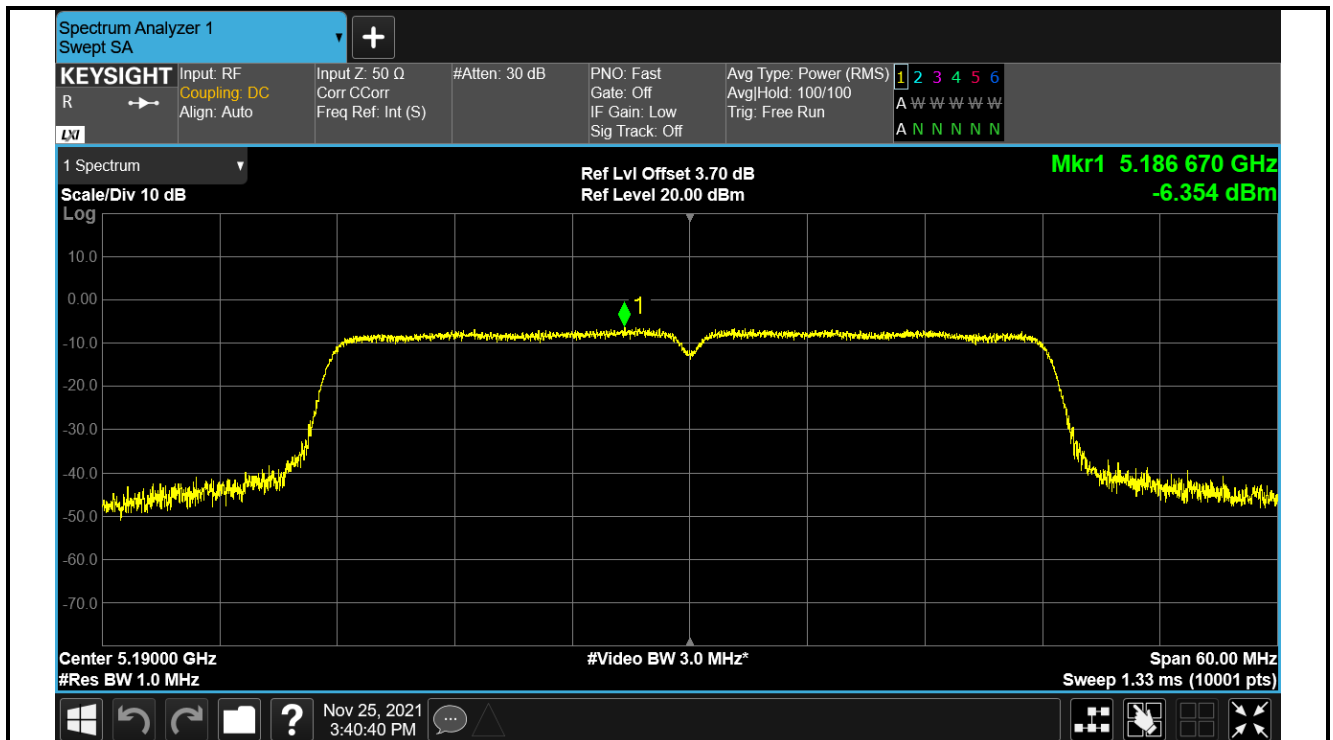
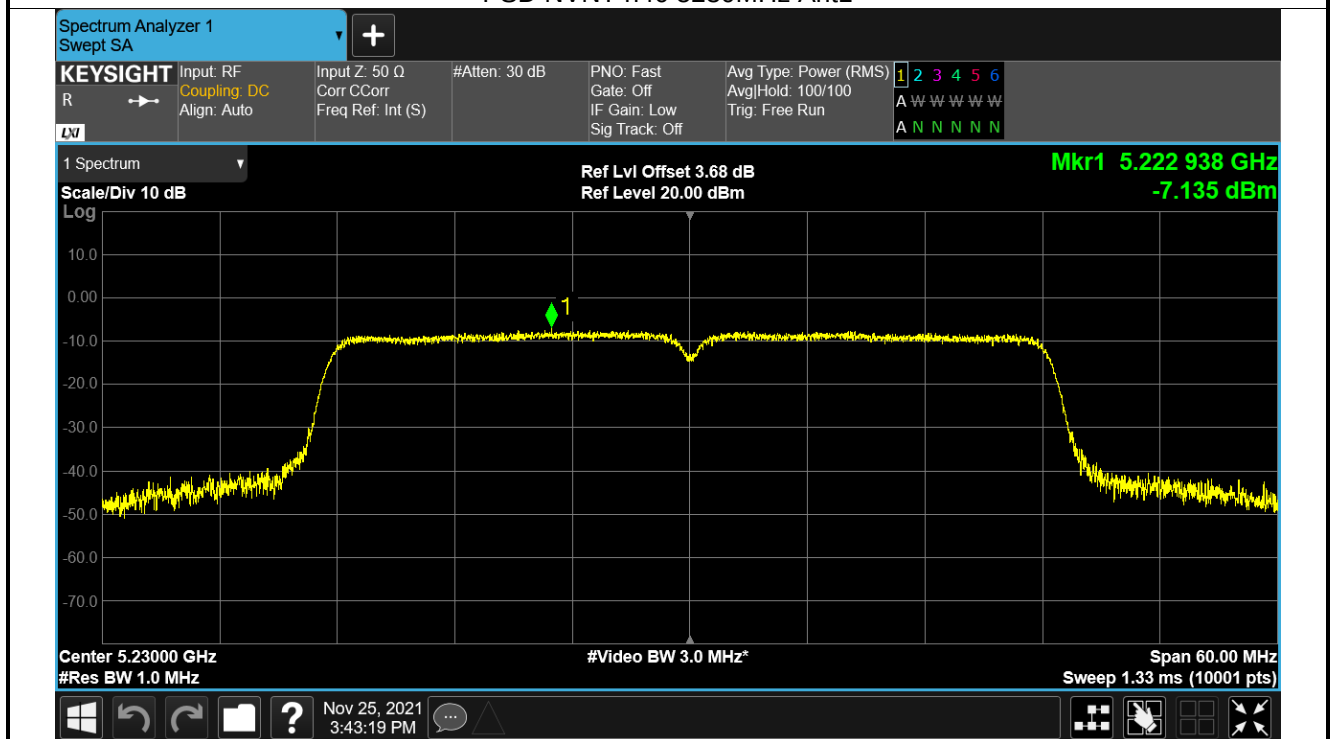




PSD NVNT n40 5230MHz Ant1



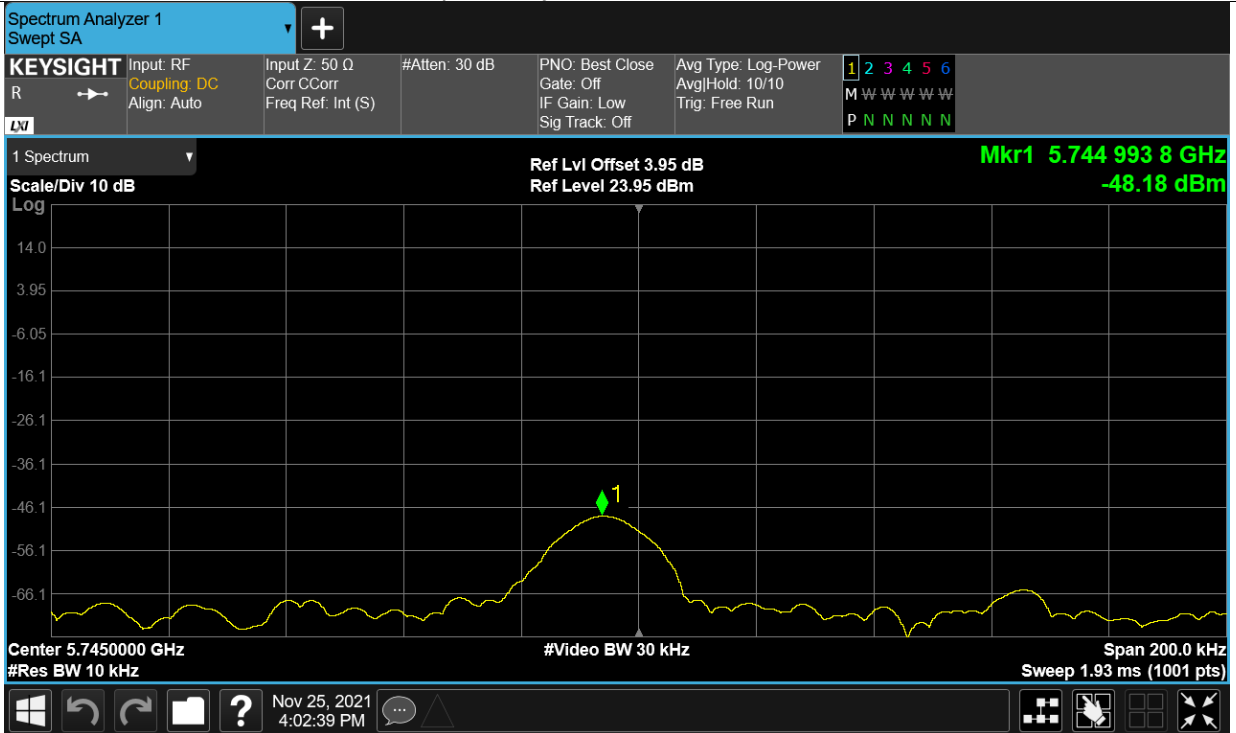
## Appendix B

### B.1 Frequency Stability

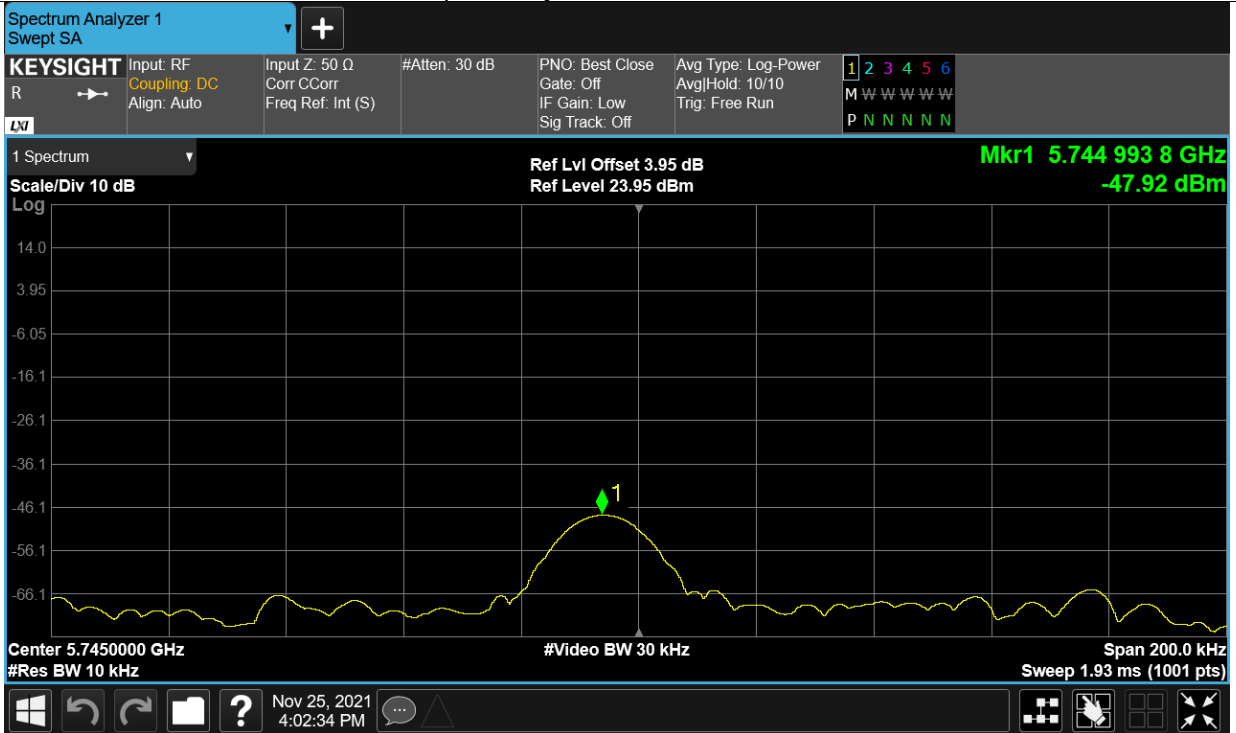
| Condition | Mode | Frequency (MHz) | Antenna | Measured Frequency (MHz) | Deviation (ppm) | Limit (ppm) | Verdict |
|-----------|------|-----------------|---------|--------------------------|-----------------|-------------|---------|
| HVHT      | a    | 5745            | Ant1    | 5744.9938                | -1.08           | 25          | Pass    |
| HVLT      | a    | 5745            | Ant1    | 5744.9938                | -1.08           | 25          | Pass    |
| LVHT      | a    | 5745            | Ant1    | 5744.9944                | -0.97           | 25          | Pass    |
| LVLT      | a    | 5745            | Ant1    | 5744.9942                | -1.01           | 25          | Pass    |
| NVNT      | a    | 5745            | Ant1    | 5744.9944                | -0.97           | 25          | Pass    |
| HVHT      | ac80 | 5775            | Ant1    | 5774.9938                | -1.07           | 25          | Pass    |
| HVLT      | ac80 | 5775            | Ant1    | 5774.9936                | -1.11           | 25          | Pass    |
| LVHT      | ac80 | 5775            | Ant1    | 5774.994                 | -1.04           | 25          | Pass    |
| LVLT      | ac80 | 5775            | Ant1    | 5774.9936                | -1.11           | 25          | Pass    |
| NVNT      | ac80 | 5775            | Ant1    | 5774.994                 | -1.04           | 25          | Pass    |
| HVHT      | n40  | 5755            | Ant1    | 5754.9938                | -1.08           | 25          | Pass    |
| HVLT      | n40  | 5755            | Ant1    | 5754.9946                | -0.94           | 25          | Pass    |
| LVHT      | n40  | 5755            | Ant1    | 5754.9938                | -1.08           | 25          | Pass    |
| LVLT      | n40  | 5755            | Ant1    | 5754.9948                | -0.9            | 25          | Pass    |
| NVNT      | n40  | 5755            | Ant1    | 5754.9942                | -1.01           | 25          | Pass    |

