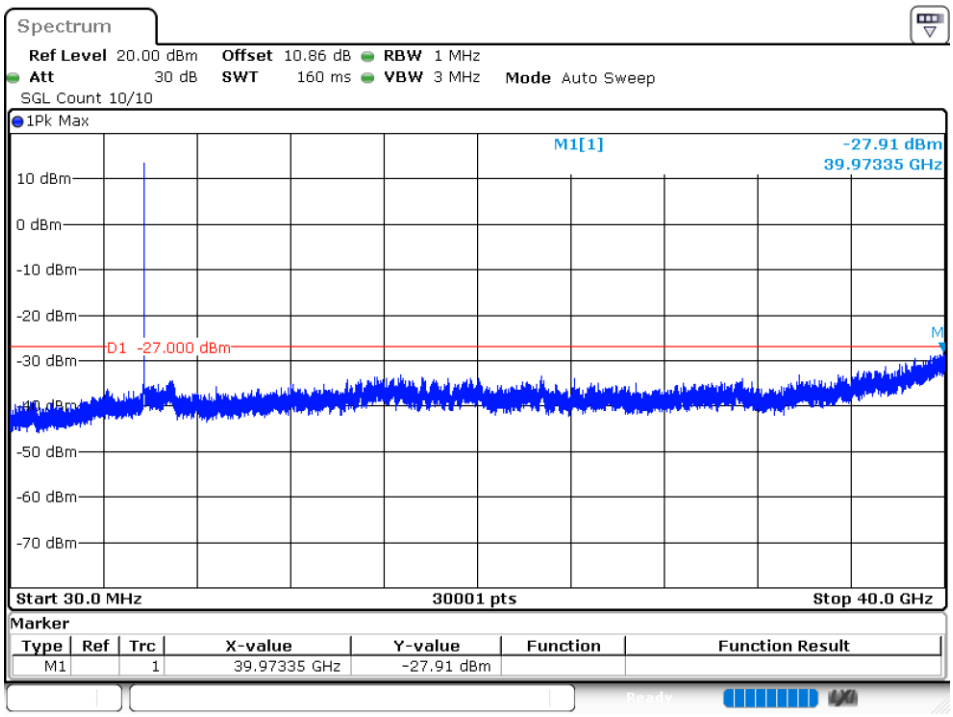

### Tx. Spurious NVNT a 5785MHz Ant1 Emission



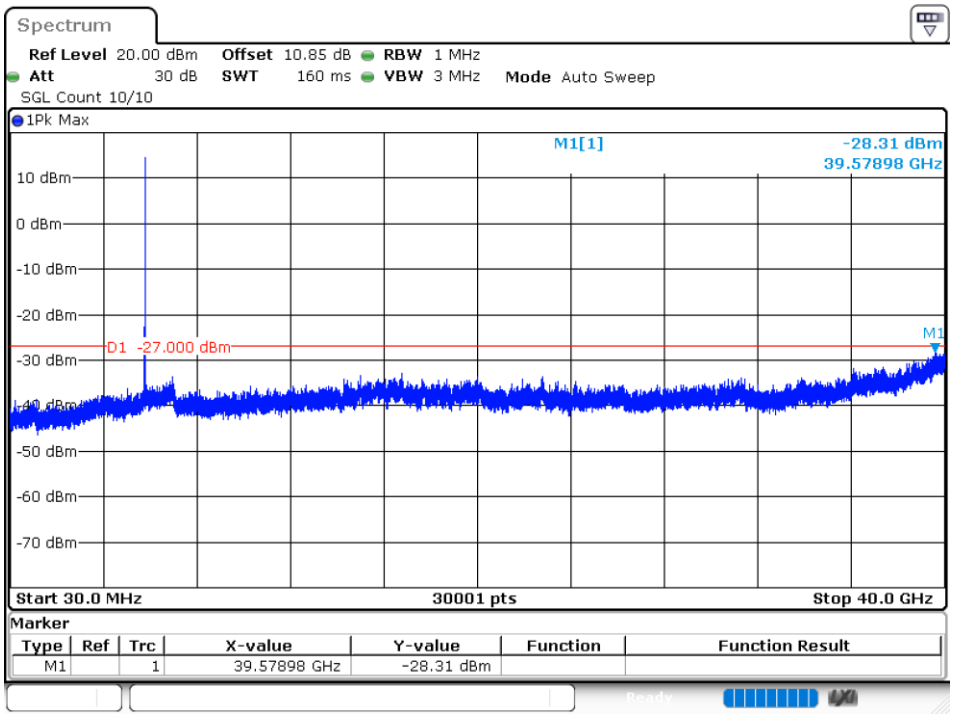
Tx. Spurious NVNT a 5825MHz Ant1 Emission



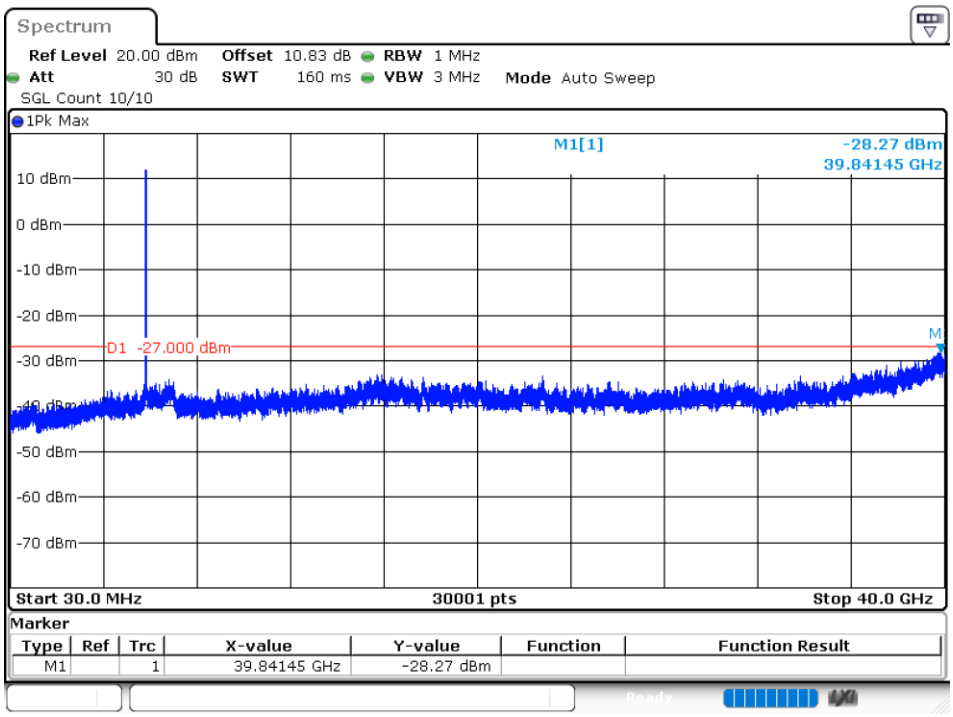

Tx. Spurious NVNT n20 5745MHz Ant1 Emission



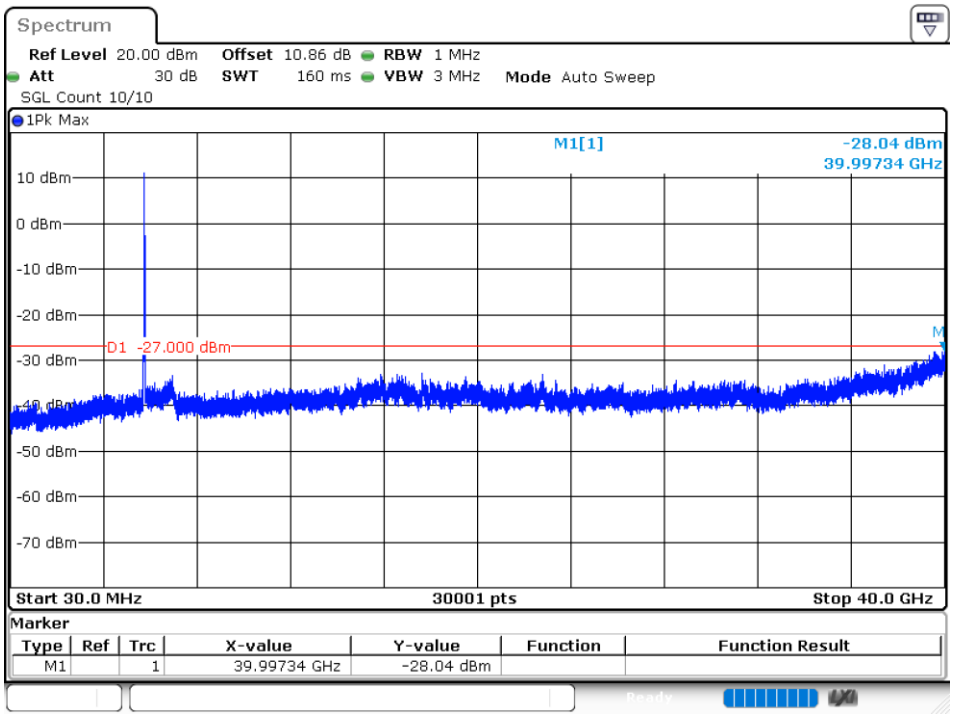
Tx. Spurious NVNT n20 5785MHz Ant1 Emission