## Test Graphs

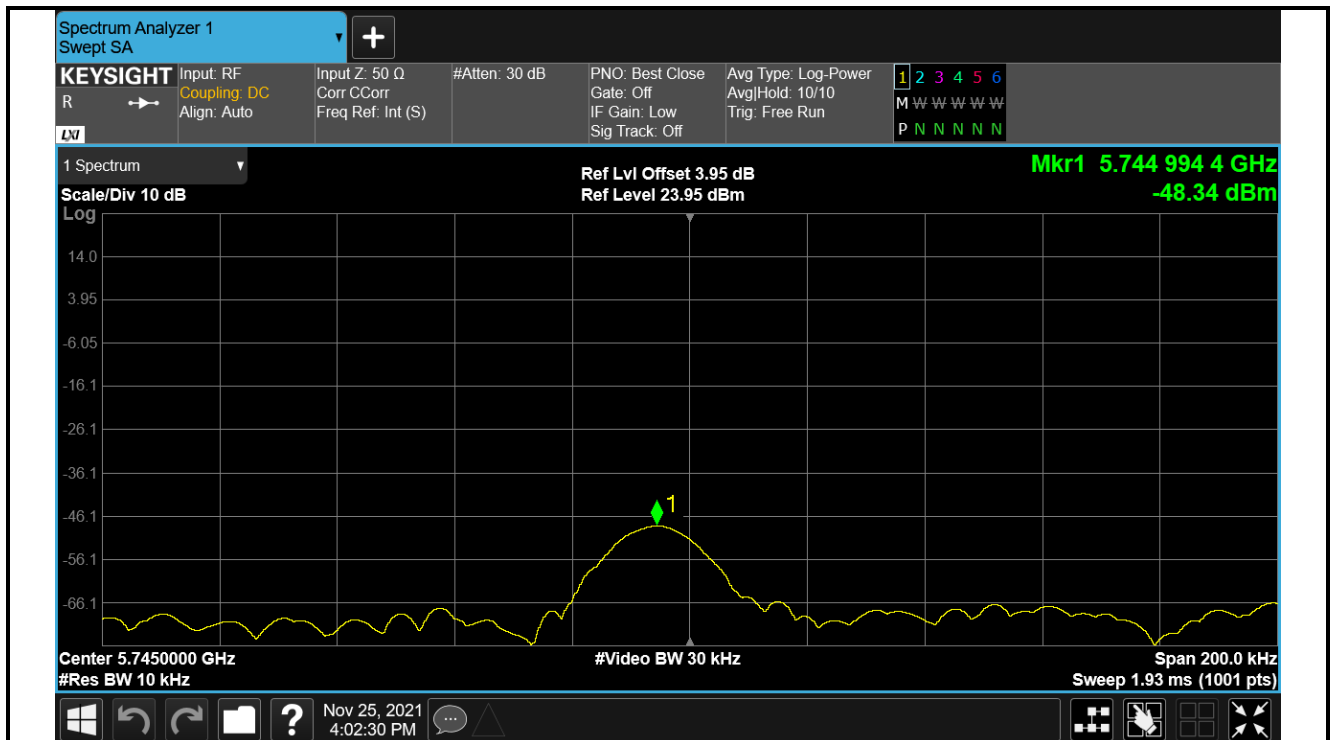
## Freq. Stability HVHT a 5745MHz Ant1



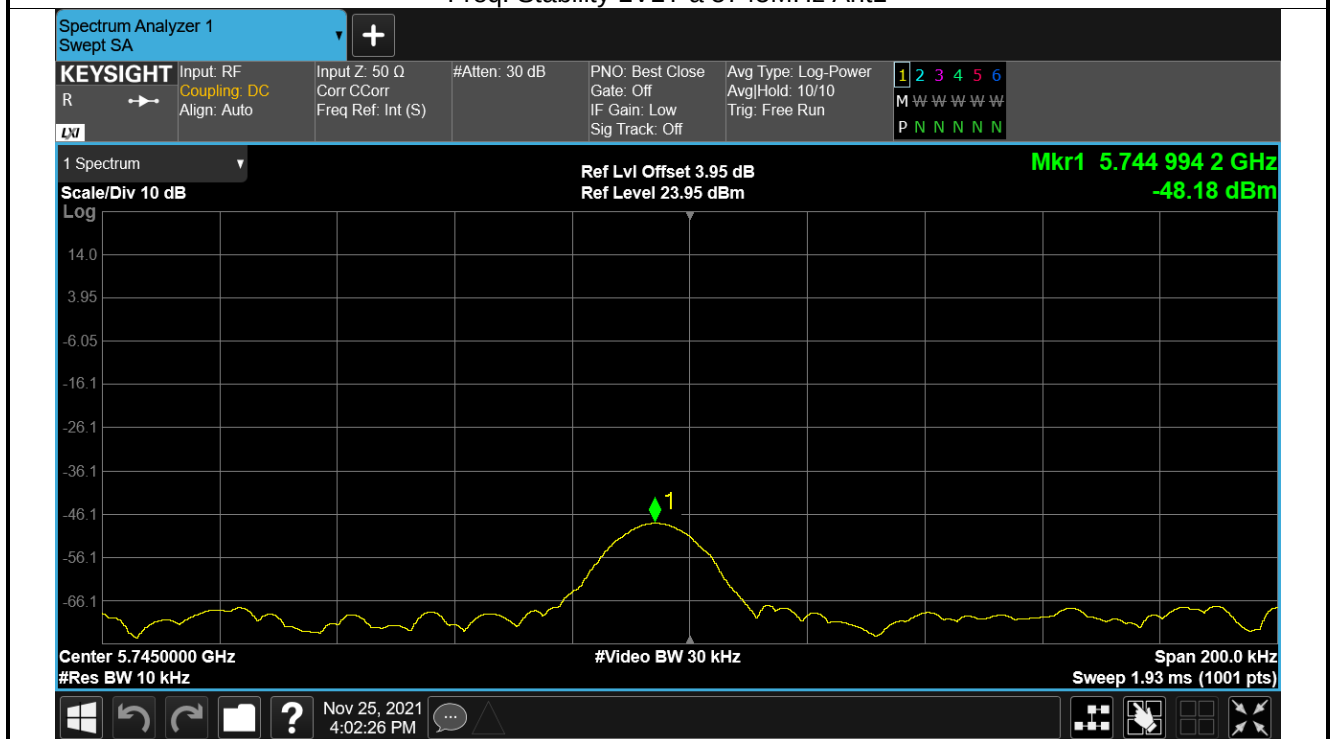
## Freq. Stability HVLT a 5745MHz Ant1



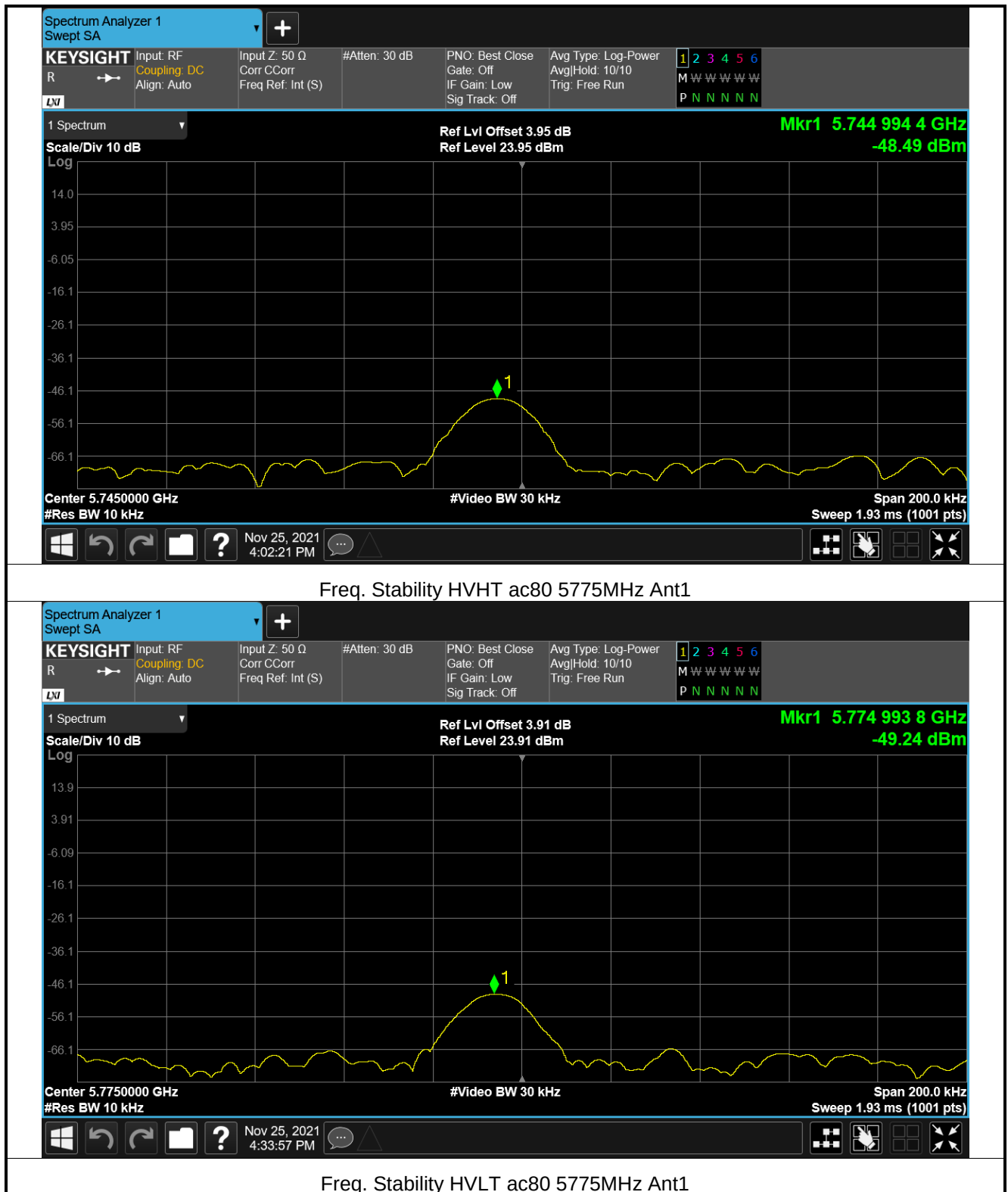
## Freq. Stability LVHT a 5745MHz Ant1



Freq. Stability LVLTA 5745MHz Ant1



Freq. Stability NVNT a 5745MHz Ant1



Spectrum Analyzer 1

Swept SA

+

KEYSIGHT

Input: RF

Coupling: DC

Align: Auto

Input Z: 50  $\Omega$

Corr: CCorr

Freq Ref: Int (S)

#Atten: 30 dB

PNO: Best Close

Gate: Off

IF Gain: Low

Sig Track: Off

Avg Type: Log-Power

Avg|Hold: 10/10

Trig: Free Run

1 2 3 4 5 6

M W W W W W

P N N N N N

1 Spectrum

▼

Ref Lvl Offset 3.91 dB

Ref Level 23.91 dBm

Mkr1 5.774 993 8 GHz

-49.24 dBm

Scale/Div 10 dB

Log

Center 5.7750000 GHz

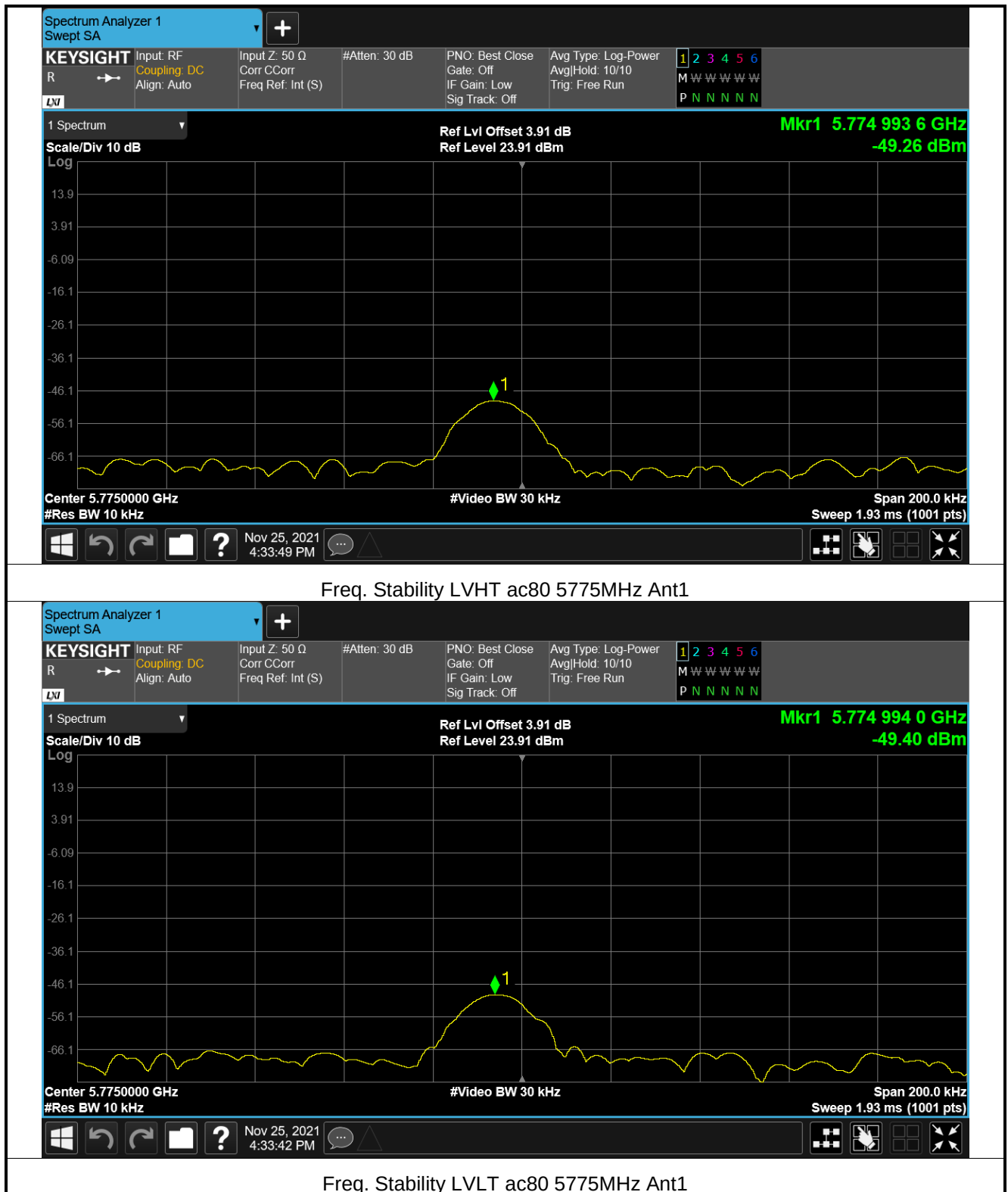
#Res BW 10 kHz

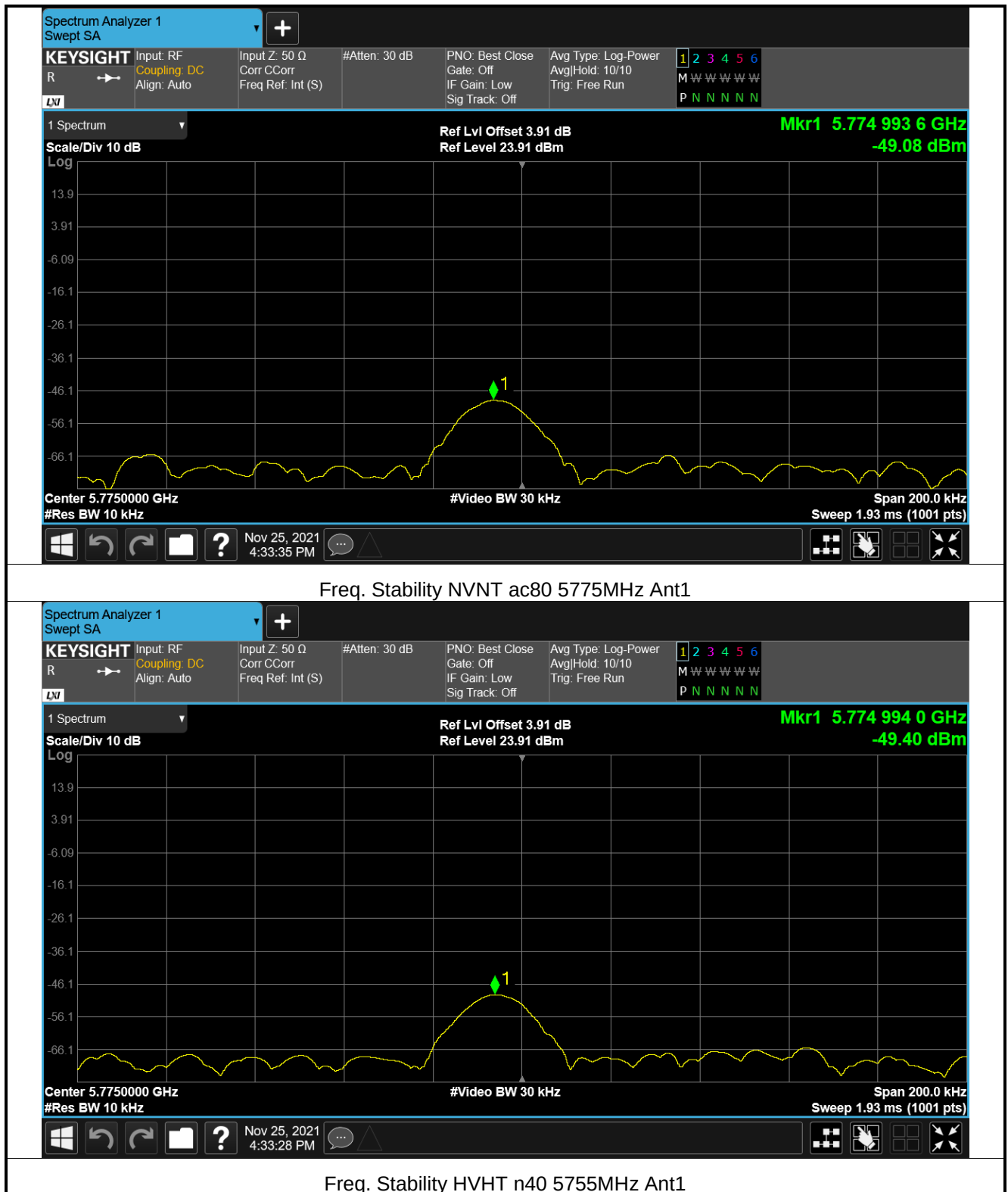
#Video BW 30 kHz

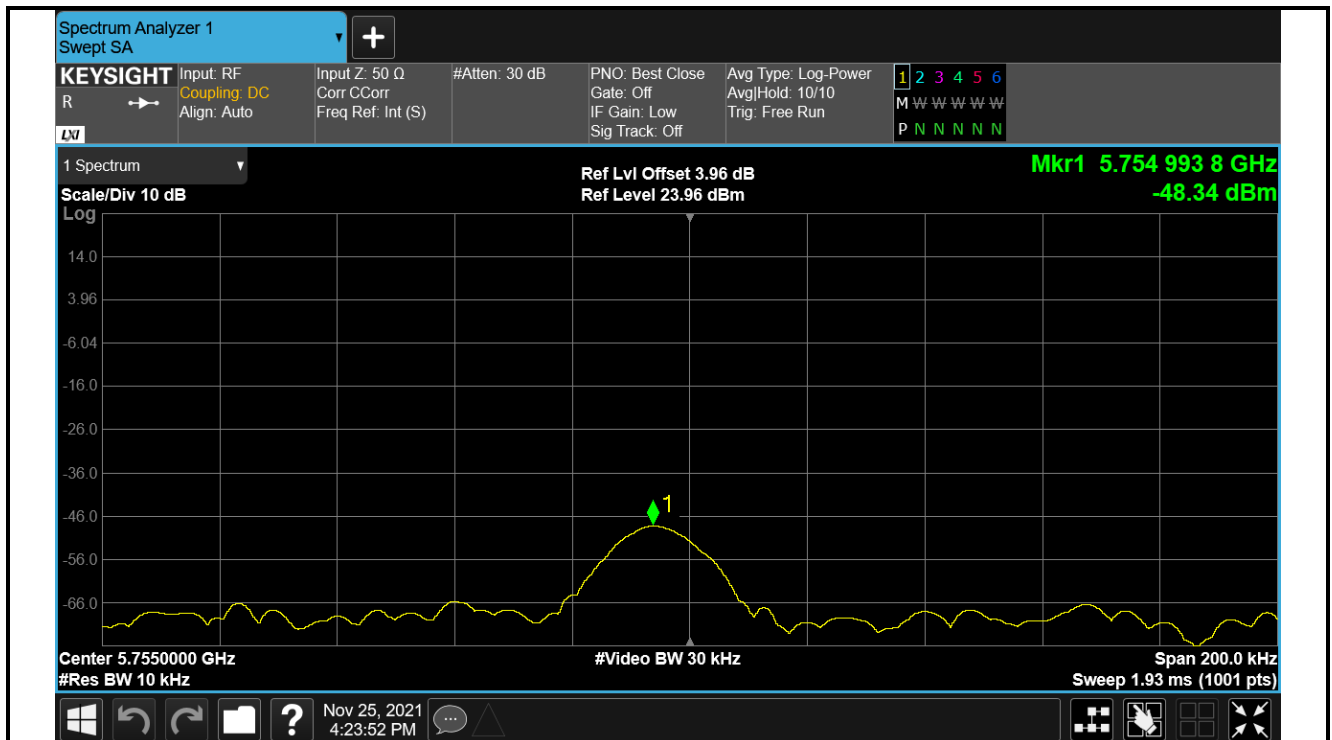
Span 200.0 kHz

Sweep 1.93 ms (1001 pts)