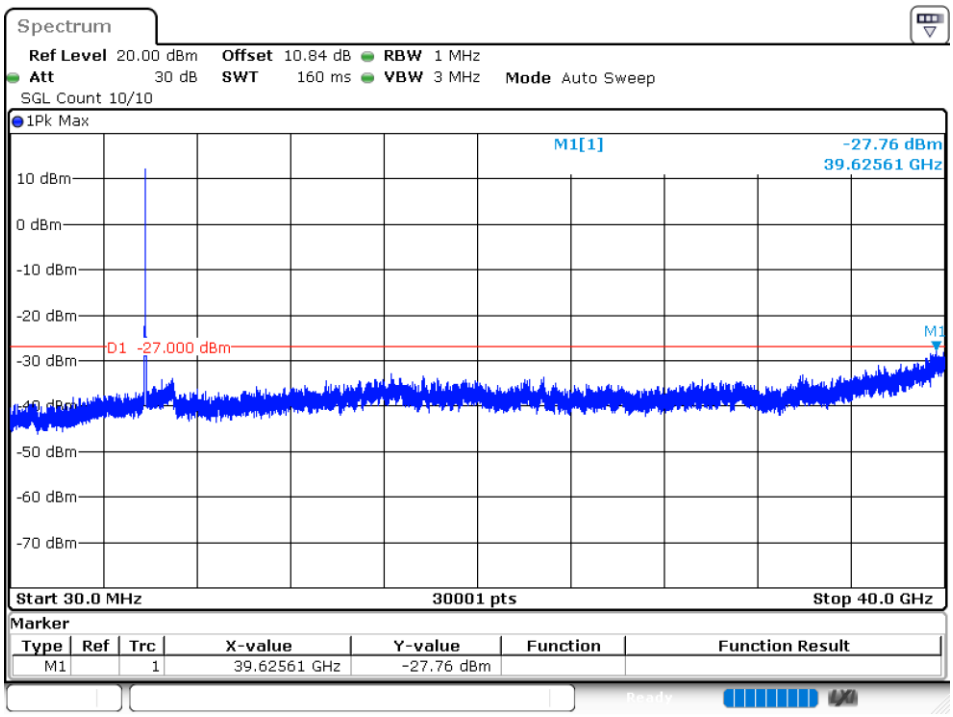

Tx. Spurious NVNT n20 5825MHz Ant1 Emission



Tx. Spurious NVNT n40 5755MHz Ant1 Emission



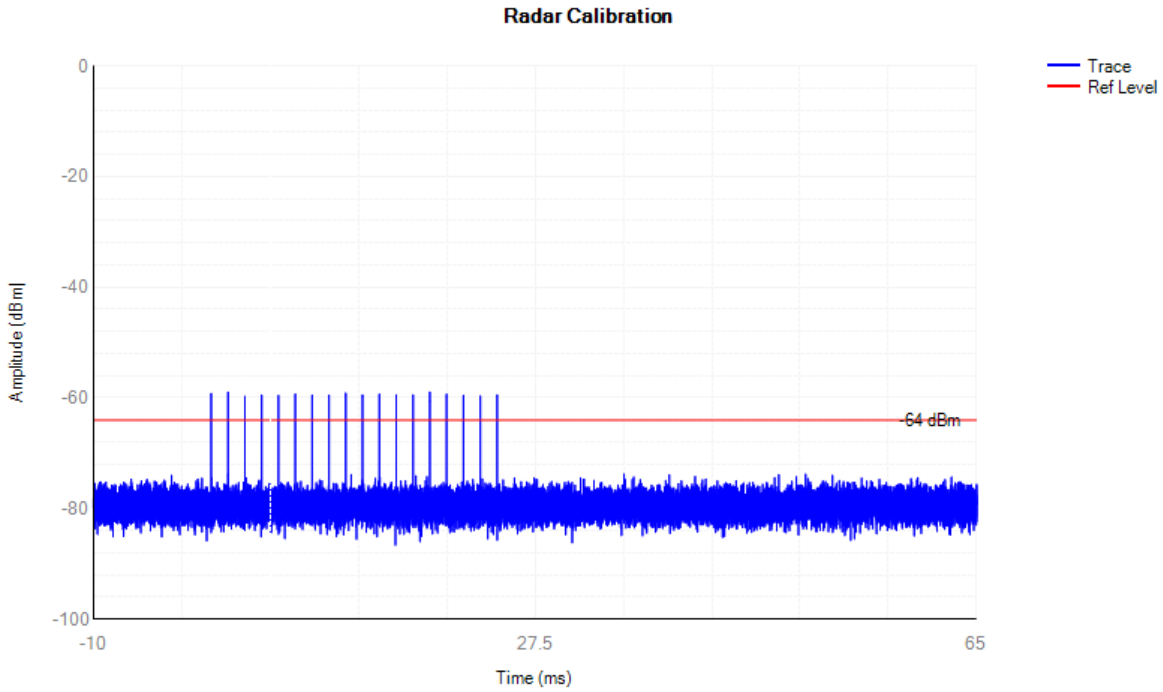

Tx. Spurious NVNT n40 5795MHz Ant1 Emission



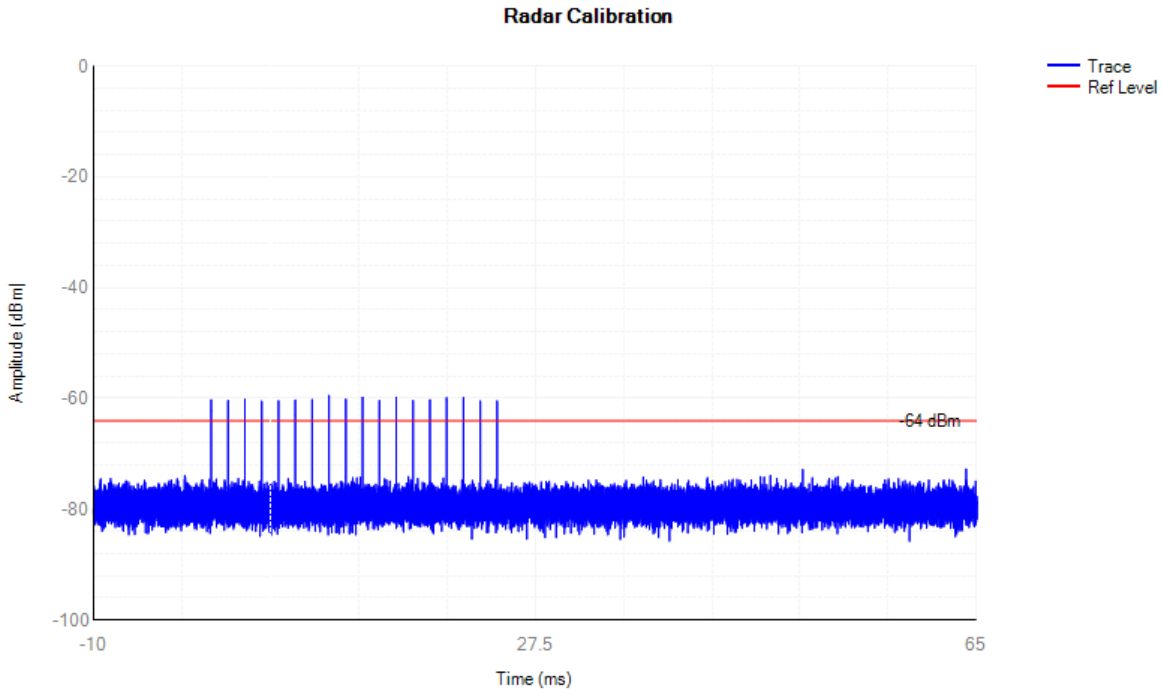