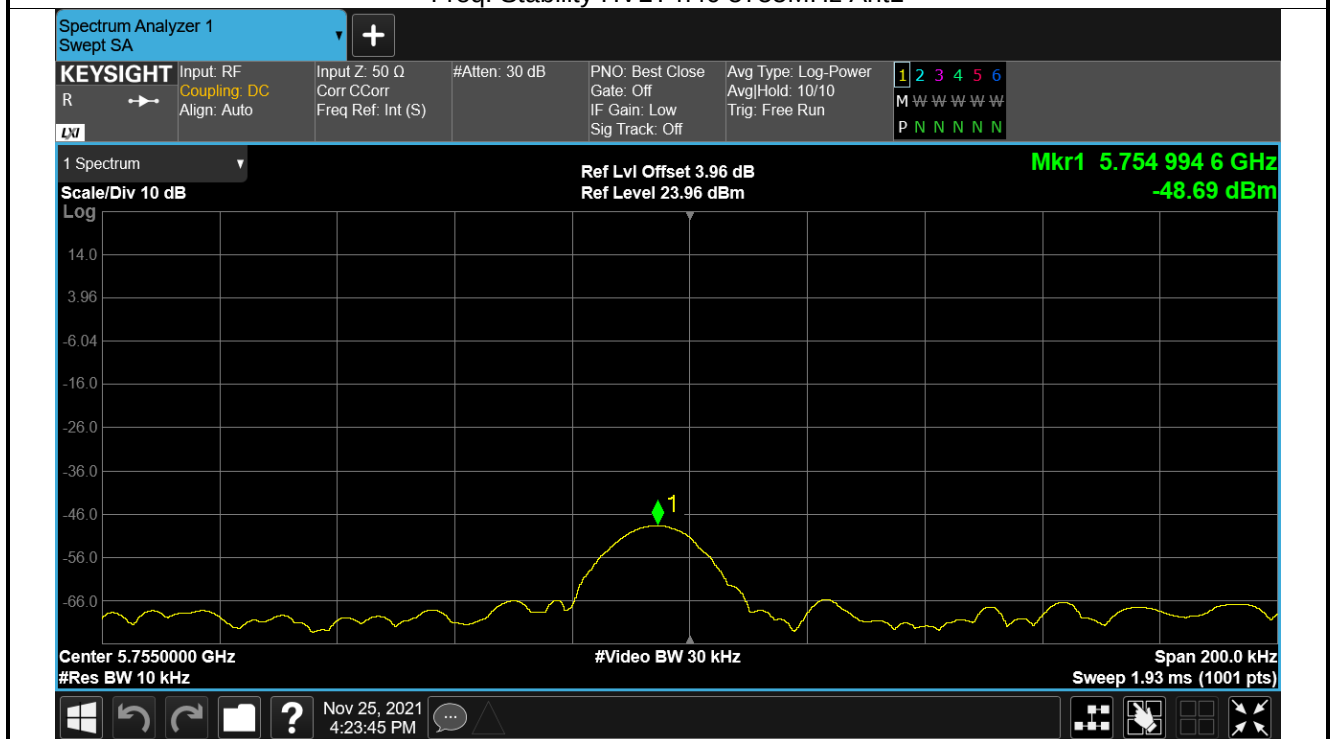
Nov 25, 2021 4:33:57 PM



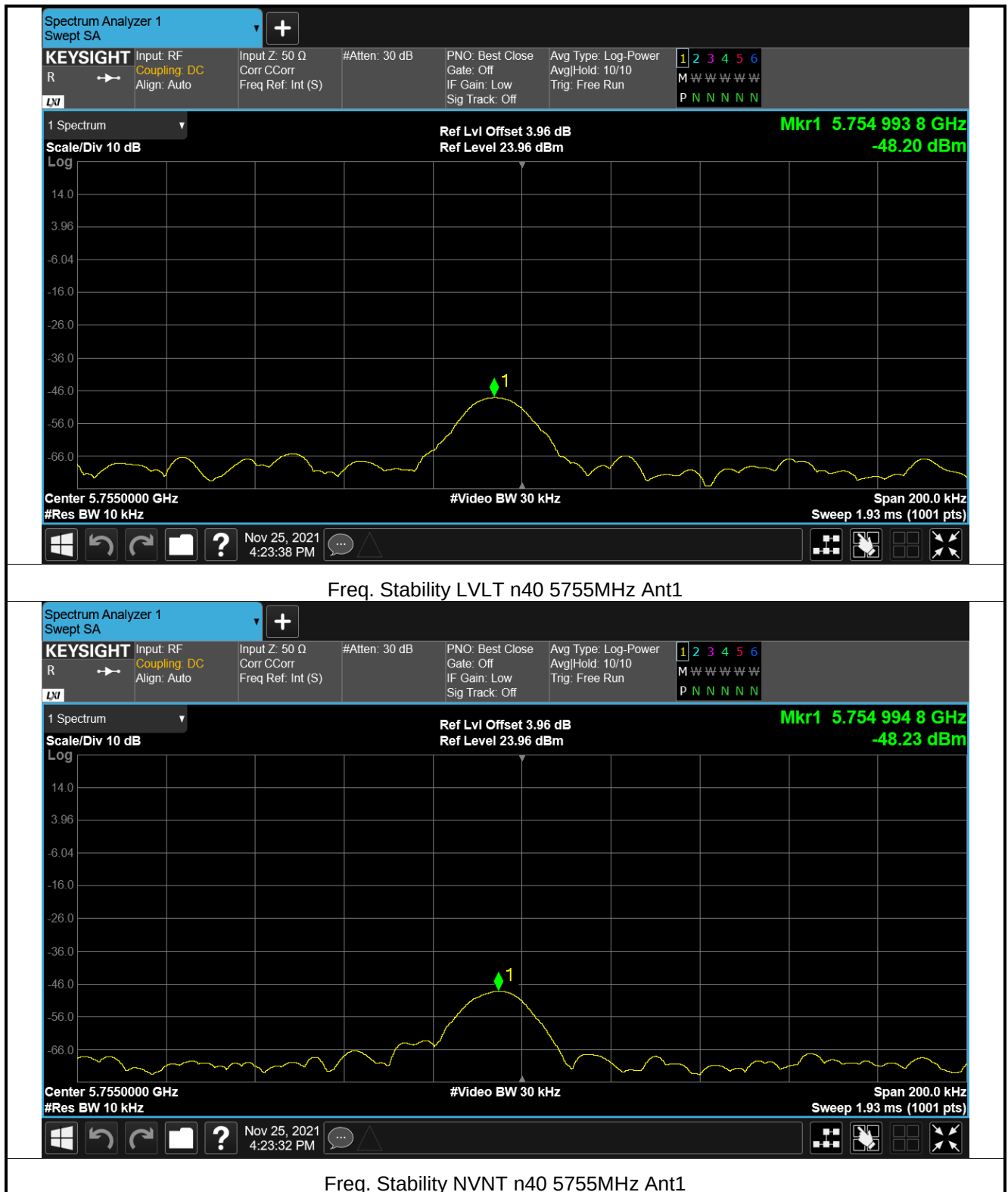


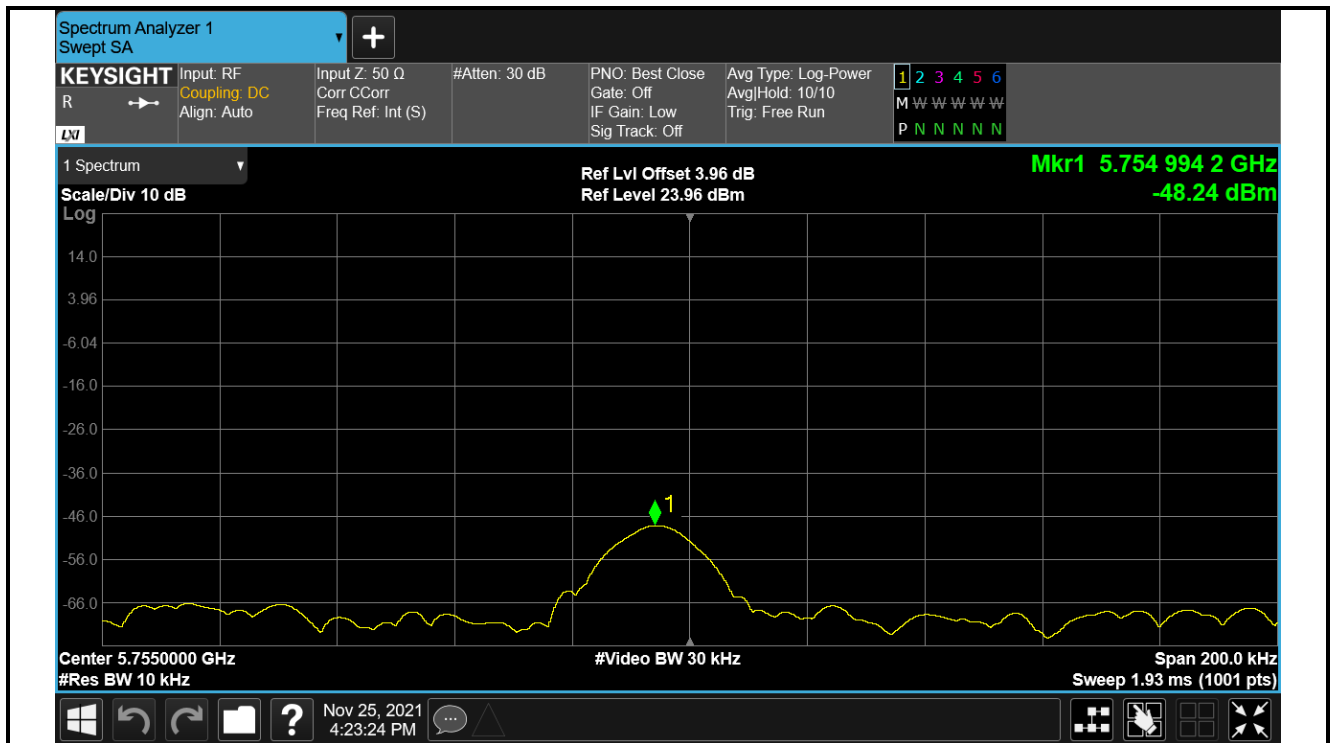


Freq. Stability HVLt n40 5755MHz Ant1



Freq. Stability LVHT n40 5755MHz Ant1



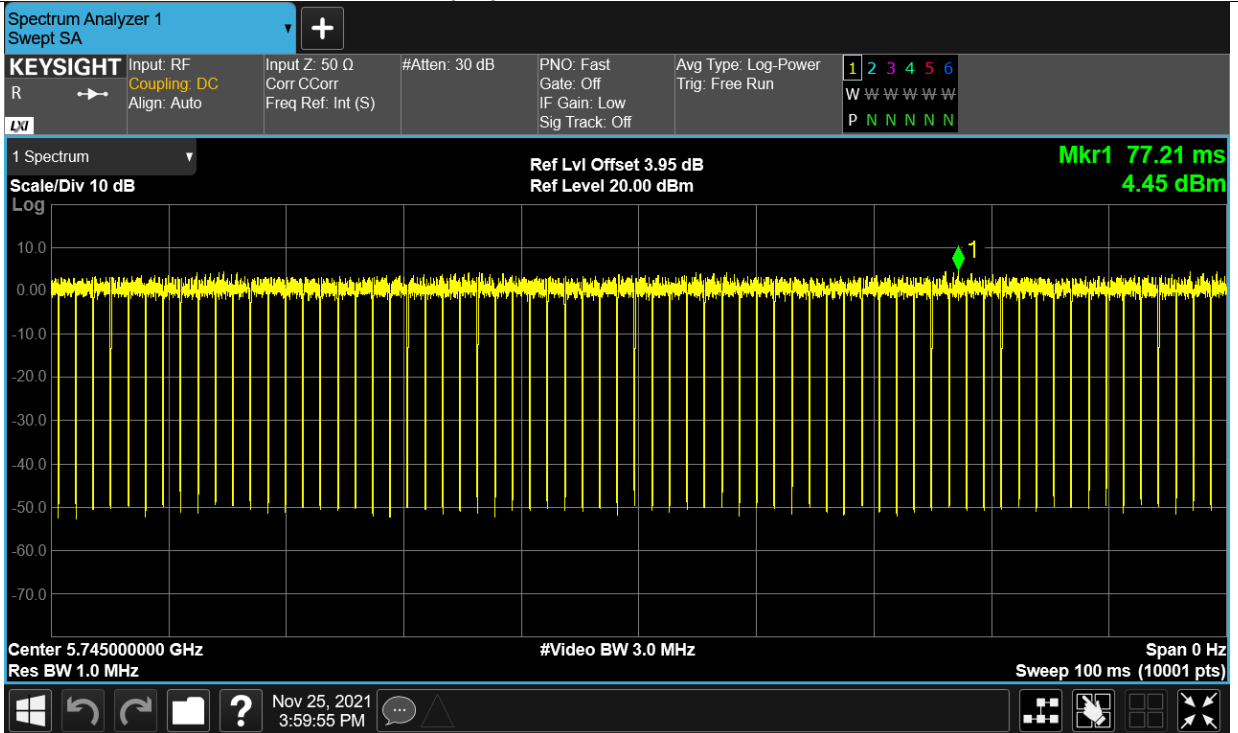


## B.2 Duty Cycle

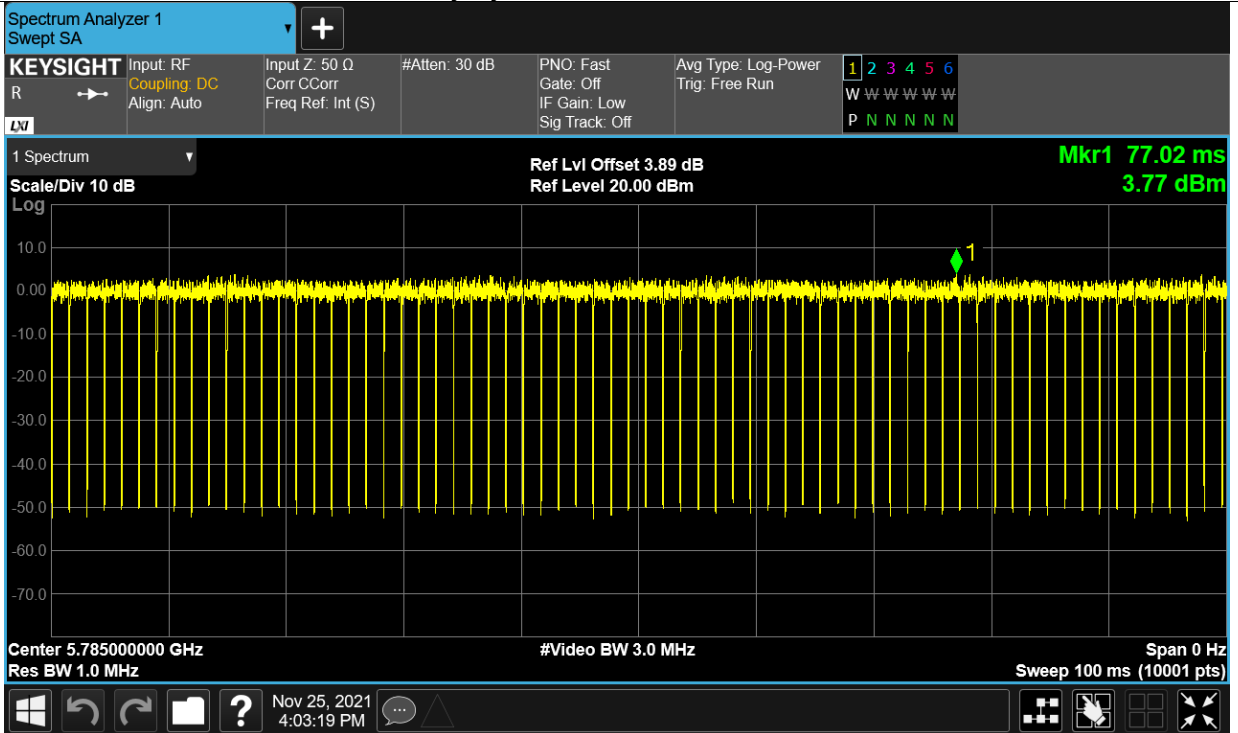
| Condition | Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor (dB) |
|-----------|------|-----------------|---------|----------------|------------------------|
| NVNT      | a    | 5745            | Ant1    | 94.77          | 0.23                   |
| NVNT      | a    | 5785            | Ant1    | 94.69          | 0.24                   |
| NVNT      | a    | 5825            | Ant1    | 94.77          | 0.23                   |
| NVNT      | ac20 | 5745            | Ant1    | 94.46          | 0.25                   |
| NVNT      | ac20 | 5785            | Ant1    | 94.24          | 0.26                   |
| NVNT      | ac20 | 5825            | Ant1    | 94.46          | 0.25                   |
| NVNT      | ac40 | 5755            | Ant1    | 89.28          | 0.49                   |
| NVNT      | ac40 | 5795            | Ant1    | 89.29          | 0.49                   |
| NVNT      | ac80 | 5775            | Ant1    | 81.14          | 0.91                   |
| NVNT      | n20  | 5745            | Ant1    | 94.24          | 0.26                   |
| NVNT      | n20  | 5785            | Ant1    | 94.32          | 0.25                   |
| NVNT      | n20  | 5825            | Ant1    | 94.32          | 0.25                   |
| NVNT      | n40  | 5755            | Ant1    | 89.47          | 0.48                   |
| NVNT      | n40  | 5795            | Ant1    | 89.12          | 0.5                    |