# DFS

**Calibration**

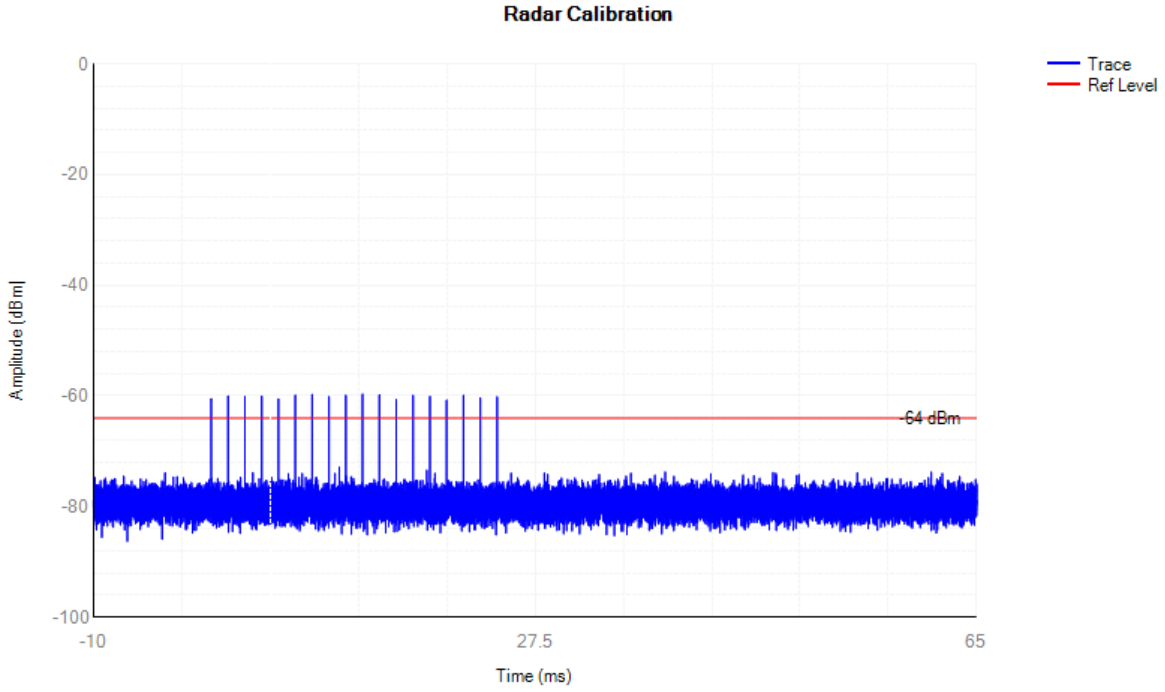
5310MHz n40 DFS_FCC_T0



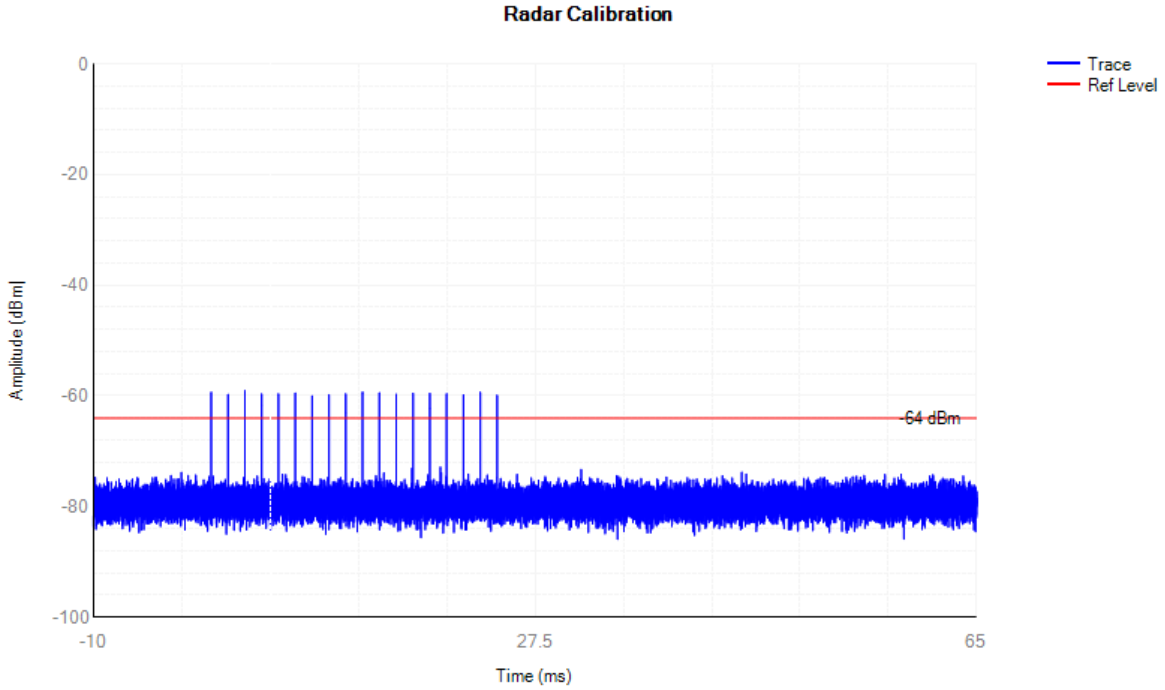

5510MHz n40 DFS_FCC_T0




5320MHz a DFS_FCC_T0

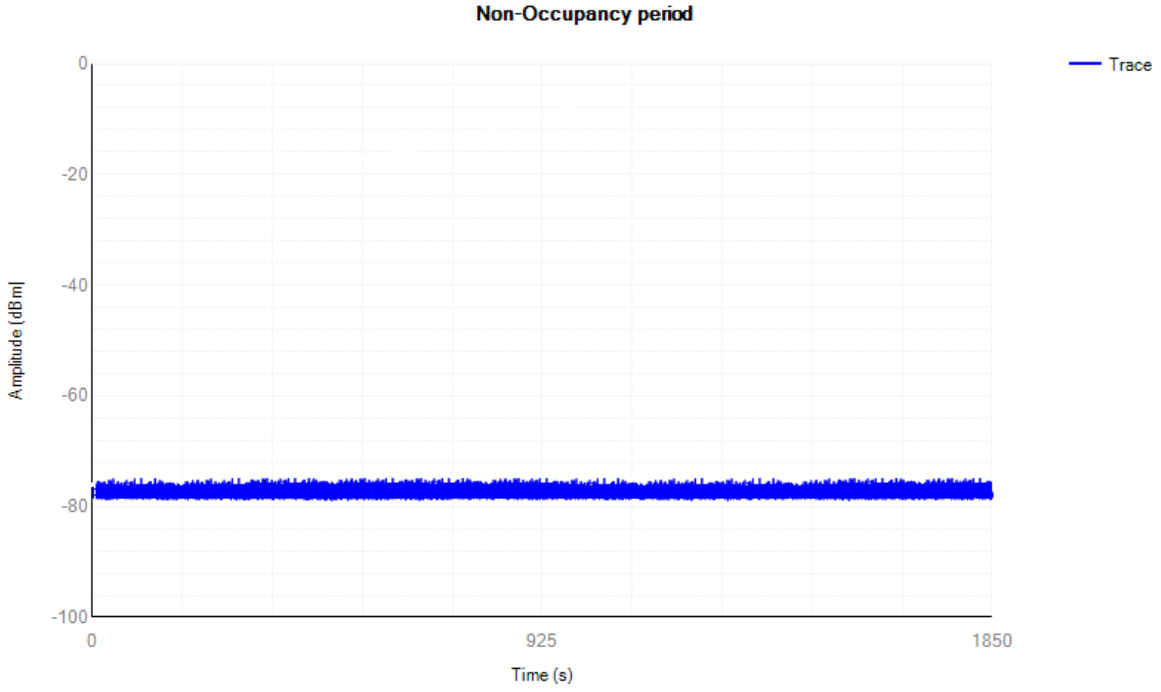



5500MHz a DFS_FCC_T0

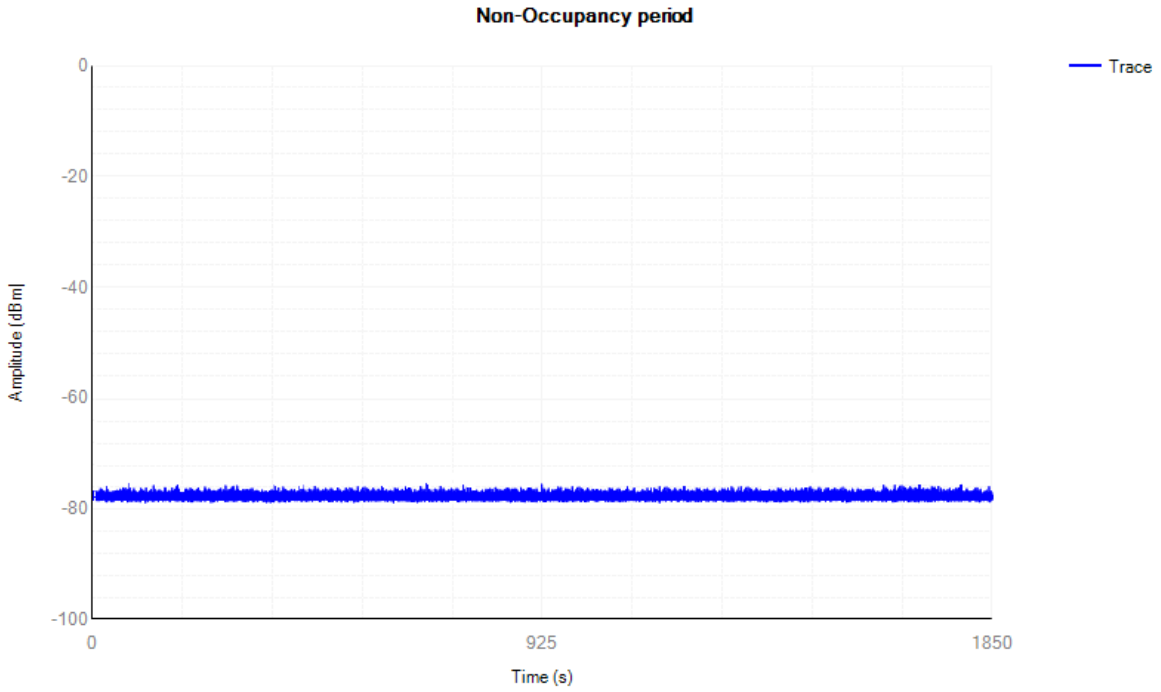



**Non-Occupancy**

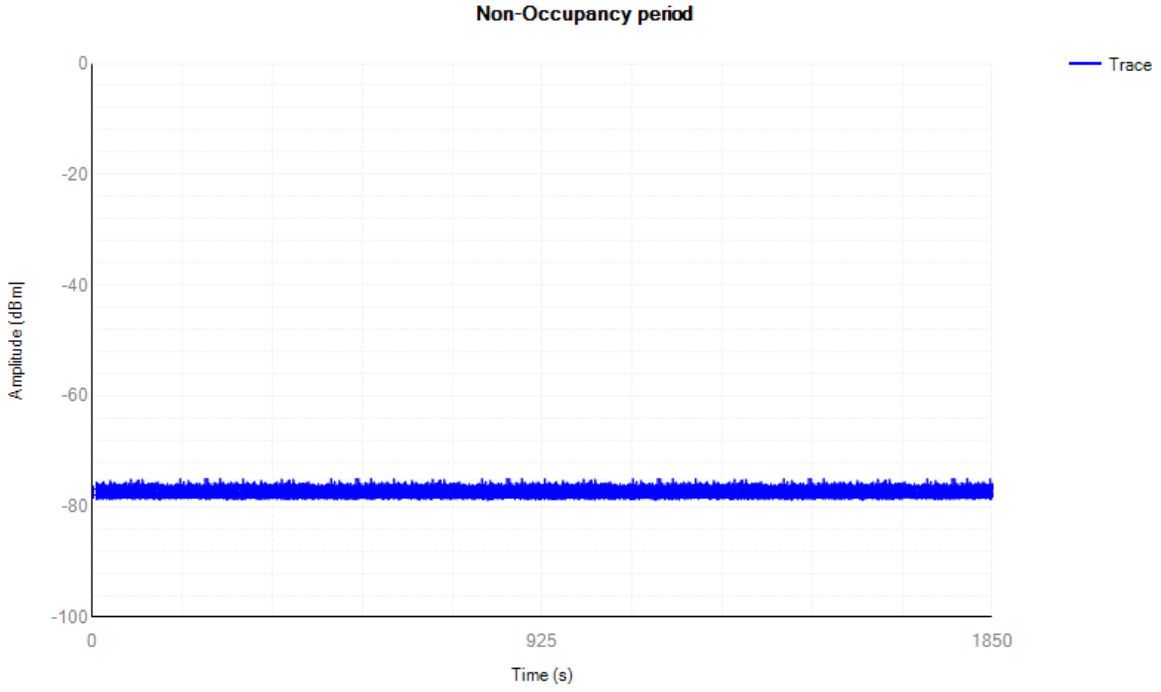
5310MHz n40 Non-Occupancy



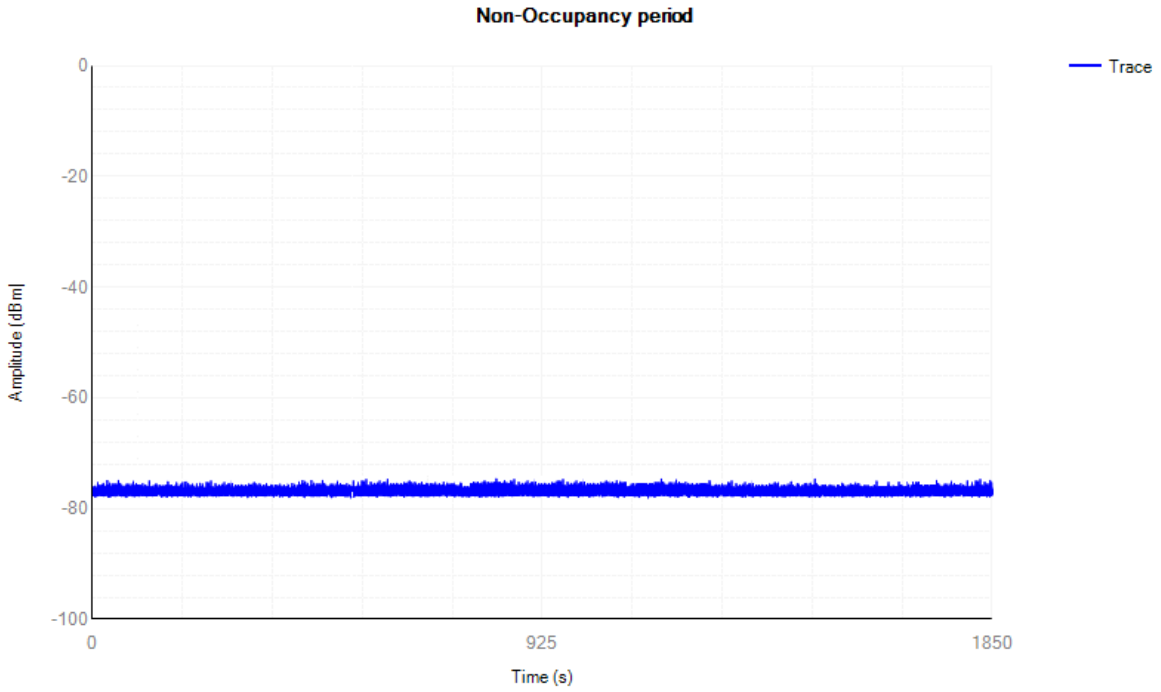

5510MHz n40 Non-Occupancy




5320MHz a Non-Occupancy