## Test Graphs

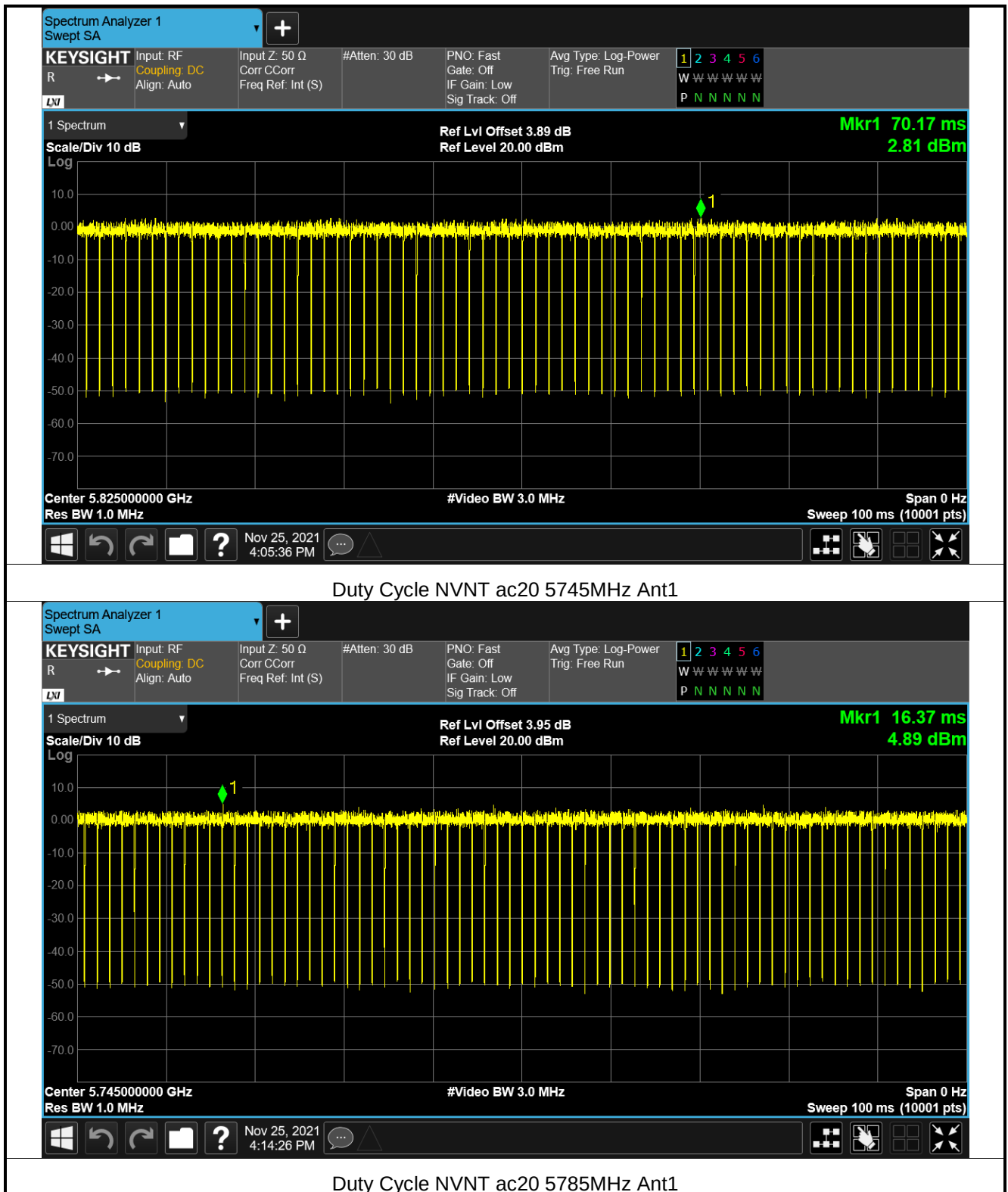
## Duty Cycle NVNT a 5745MHz Ant1

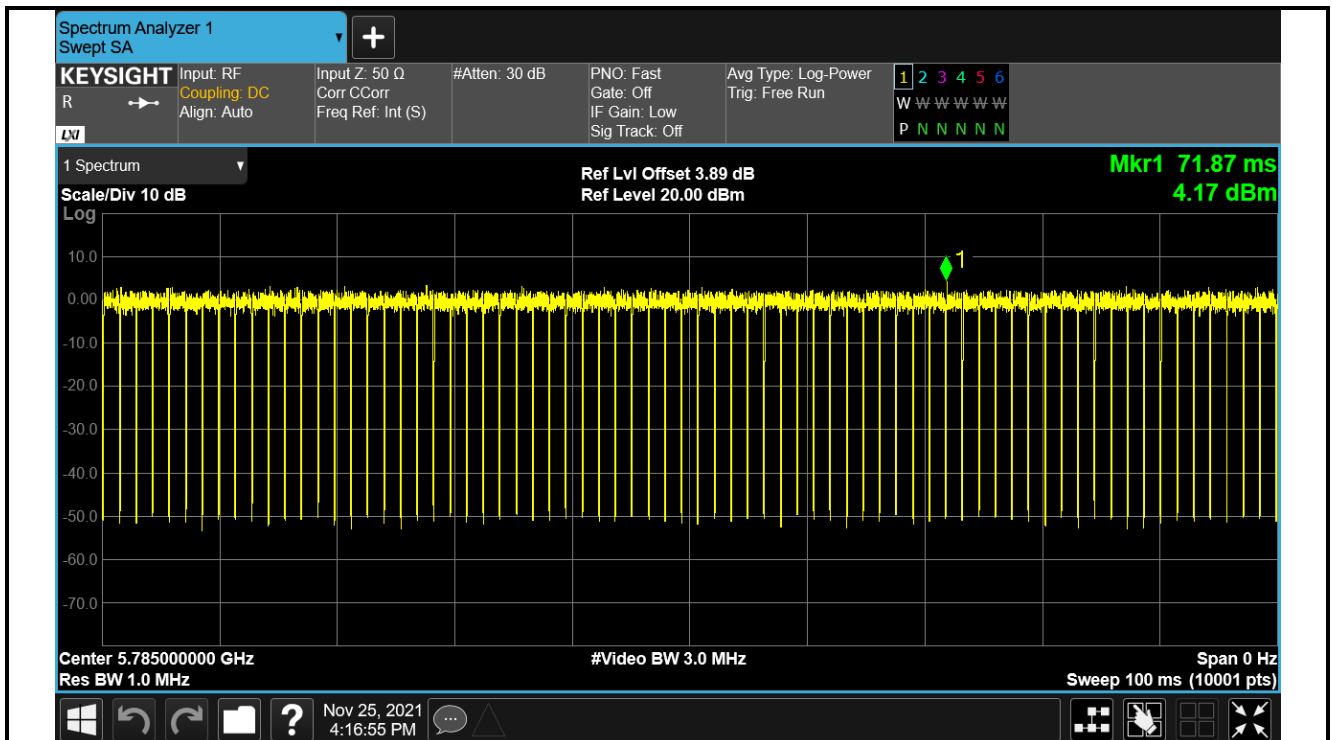


## Duty Cycle NVNT a 5785MHz Ant1

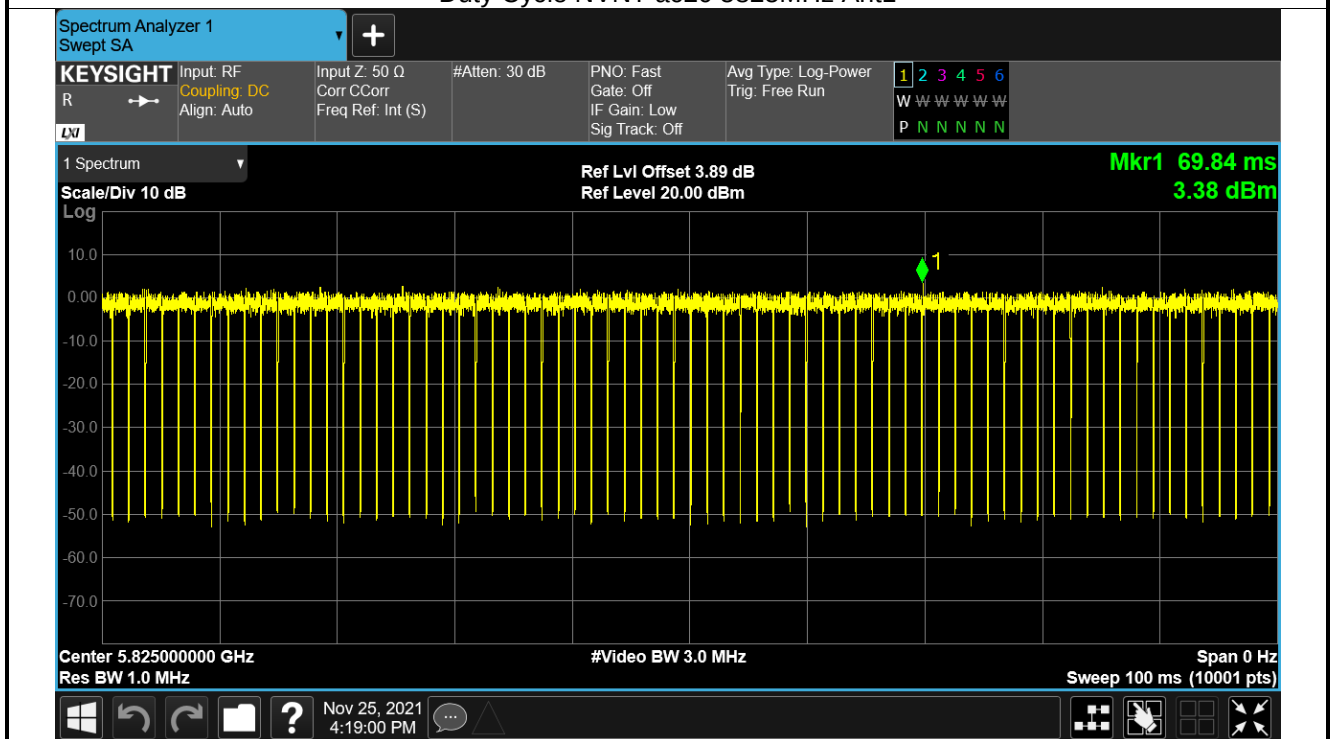


## Duty Cycle NVNT a 5825MHz Ant1

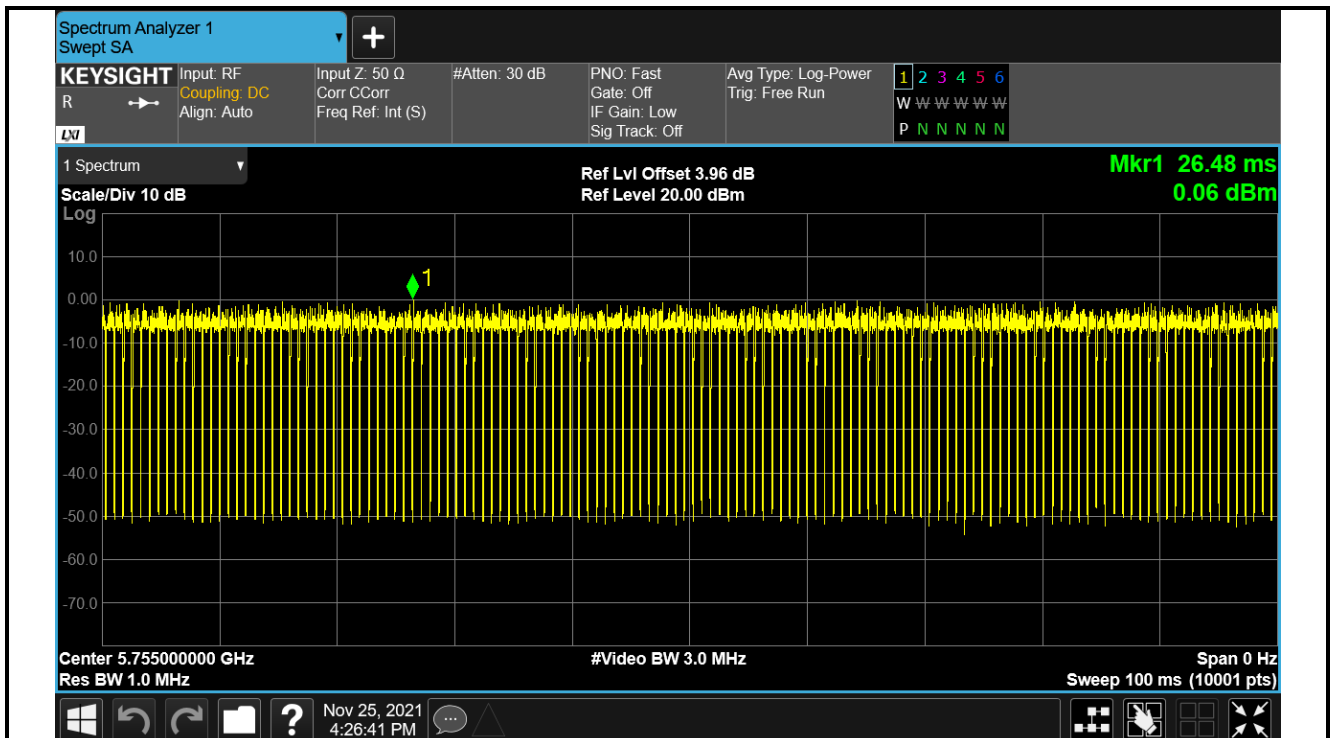




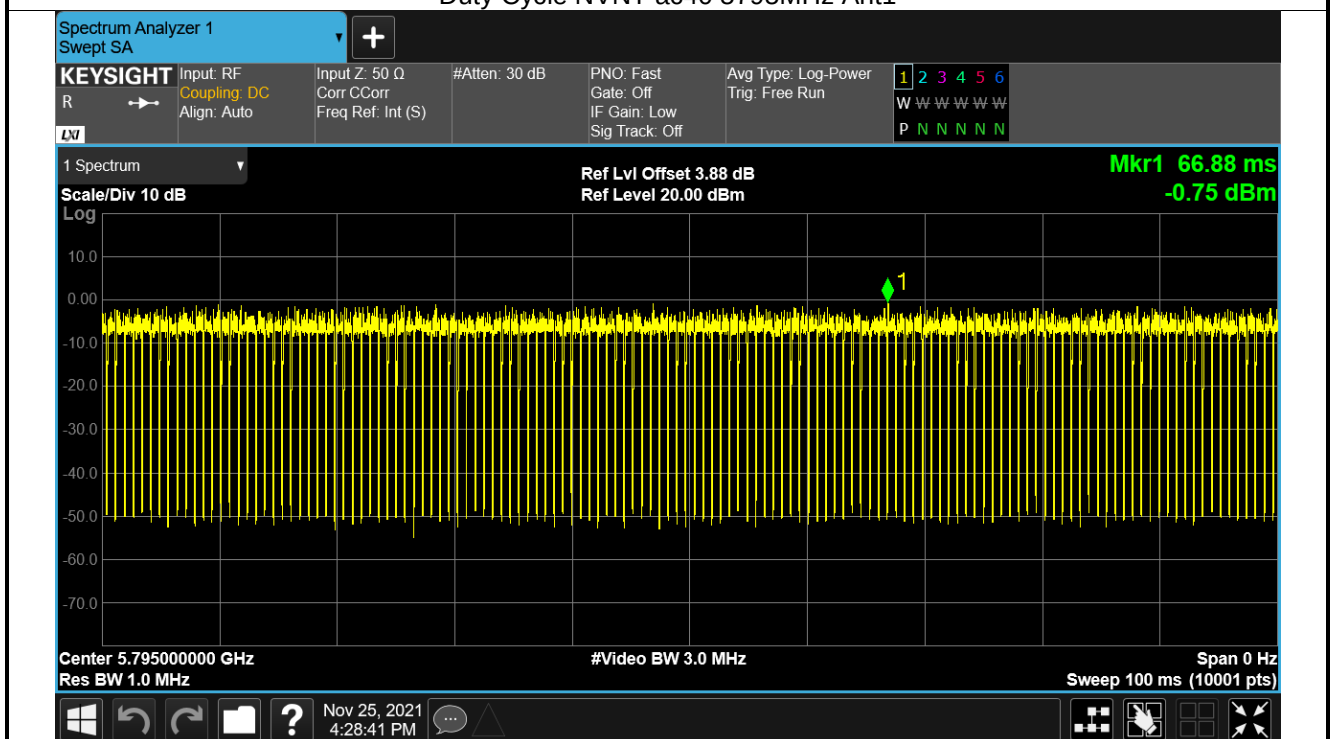
Duty Cycle NVNT ac20 5825MHz Ant1



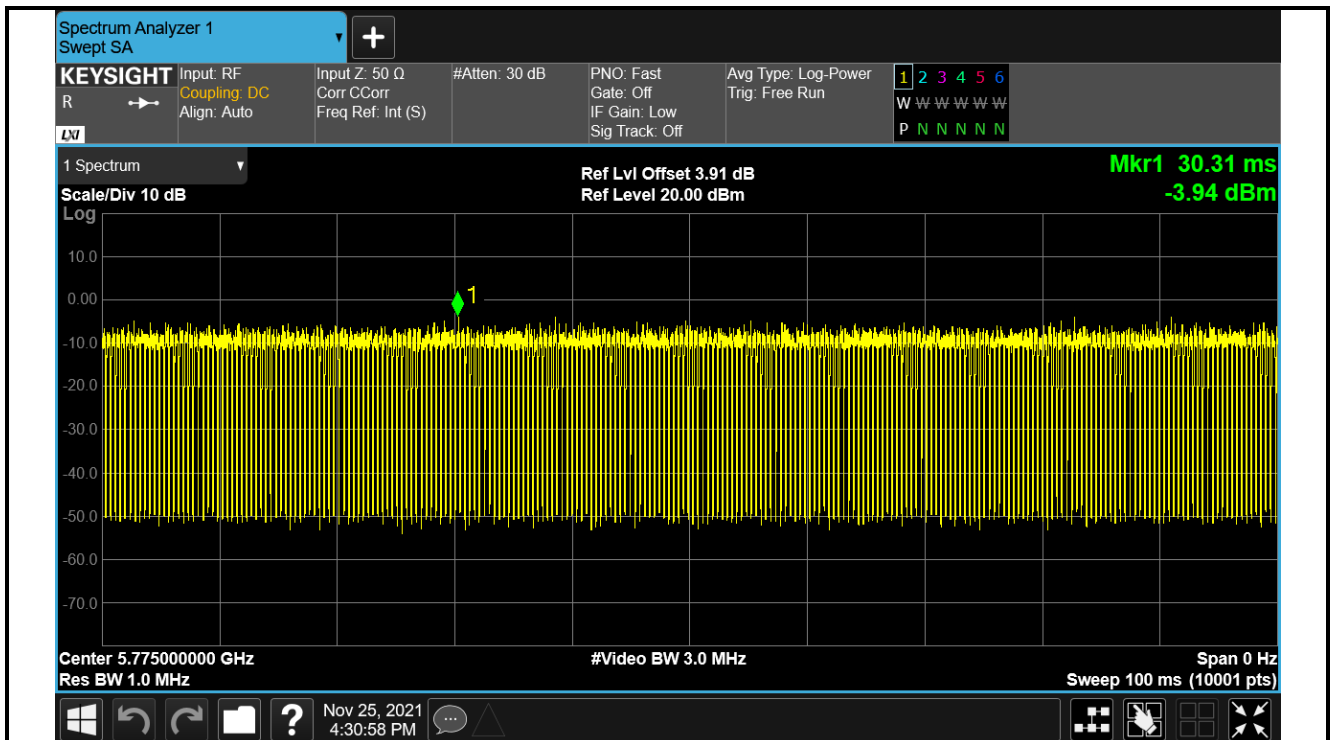
Duty Cycle NVNT ac40 5755MHz Ant1



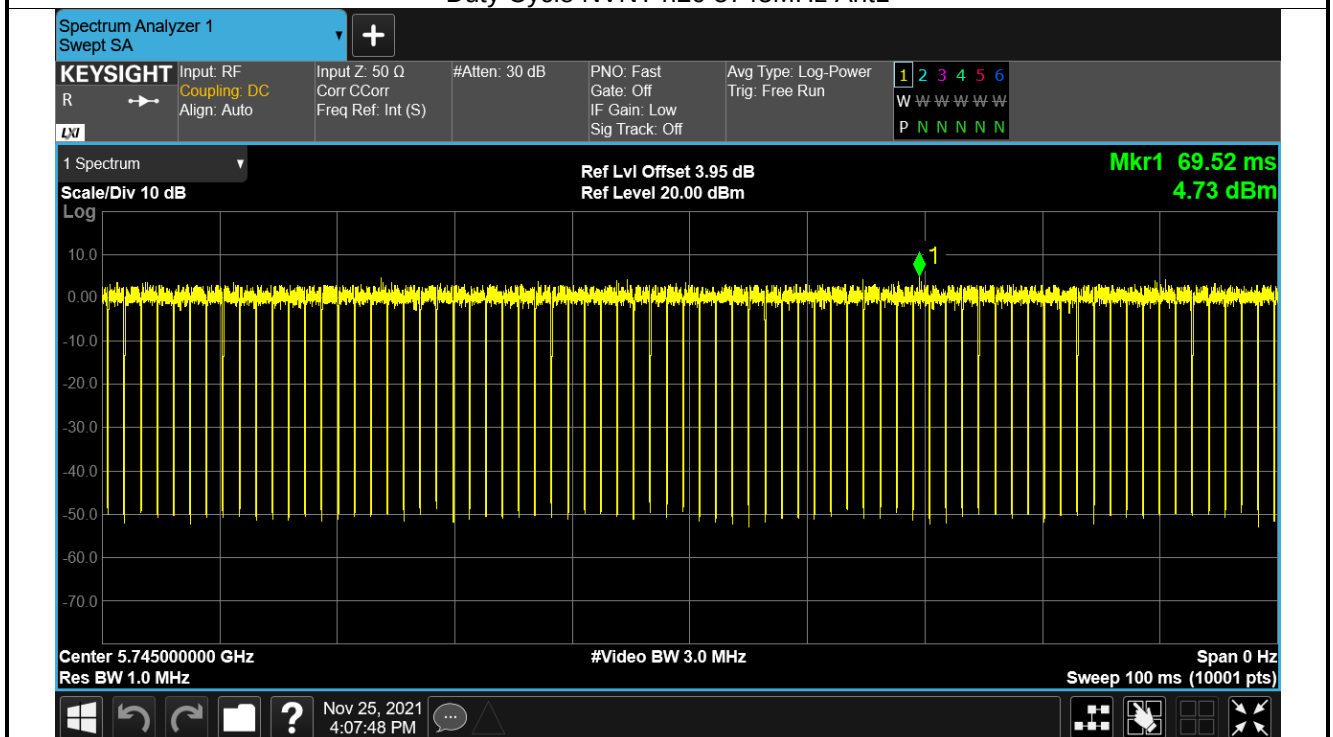
Duty Cycle NVNT ac40 5795MHz Ant1



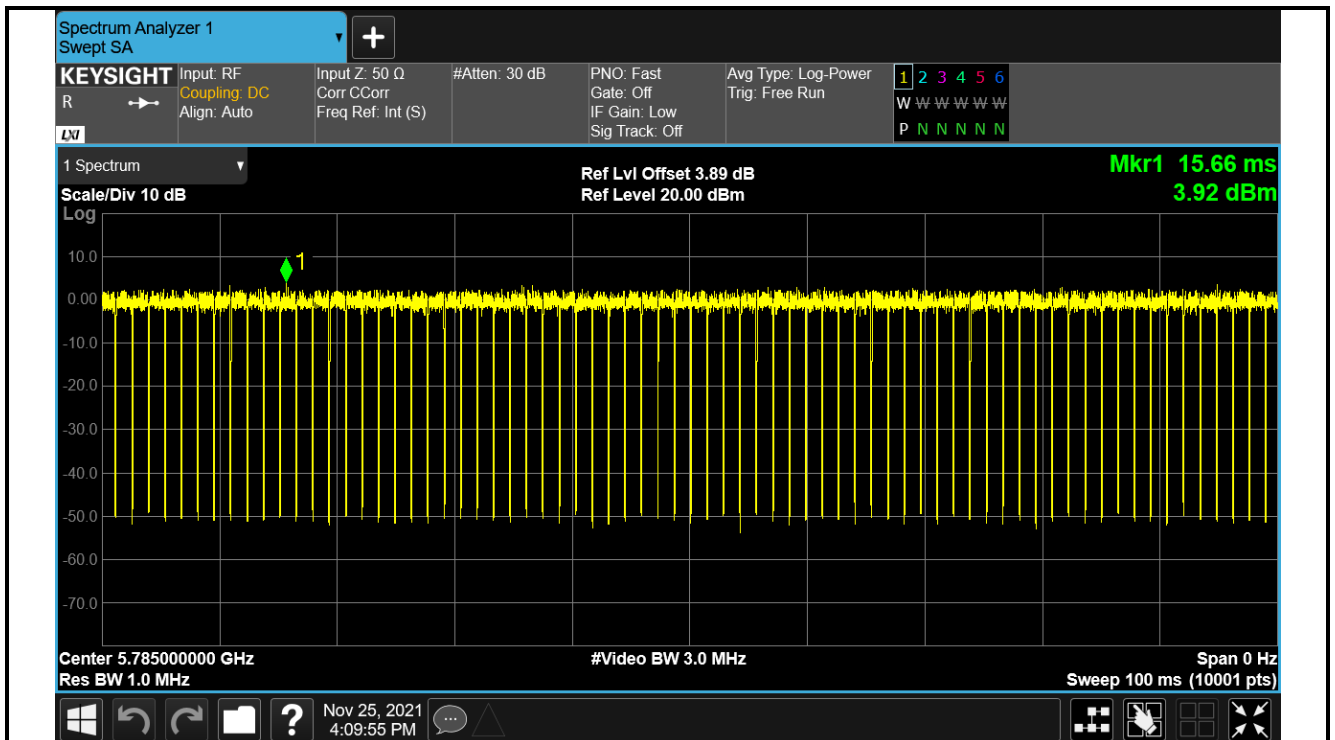
Duty Cycle NVNT ac80 5775MHz Ant1



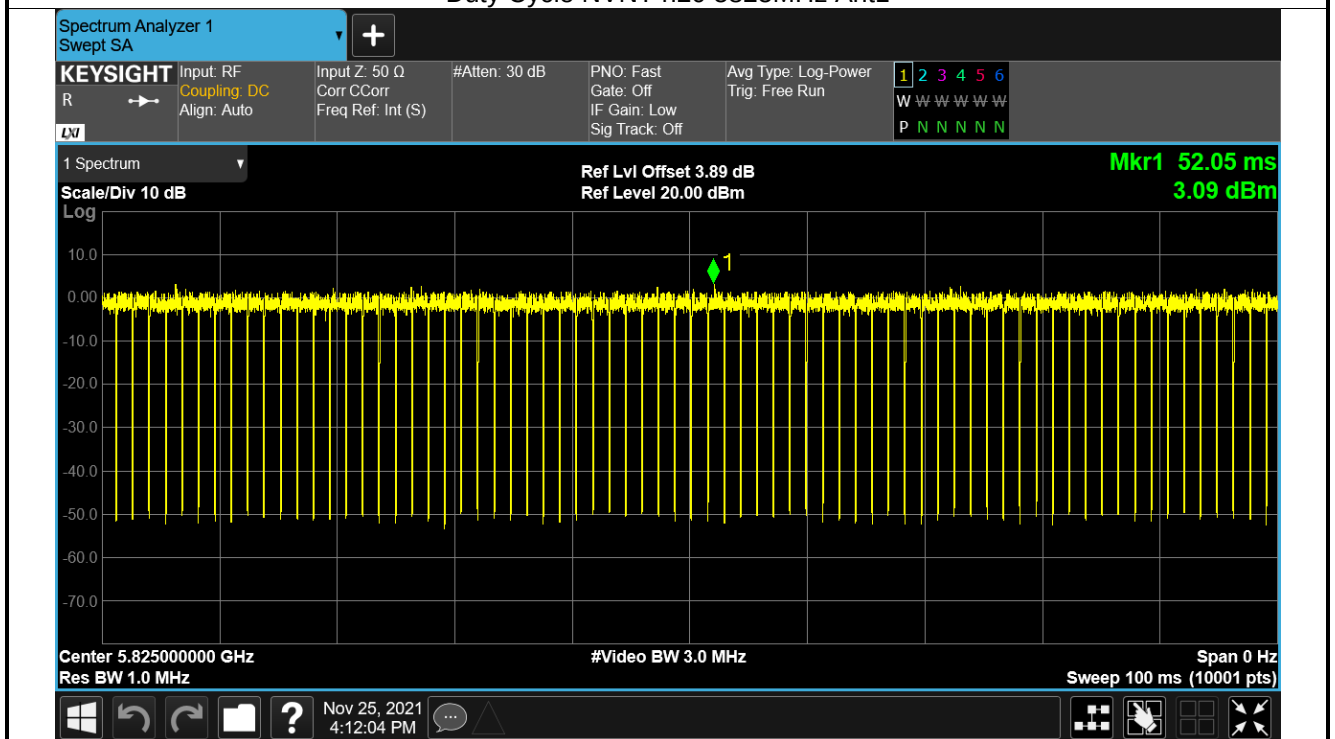
Duty Cycle NVNT n20 5745MHz Ant1



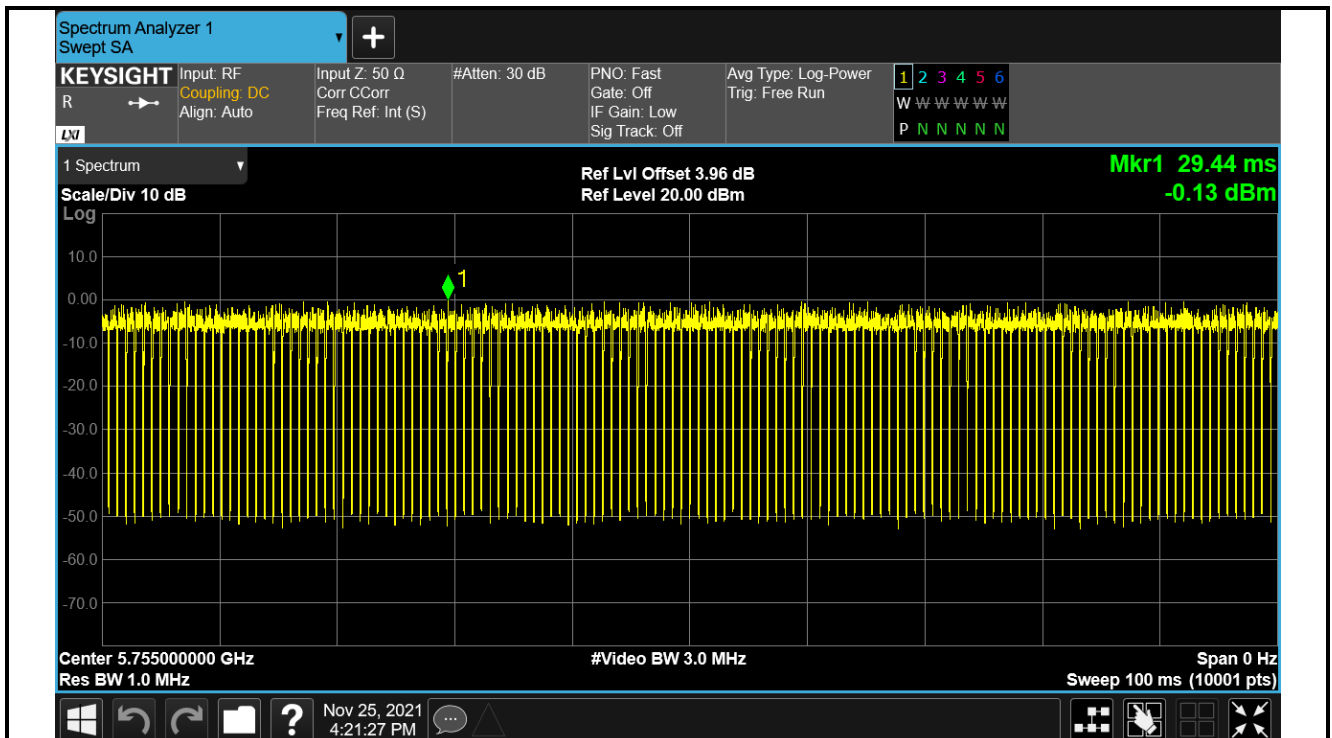
Duty Cycle NVNT n20 5785MHz Ant1



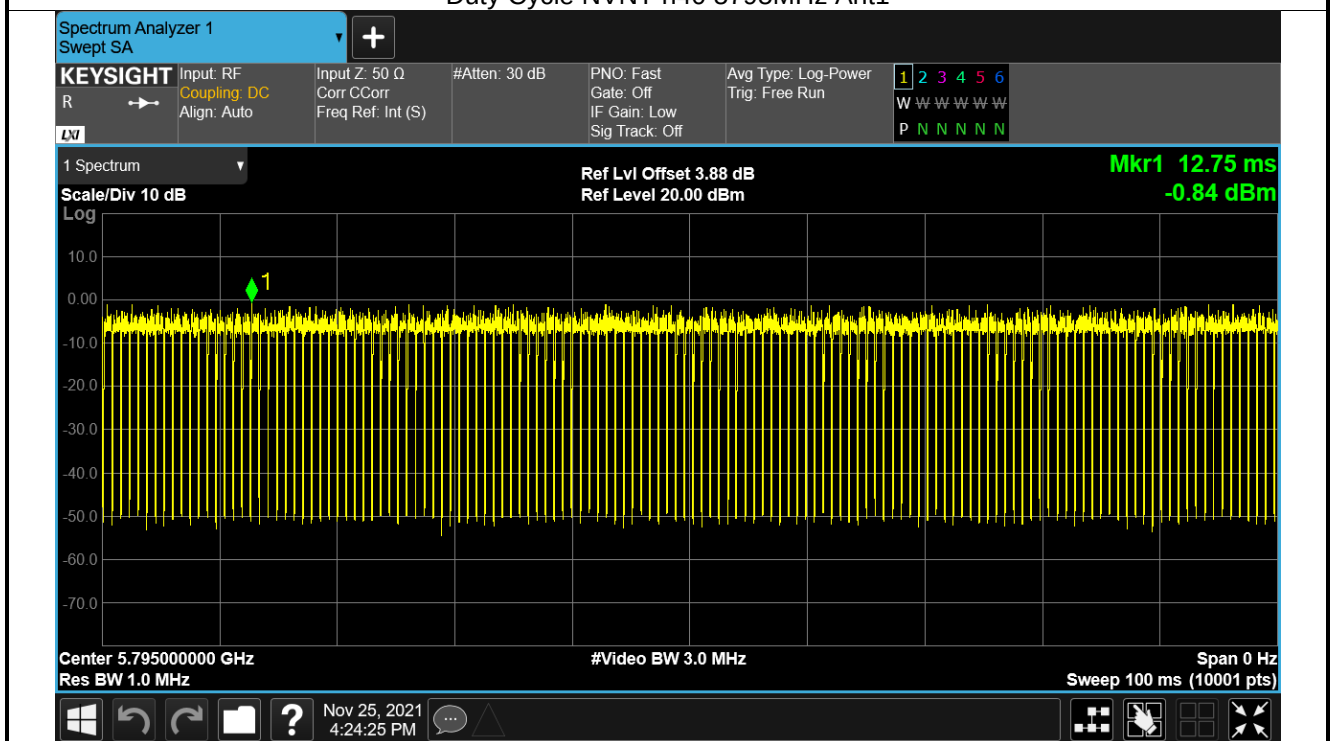
Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1



Duty Cycle NVNT n40 5795MHz Ant1



### B.3 Maximum Conducted Output Power

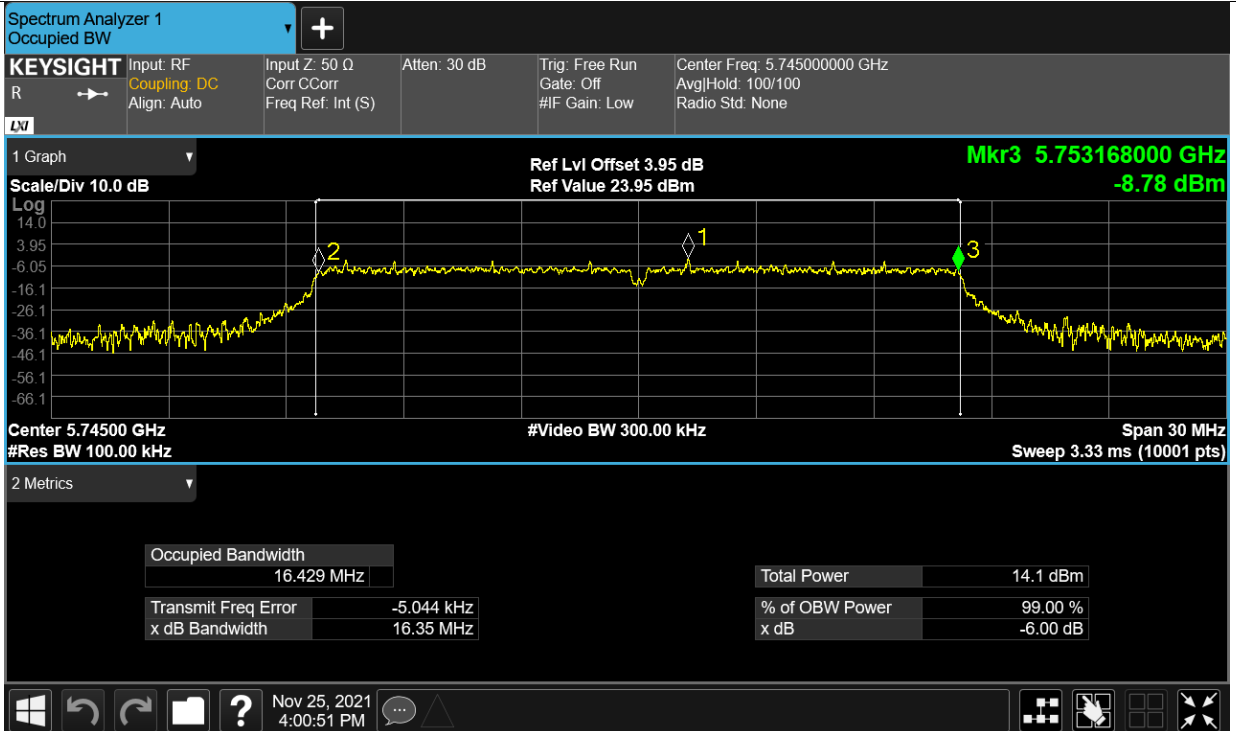
| Condition | Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Duty Factor (dB) | Total Power (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|-----------------------|------------------|-------------------|-------------|---------|
| NVNT      | a    | 5745            | Ant1    | 8.93                  | 0.23             | 9.16              | 30          | Pass    |
| NVNT      | a    | 5785            | Ant1    | 8.44                  | 0.24             | 8.68              | 30          | Pass    |
| NVNT      | a    | 5825            | Ant1    | 8.06                  | 0.23             | 8.29              | 30          | Pass    |
| NVNT      | ac20 | 5745            | Ant1    | 8.72                  | 0.25             | 8.97              | 30          | Pass    |
| NVNT      | ac20 | 5785            | Ant1    | 8.29                  | 0.26             | 8.55              | 30          | Pass    |
| NVNT      | ac20 | 5825            | Ant1    | 7.96                  | 0.25             | 8.21              | 30          | Pass    |
| NVNT      | ac40 | 5755            | Ant1    | 9                     | 0.49             | 9.49              | 30          | Pass    |
| NVNT      | ac40 | 5795            | Ant1    | 8.57                  | 0.49             | 9.06              | 30          | Pass    |
| NVNT      | ac80 | 5775            | Ant1    | 8.6                   | 0.91             | 9.51              | 30          | Pass    |