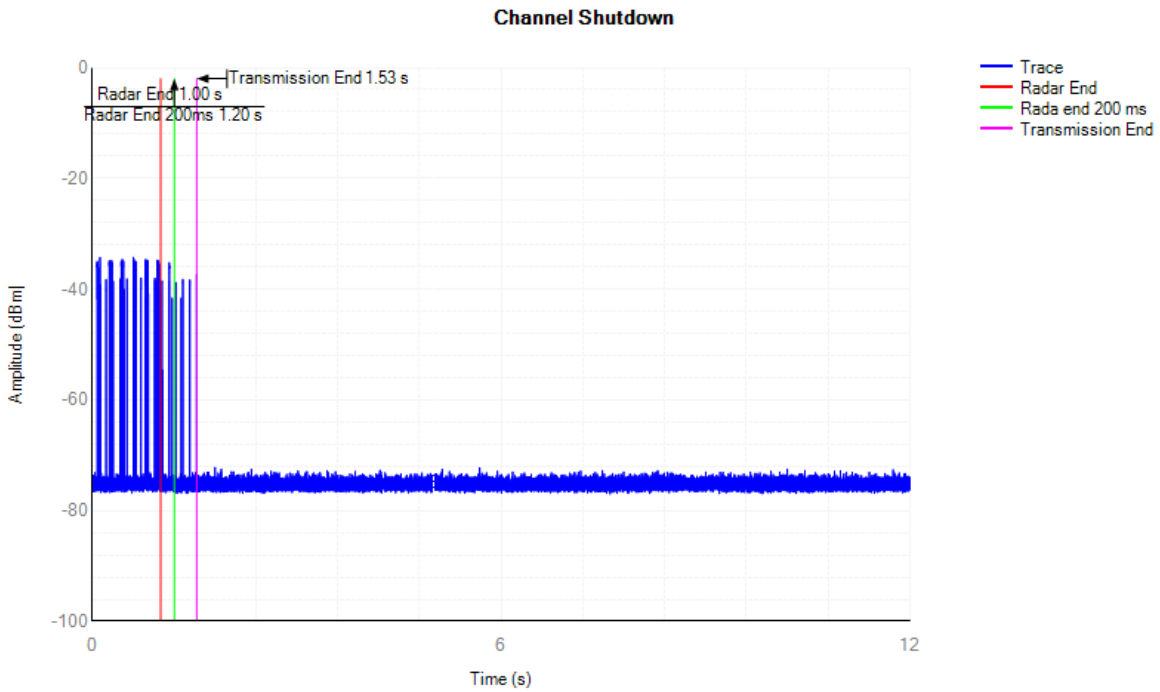

5500MHz a Non-Occupancy



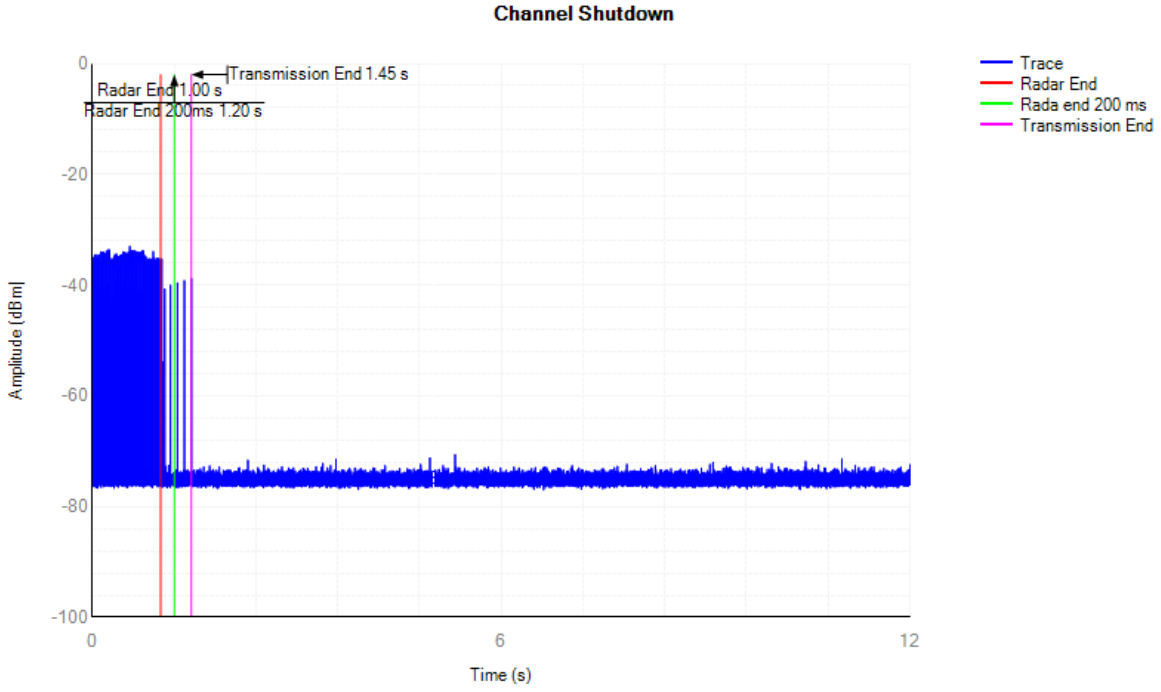
**Shutdown Time**

| 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 |
|---|---|---|---|---|---|---|---|---|
| n40 | 5310 | 0.53 | 10 | 0.0084 | 0.26 | 0.0036 | 0.06 | Pass |
| n40 | 5510 | 0.4512 | 10 | 0.0072 | 0.26 | 0.0024 | 0.06 | Pass |
| a | 5320 | 0.4284 | 10 | 0.0084 | 0.26 | 0.002 | 0.06 | Pass |
| a | 5500 | 0.514 | 10 | 0.0092 | 0.26 | 0.0024 | 0.06 | Pass |