| NVNT      | n20  | 5745            | Ant1    | 8.86                  | 0.26             | 9.12              | 30          | Pass    |
| NVNT      | n20  | 5785            | Ant1    | 8.3                   | 0.25             | 8.55              | 30          | Pass    |
| NVNT      | n20  | 5825            | Ant1    | 7.98                  | 0.25             | 8.23              | 30          | Pass    |
| NVNT      | n40  | 5755            | Ant1    | 9.05                  | 0.48             | 9.53              | 30          | Pass    |
| NVNT      | n40  | 5795            | Ant1    | 8.73                  | 0.5              | 9.23              | 30          | Pass    |

## B.4 -6dB Bandwidth

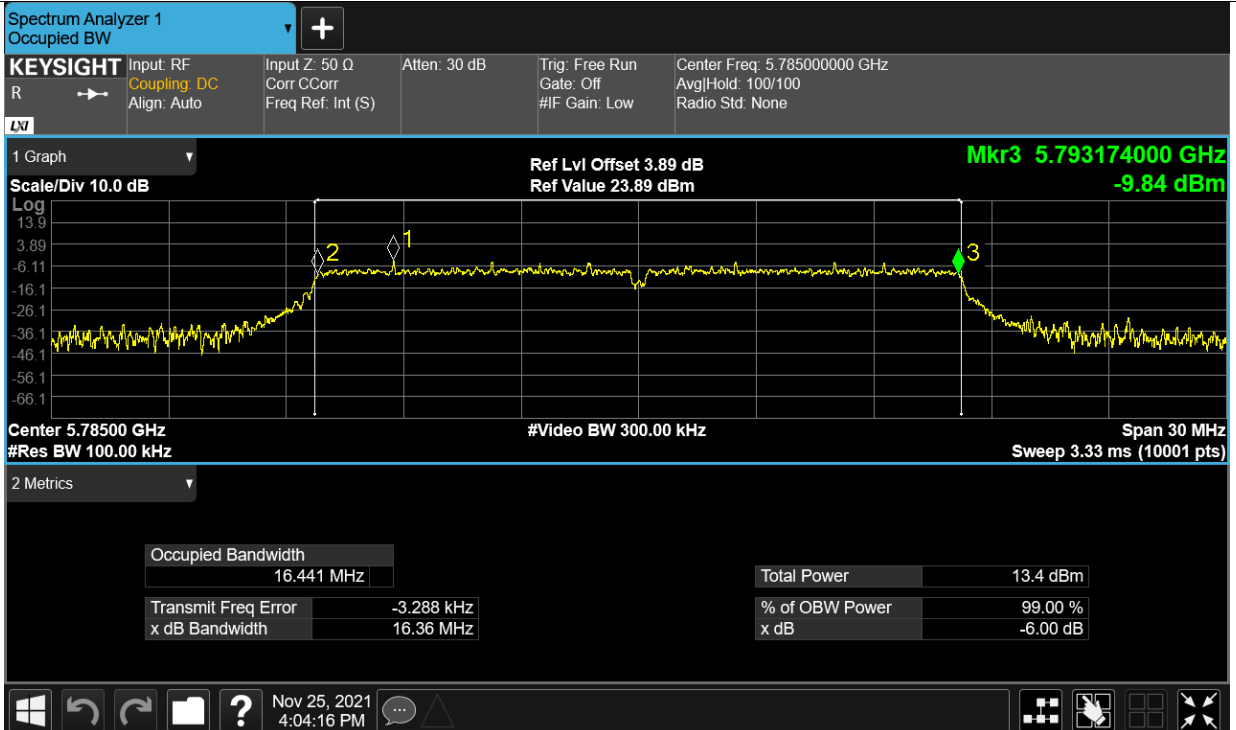
| Condition | Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|-----------|------|-----------------|---------|-----------------------|-----------------------------|---------|
| NVNT      | a    | 5745            | Ant1    | 16.345                | 0.5                         | Pass    |
| NVNT      | a    | 5785            | Ant1    | 16.355                | 0.5                         | Pass    |
| NVNT      | a    | 5825            | Ant1    | 16.355                | 0.5                         | Pass    |
| NVNT      | ac20 | 5745            | Ant1    | 17.327                | 0.5                         | Pass    |
| NVNT      | ac20 | 5785            | Ant1    | 17.082                | 0.5                         | Pass    |
| NVNT      | ac20 | 5825            | Ant1    | 17.294                | 0.5                         | Pass    |
| NVNT      | ac40 | 5755            | Ant1    | 35.704                | 0.5                         | Pass    |
| NVNT      | ac40 | 5795            | Ant1    | 35.674                | 0.5                         | Pass    |
| NVNT      | ac80 | 5775            | Ant1    | 75.554                | 0.5                         | Pass    |
| NVNT      | n20  | 5745            | Ant1    | 17.542                | 0.5                         | Pass    |
| NVNT      | n20  | 5785            | Ant1    | 17.158                | 0.5                         | Pass    |
| NVNT      | n20  | 5825            | Ant1    | 17.18                 | 0.5                         | Pass    |
| NVNT      | n40  | 5755            | Ant1    | 35.635                | 0.5                         | Pass    |
| NVNT      | n40  | 5795            | Ant1    | 35.688                | 0.5                         | Pass    |