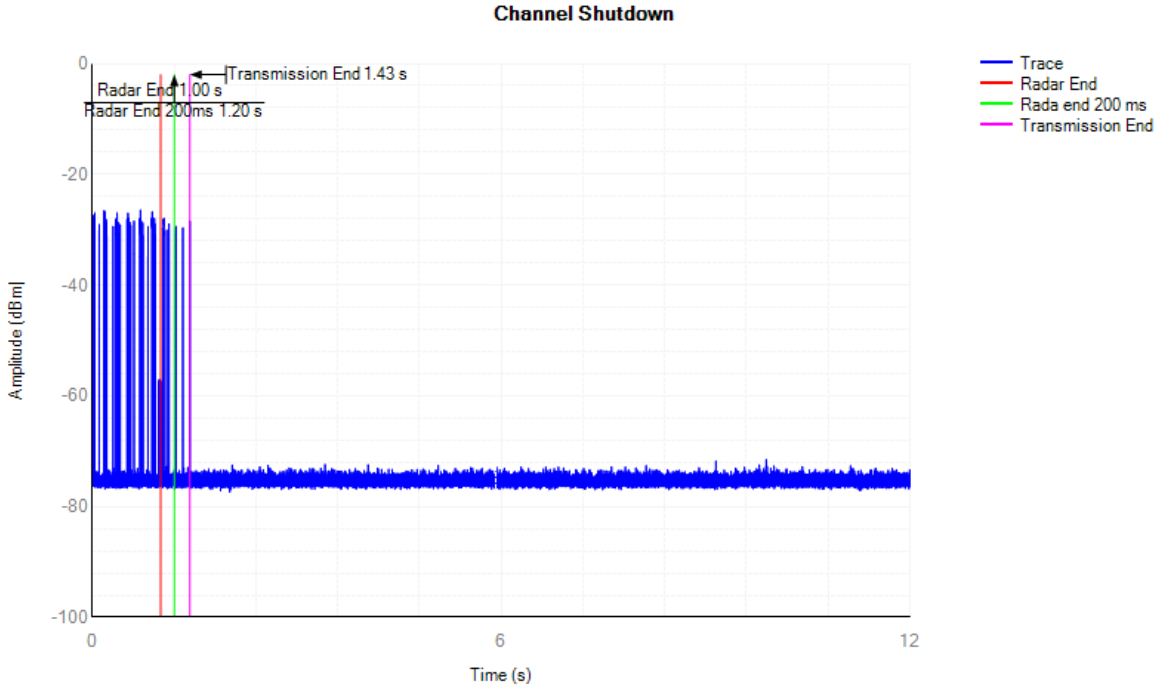
5310MHz n40 Shutdown



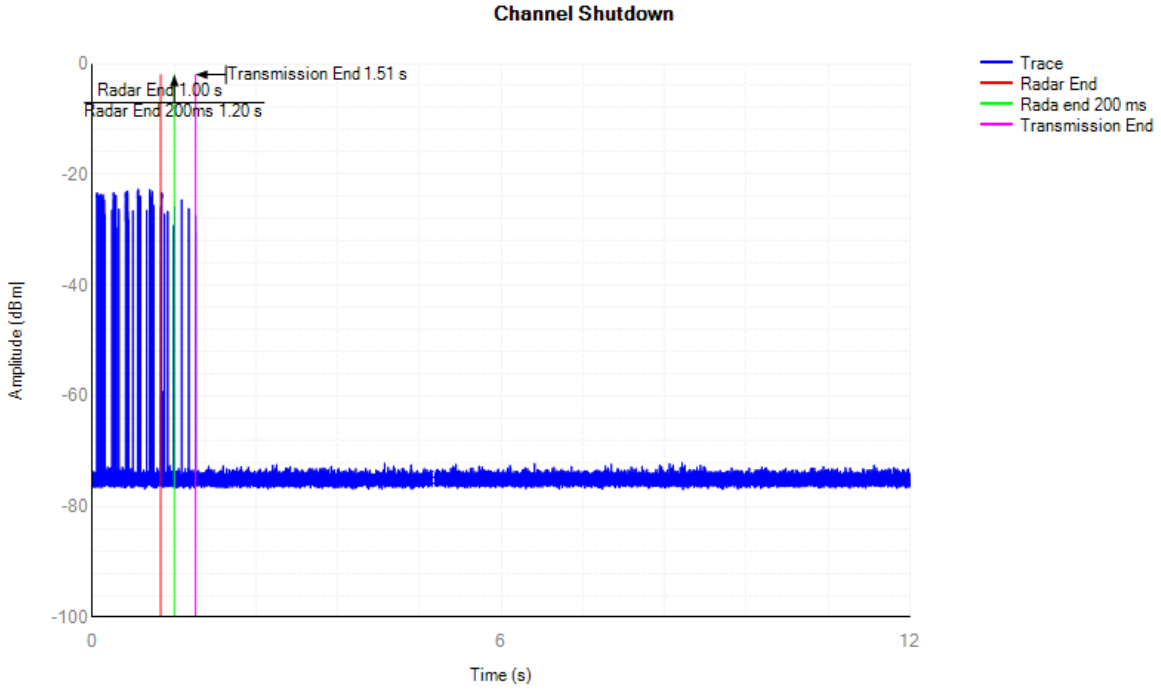

5510MHz n40 Shutdown




5320MHz a Shutdown




5500MHz a Shutdown


Channel Shutdown
Transmission End 1.51 s
Radar End 1.00 s
Radar End 200ms 1.20 s
Trace
Radar End
Rada end 200 ms
Transmission End
Amplitude [dBm]
0
-20
-40
-60
-80
-100
0
6
12
Time (s)