## Test Graphs

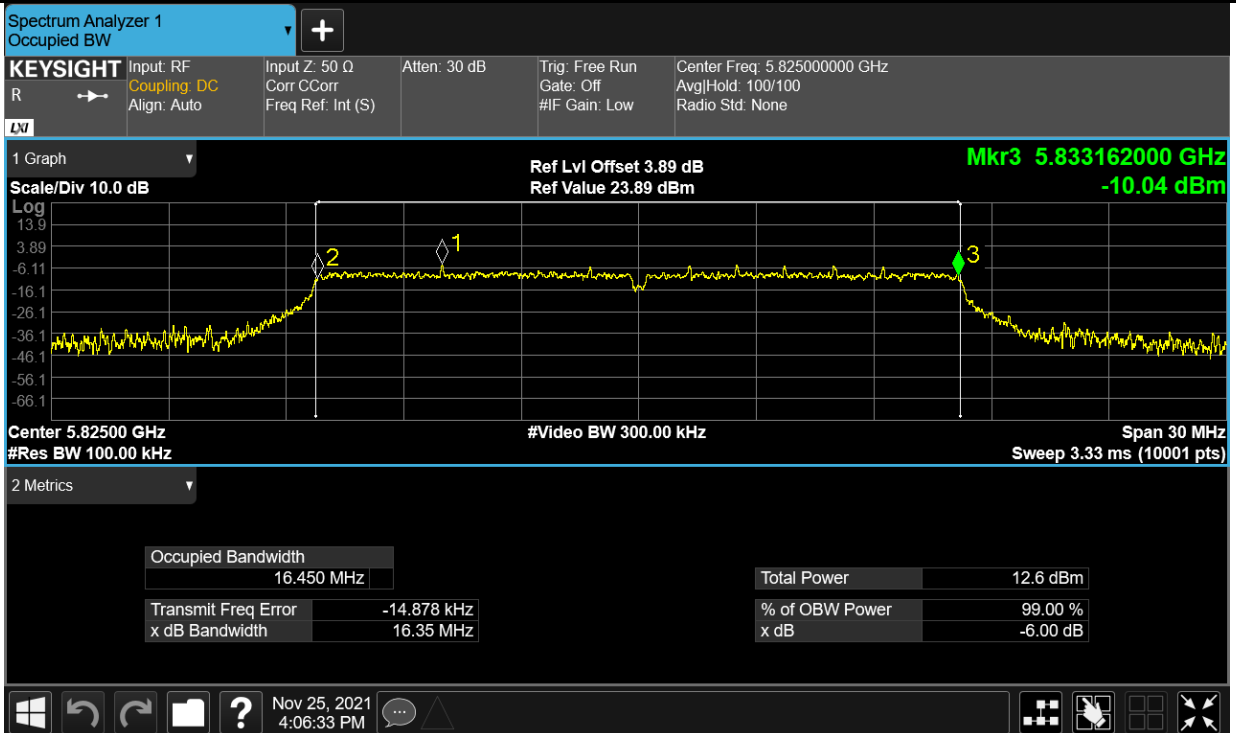
## -6dB Bandwidth NVNT a 5745MHz Ant1



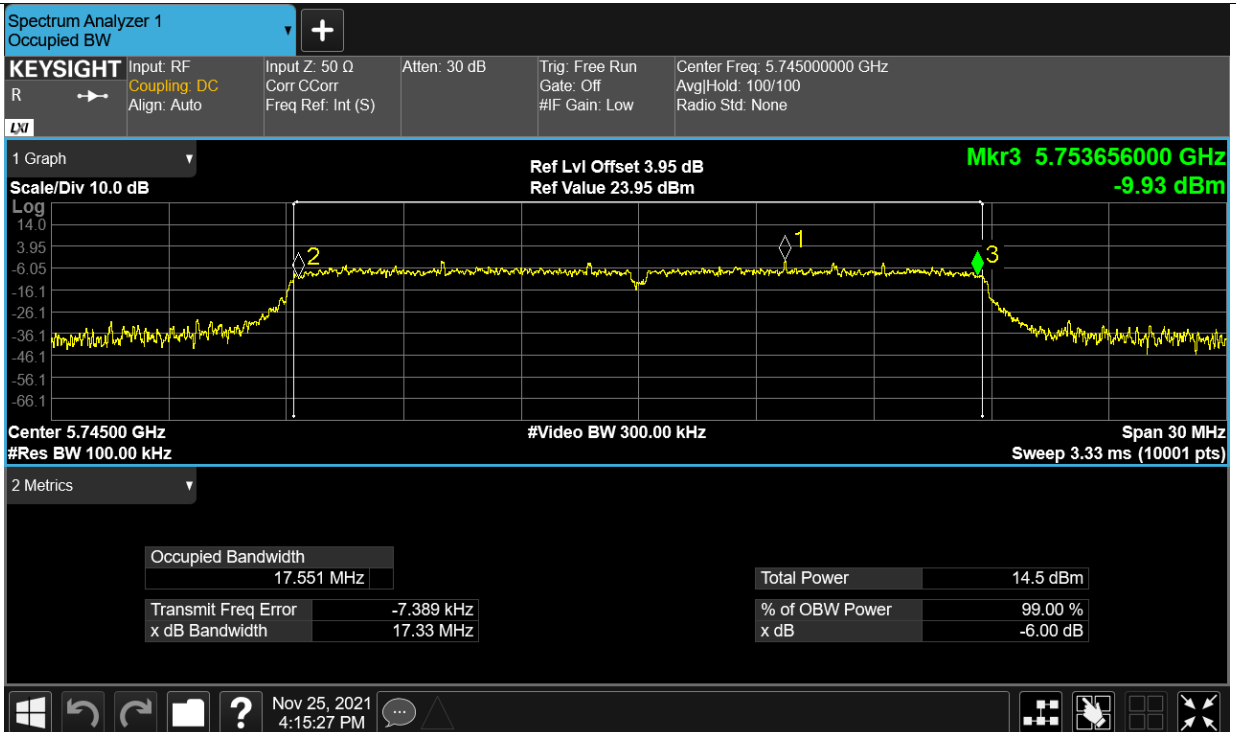
## -6dB Bandwidth NVNT a 5785MHz Ant1



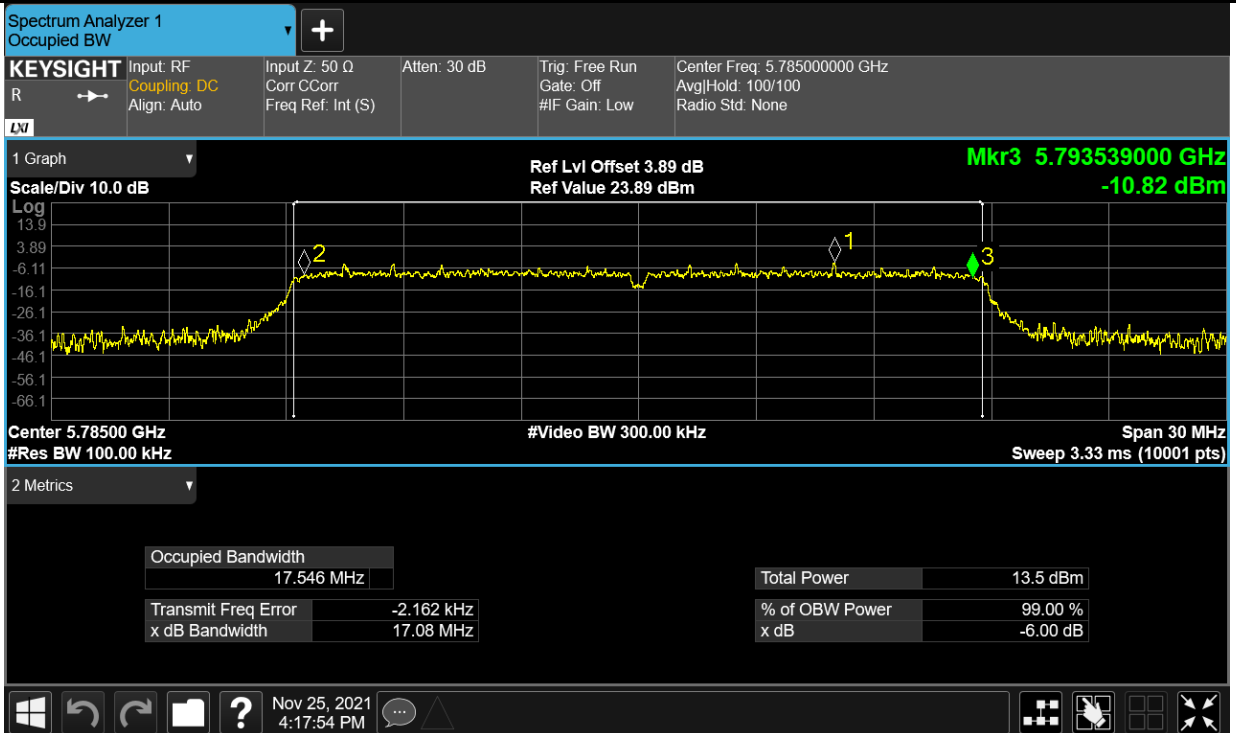
## -6dB Bandwidth NVNT a 5825MHz Ant1



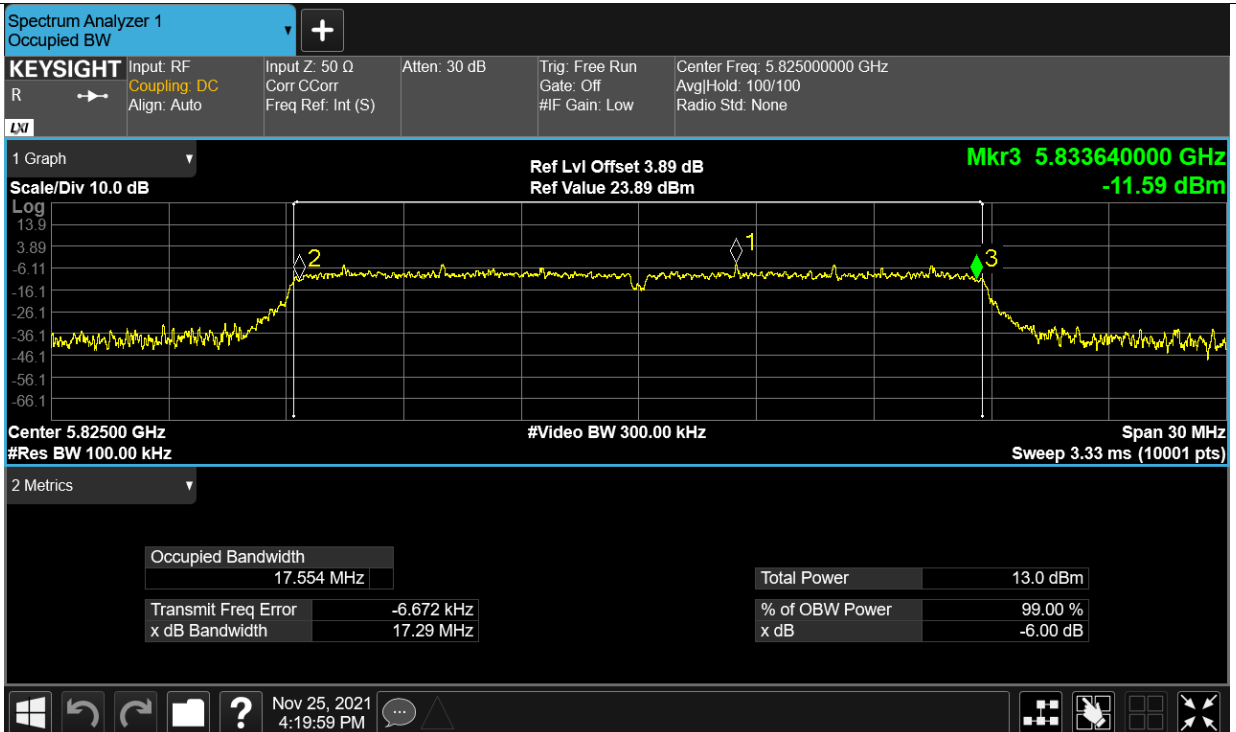
-6dB Bandwidth NVNT ac20 5745MHz Ant1



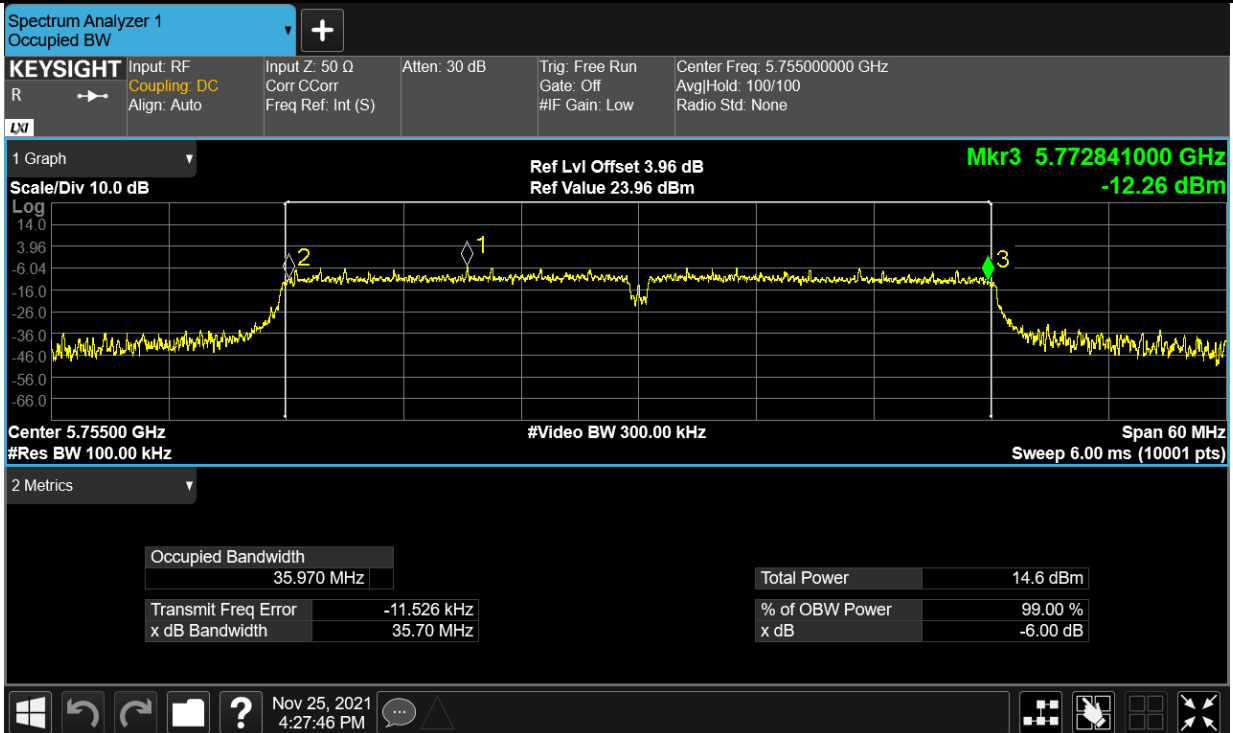
-6dB Bandwidth NVNT ac20 5785MHz Ant1



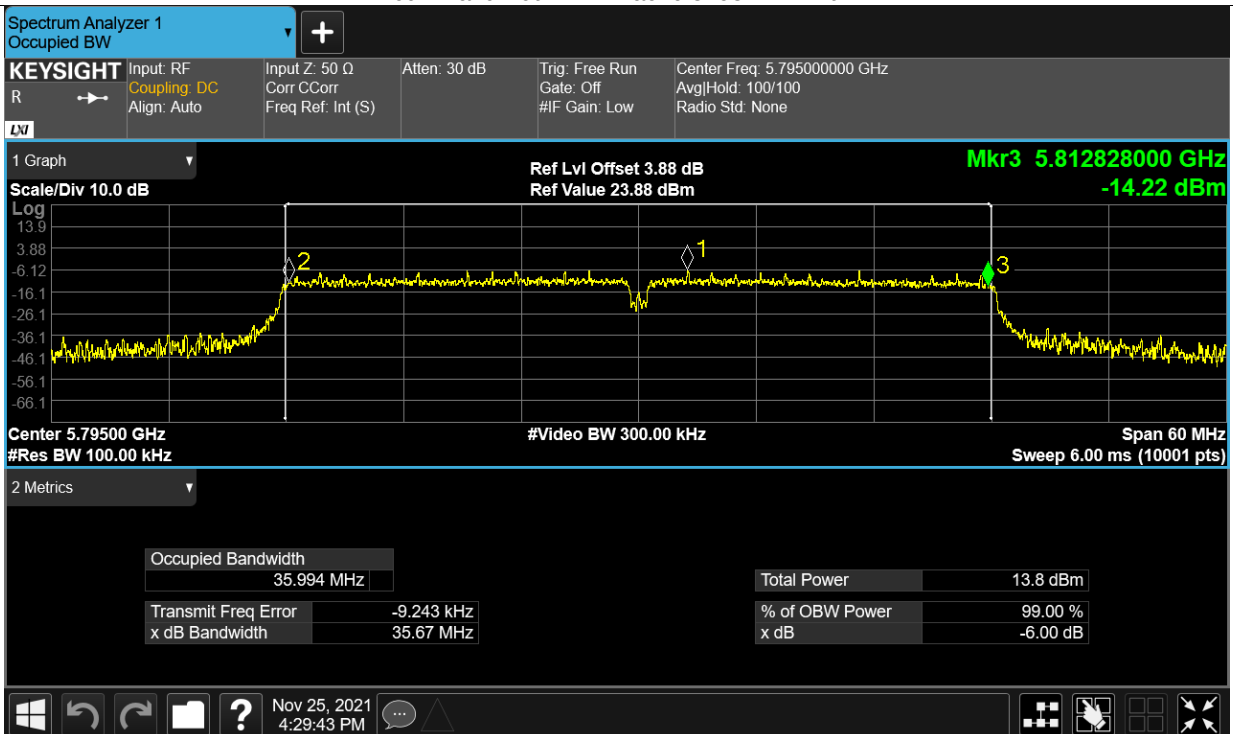
-6dB Bandwidth NVNT ac20 5825MHz Ant1



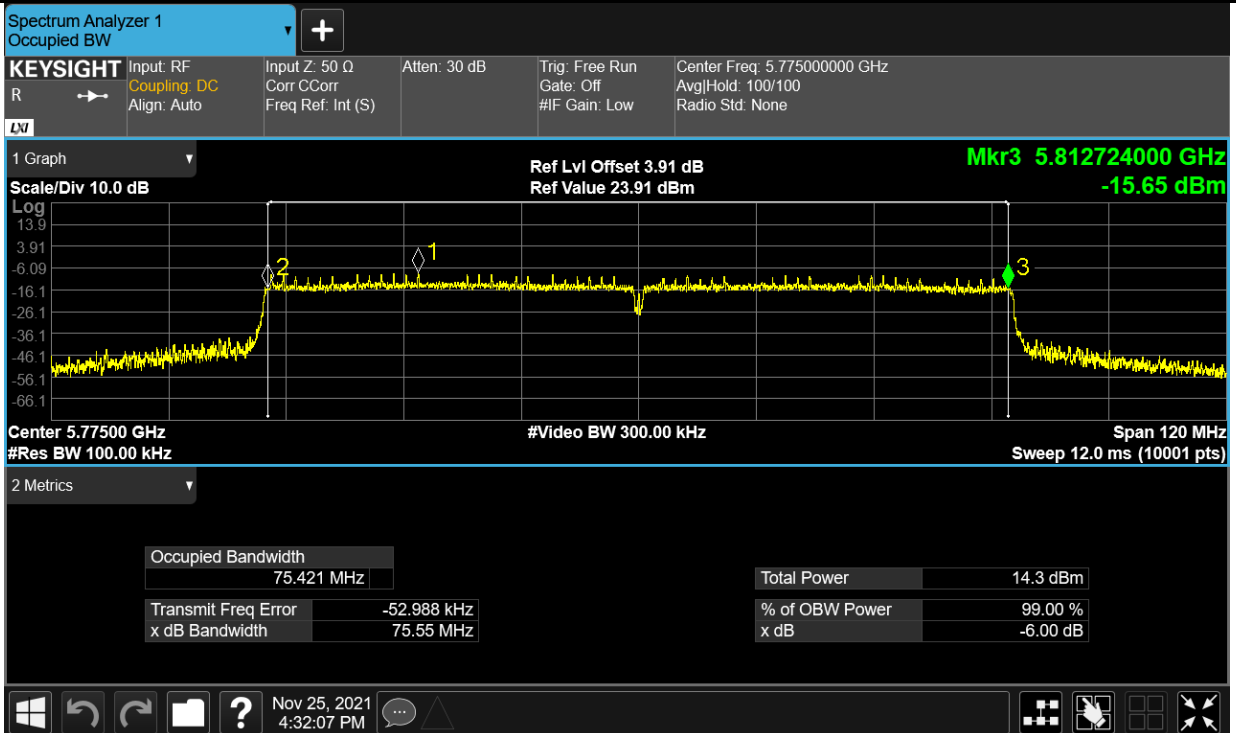
-6dB Bandwidth NVNT ac40 5755MHz Ant1



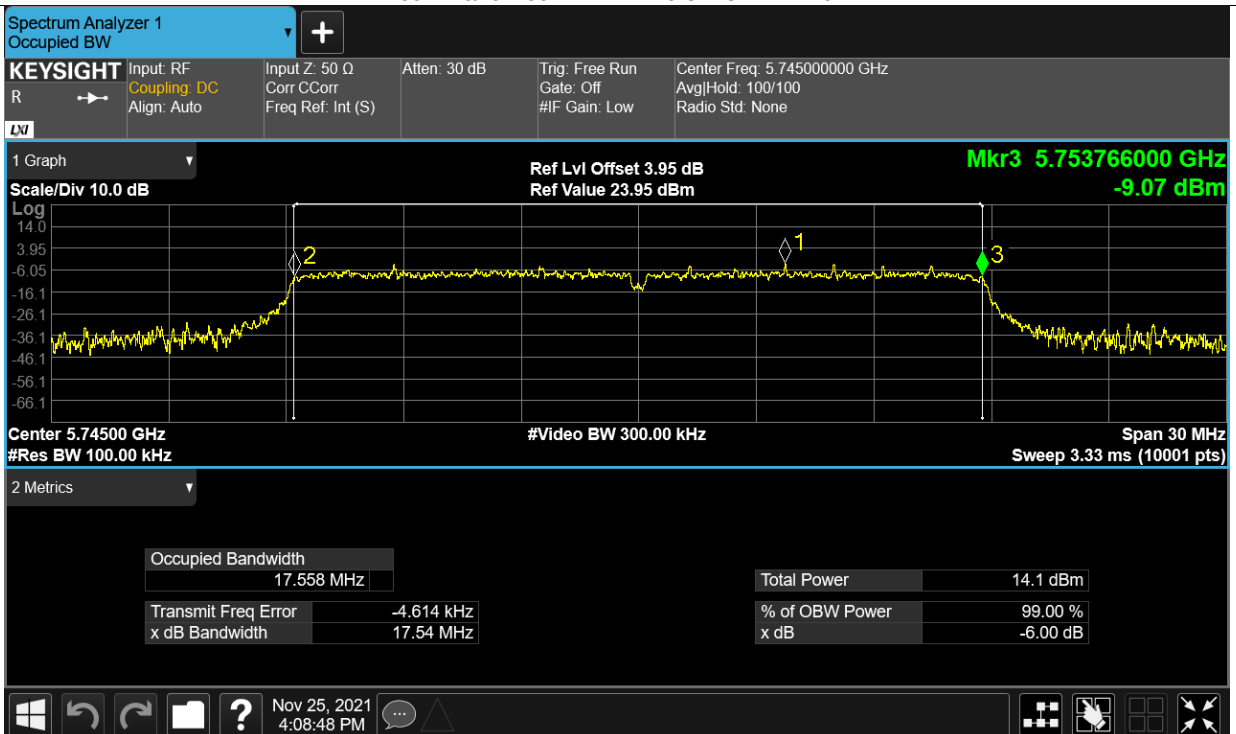
-6dB Bandwidth NVNT ac40 5795MHz Ant1



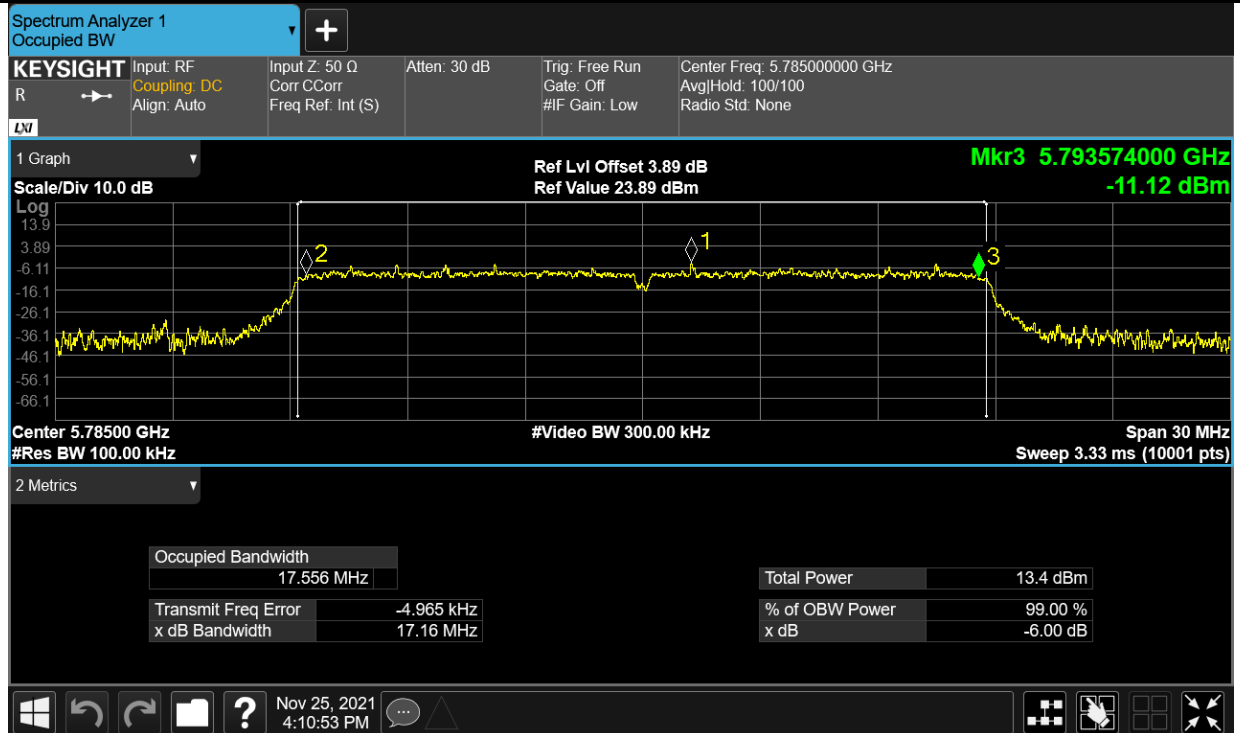
-6dB Bandwidth NVNT ac80 5775MHz Ant1



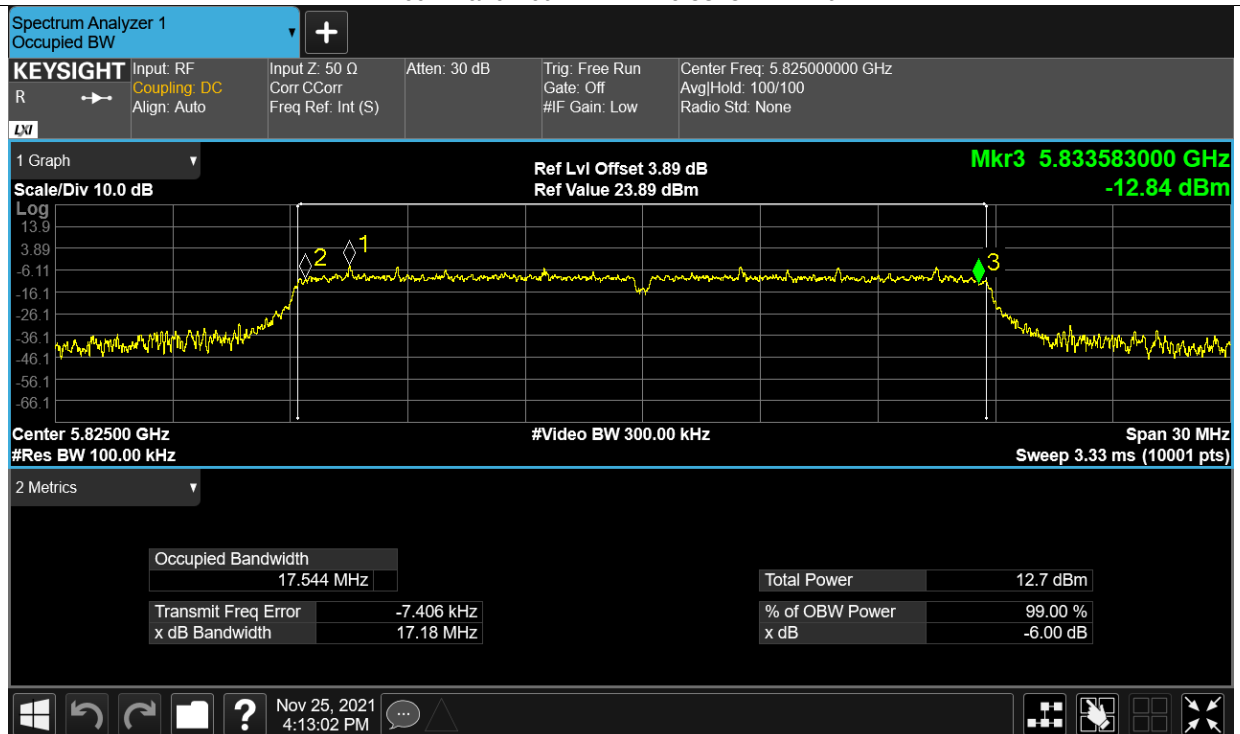
-6dB Bandwidth NVNT n20 5745MHz Ant1



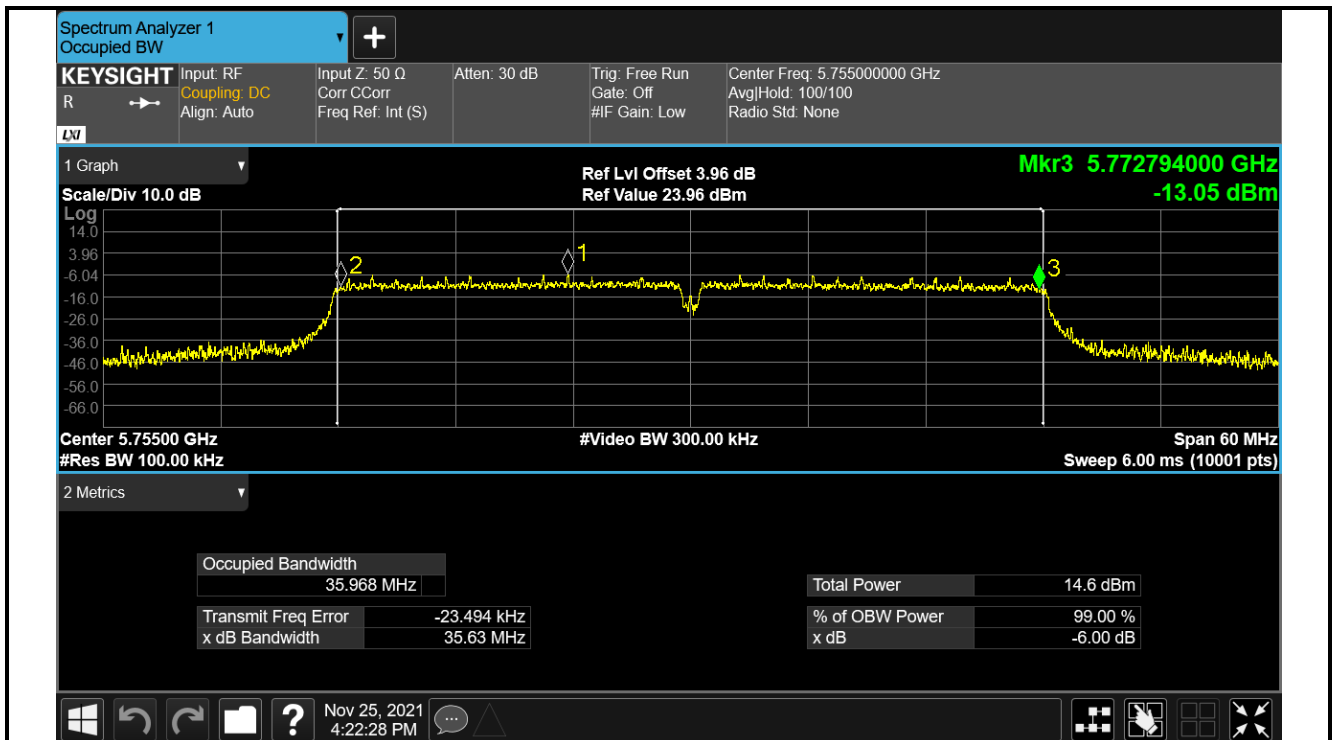
-6dB Bandwidth NVNT n20 5785MHz Ant1



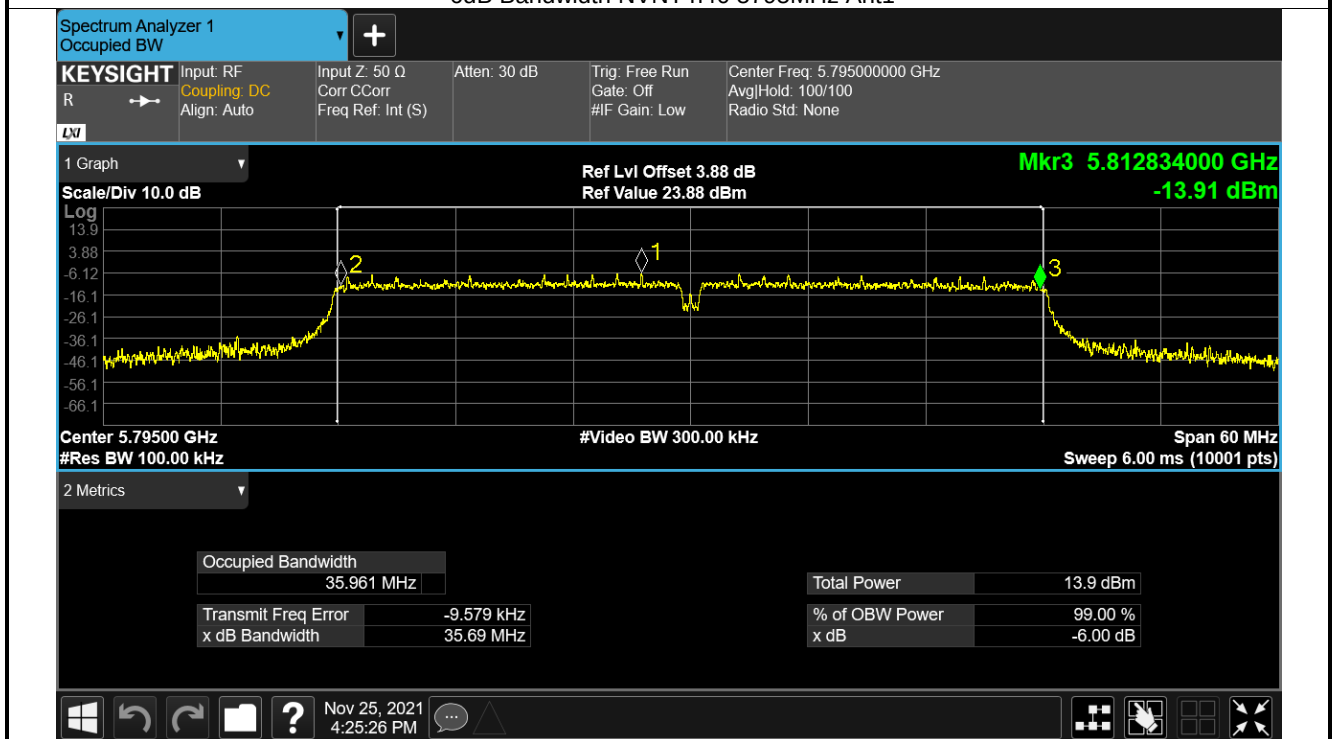
-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1



-6dB Bandwidth NVNT n40 5795MHz Ant1

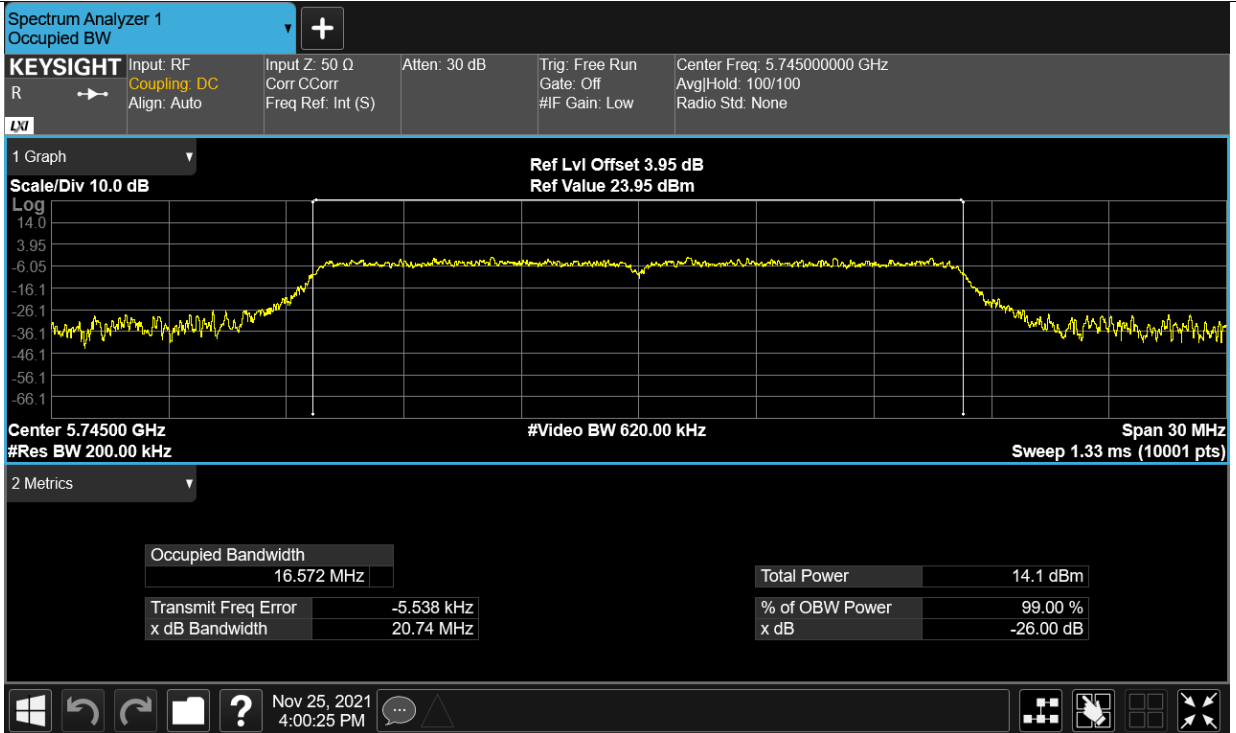


## B.5 Occupied Channel Bandwidth

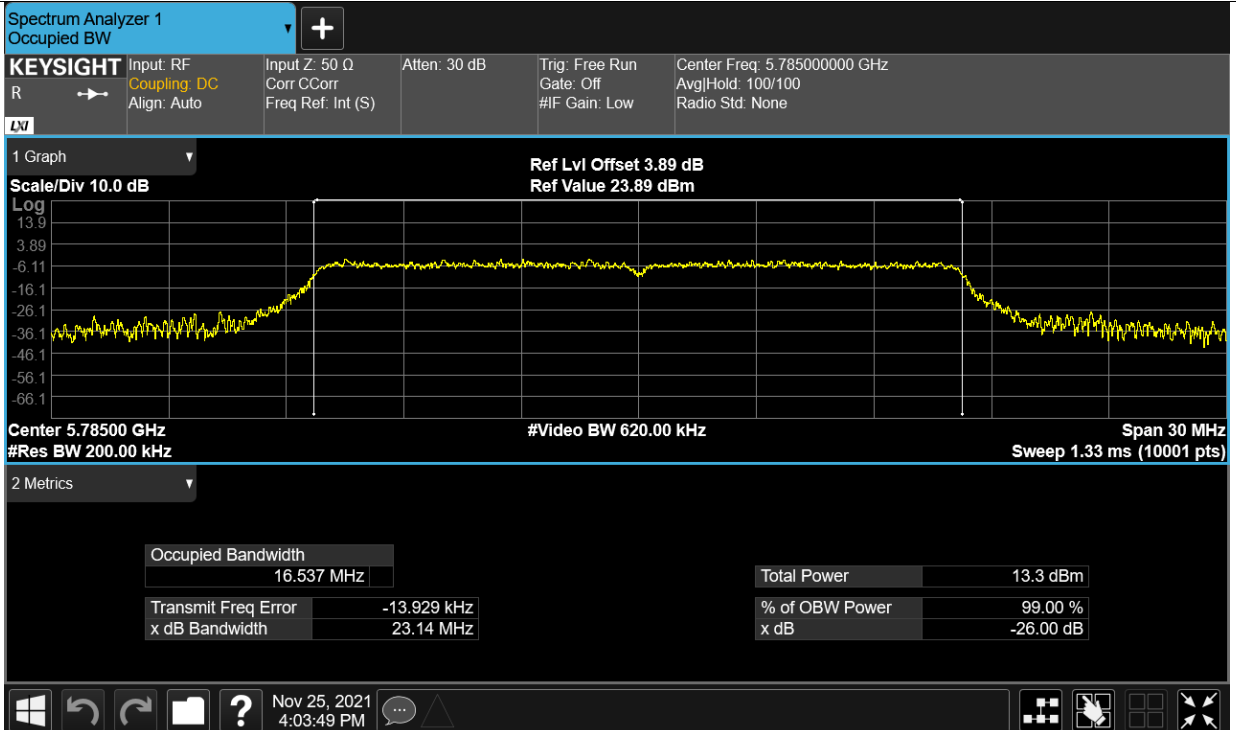
| Condition | Mode | Frequency (MHz) | Antenna | 99% OBW (MHz) |
|-----------|------|-----------------|---------|---------------|
| NVNT      | a    | 5745            | Ant1    | 16.57167208   |
| NVNT      | a    | 5785            | Ant1    | 16.53738611   |
| NVNT      | a    | 5825            | Ant1    | 16.54947009   |
| NVNT      | ac20 | 5745            | Ant1    | 17.55986326   |
| NVNT      | ac20 | 5785            | Ant1    | 17.56858922   |
| NVNT      | ac20 | 5825            | Ant1    | 17.59536325   |
| NVNT      | ac40 | 5755            | Ant1    | 36.10079096   |
| NVNT      | ac40 | 5795            | Ant1    | 36.1363726    |
| NVNT      | ac80 | 5775            | Ant1    | 75.50652793   |
| NVNT      | n20  | 5745            | Ant1    | 17.57907112   |
| NVNT      | n20  | 5785            | Ant1    | 17.58195174   |
| NVNT      | n20  | 5825            | Ant1    | 17.59441493   |
| NVNT      | n40  | 5755            | Ant1    | 36.07063994   |
| NVNT      | n40  | 5795            | Ant1    | 36.08863603   |

## Test Graphs

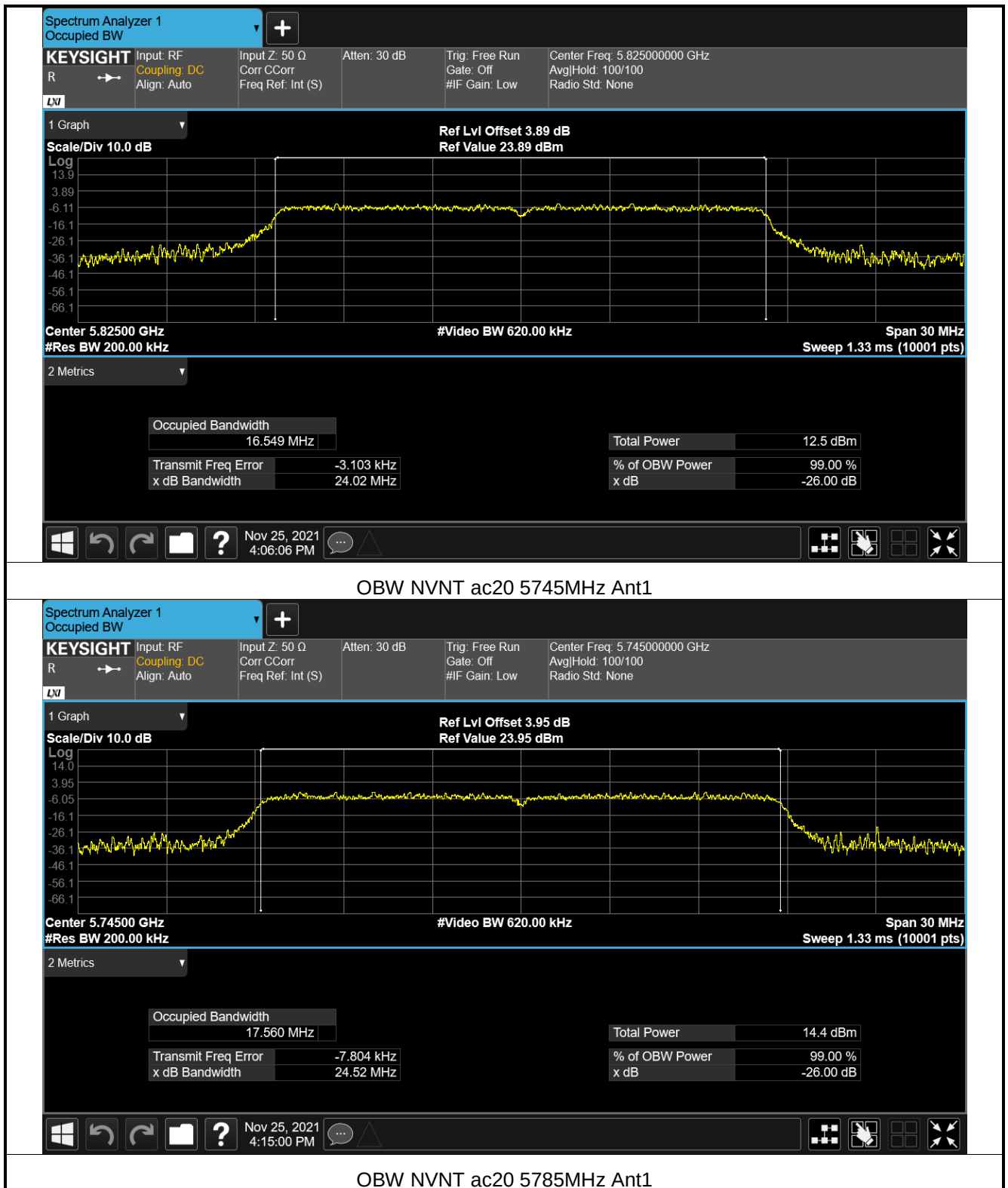
## OBW NVNT a 5745MHz Ant1

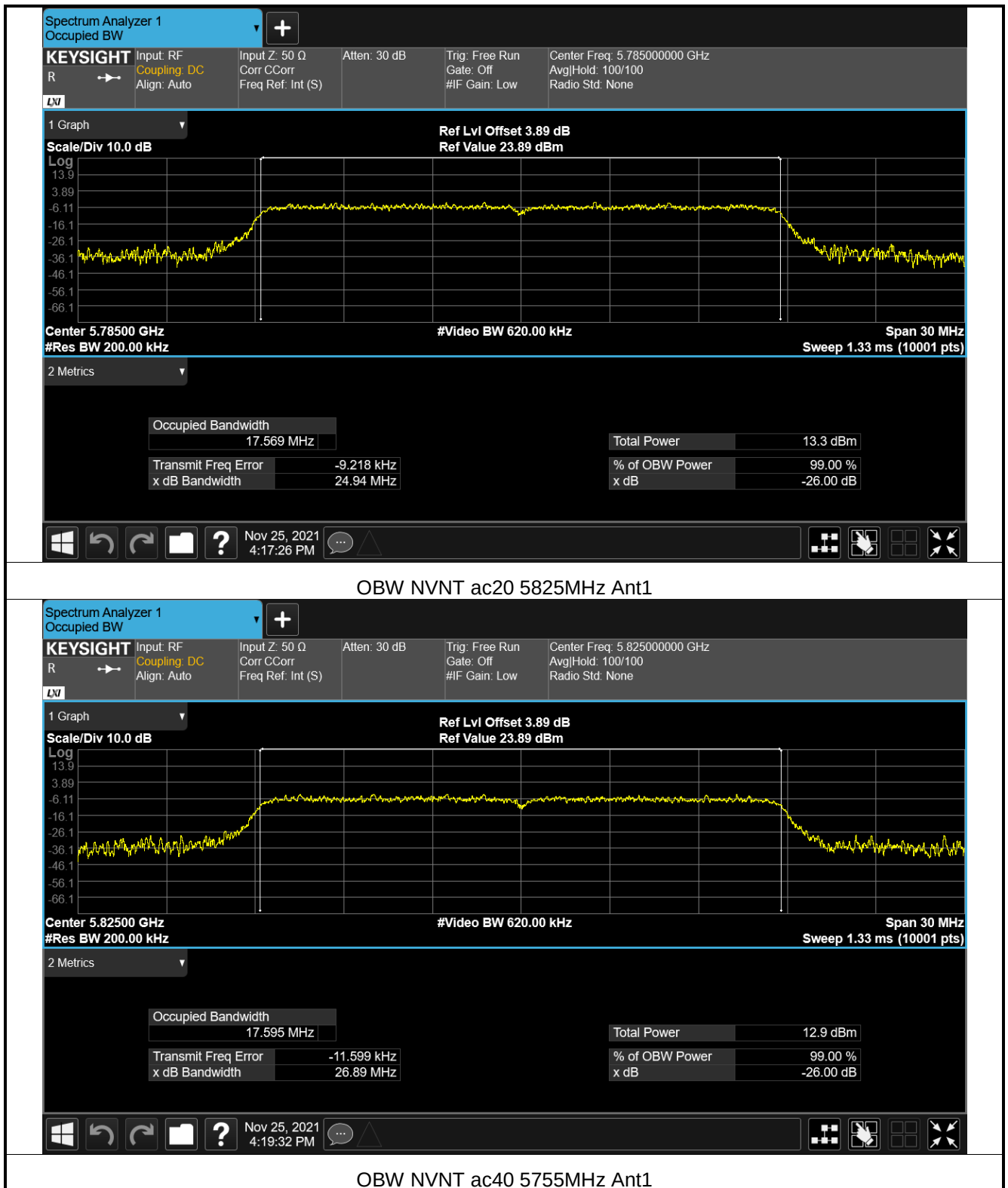


## OBW NVNT a 5785MHz Ant1



## OBW NVNT a 5825MHz Ant1





OBW NVNT ac20 5825MHz Ant1

Spectrum Analyzer 1  
Occupied BW

KEYSIGHT

R

Input: RF

Coupling: DC

Align: Auto

Input Z: 50  $\Omega$

Corr CCorr

Freq Ref: Int (S)

Atten: 30 dB

Trig: Free Run

Gate: Off

#IF Gain: Low

Center Freq: 5.82500000 GHz

Avg/Hold: 100/100

Radio Std: None

LN

1 Graph

Scale/Div 10.0 dB

Log

13.9

3.89

-6.11

-16.1

-26.1

-36.1

-46.1

-56.1

-66.1

Ref Lvl Offset 3.89 dB

Ref Value 23.89 dBm

Center 5.82500 GHz

#Res BW 200.00 kHz

#Video BW 620.00 kHz

Span 30 MHz

Sweep 1.33 ms (10001 pts)

2 Metrics

Occupied Bandwidth

17.595 MHz

Transmit Freq Error

-11.599 kHz

x dB Bandwidth

26.89 MHz

Total Power

12.9 dBm

% of OBW Power

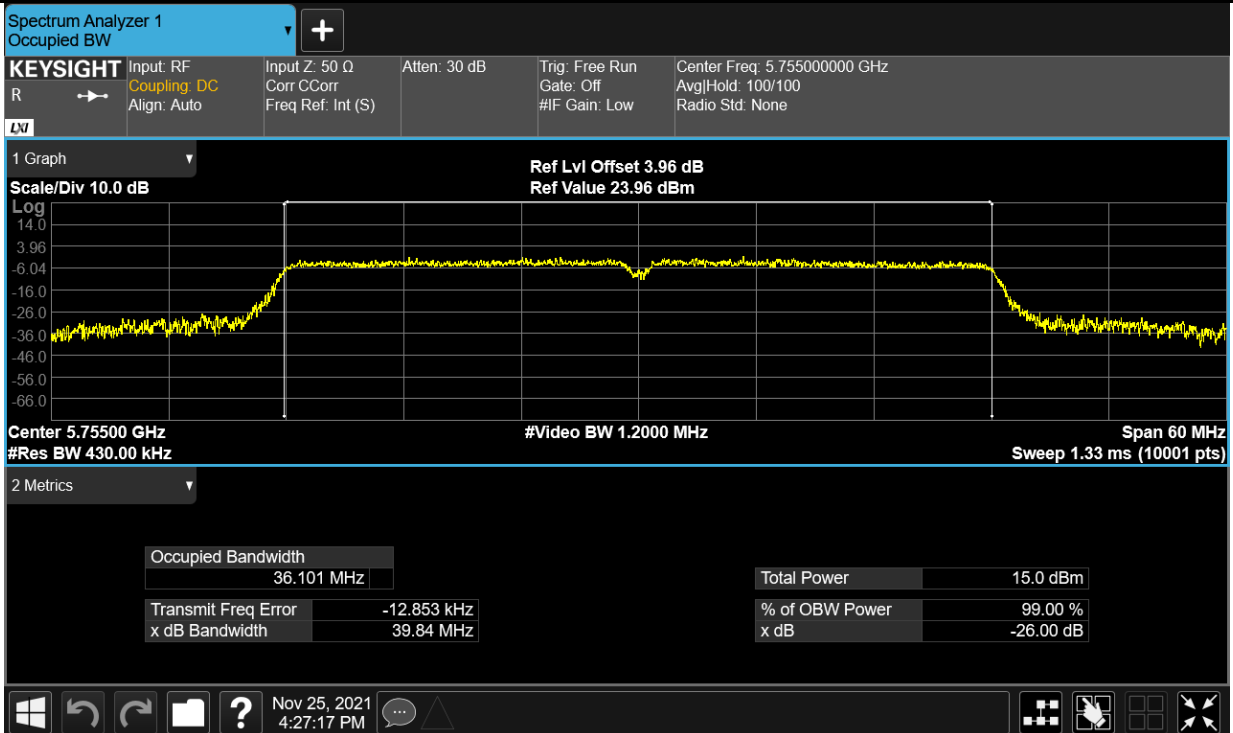
99.00 %

x dB

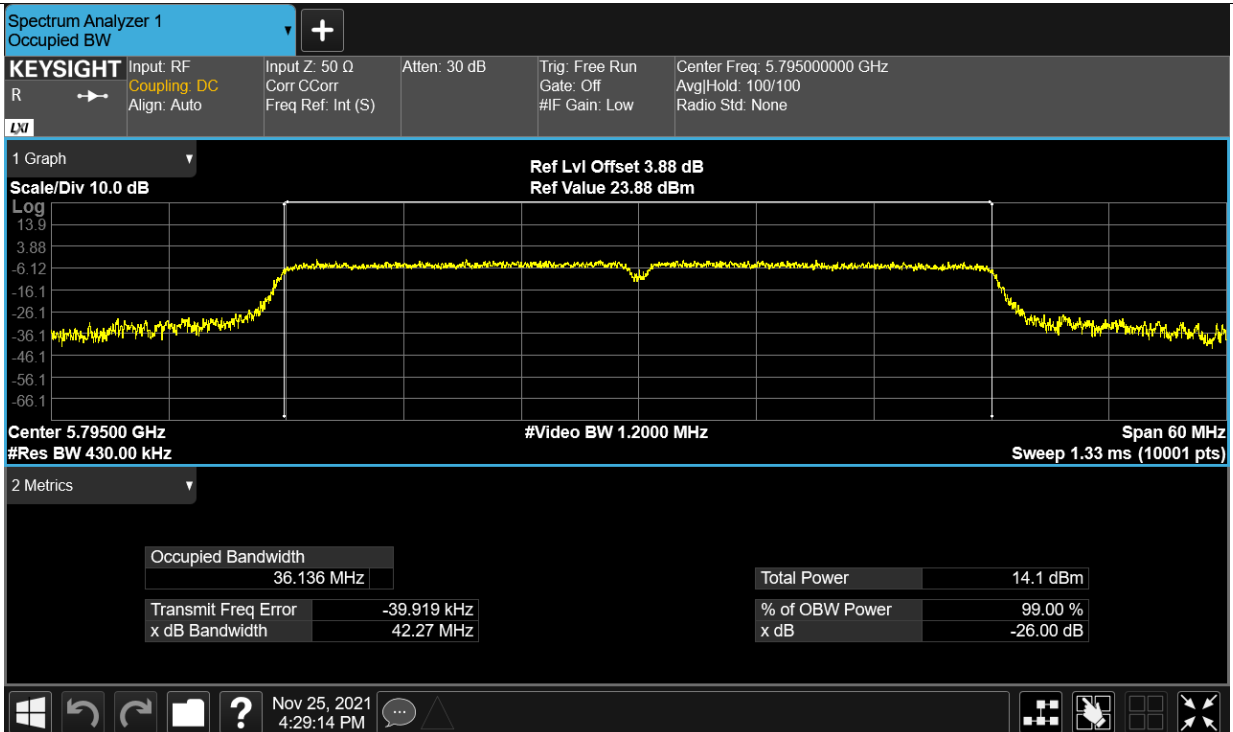
-26.00 dB

Nov 25, 2021 4:19:32 PM

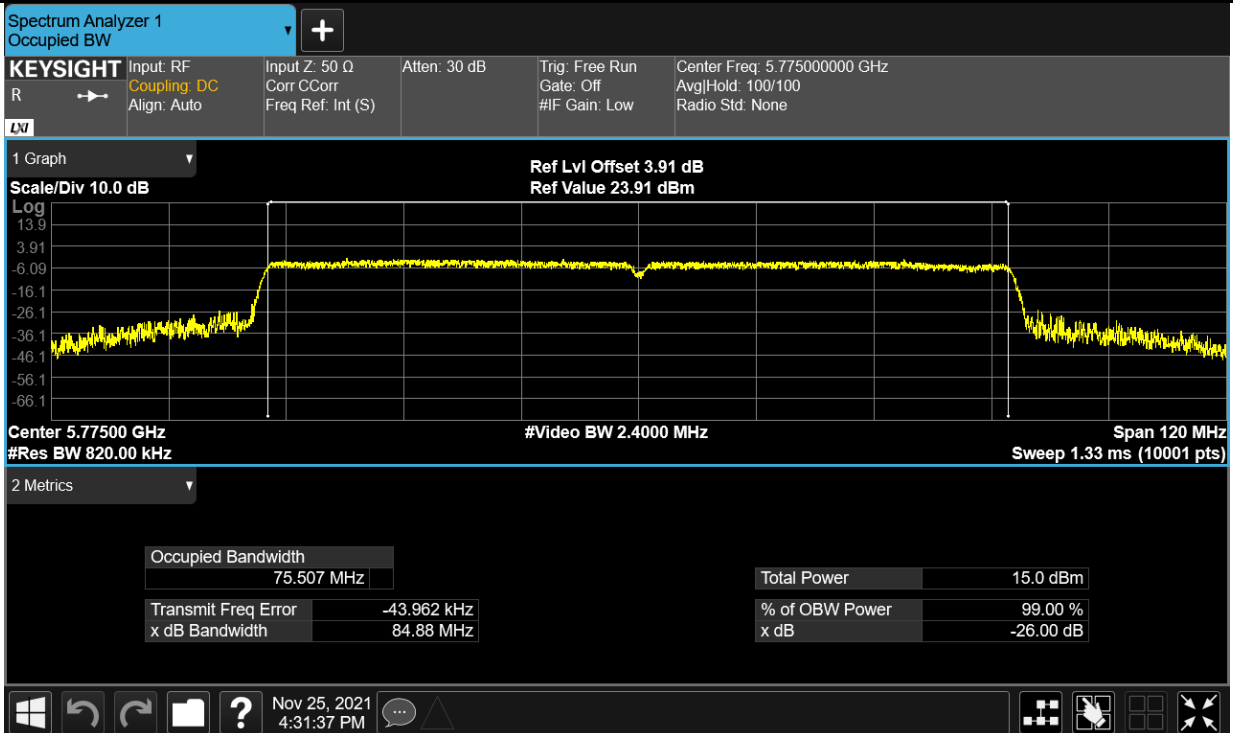
OBW NVNT ac40 5755MHz Ant1



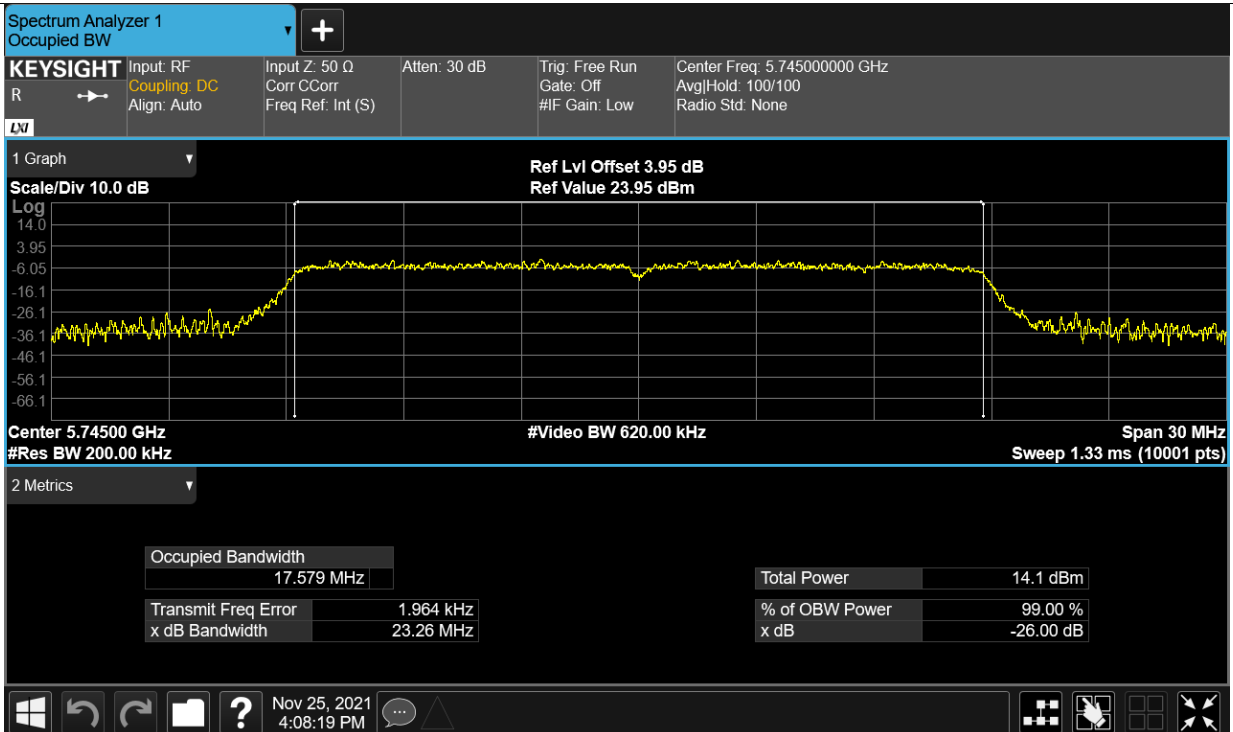
OBW NVNT ac40 5795MHz Ant1



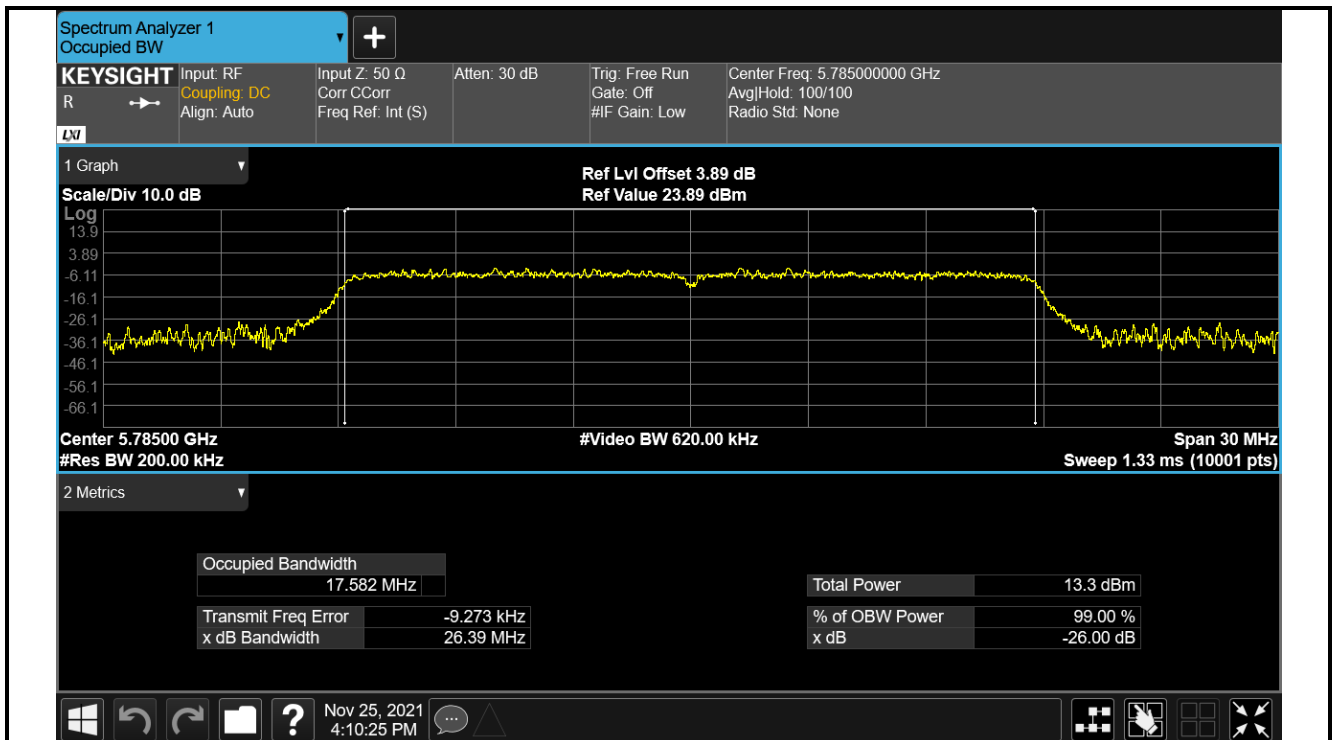
OBW NVNT ac80 5775MHz Ant1



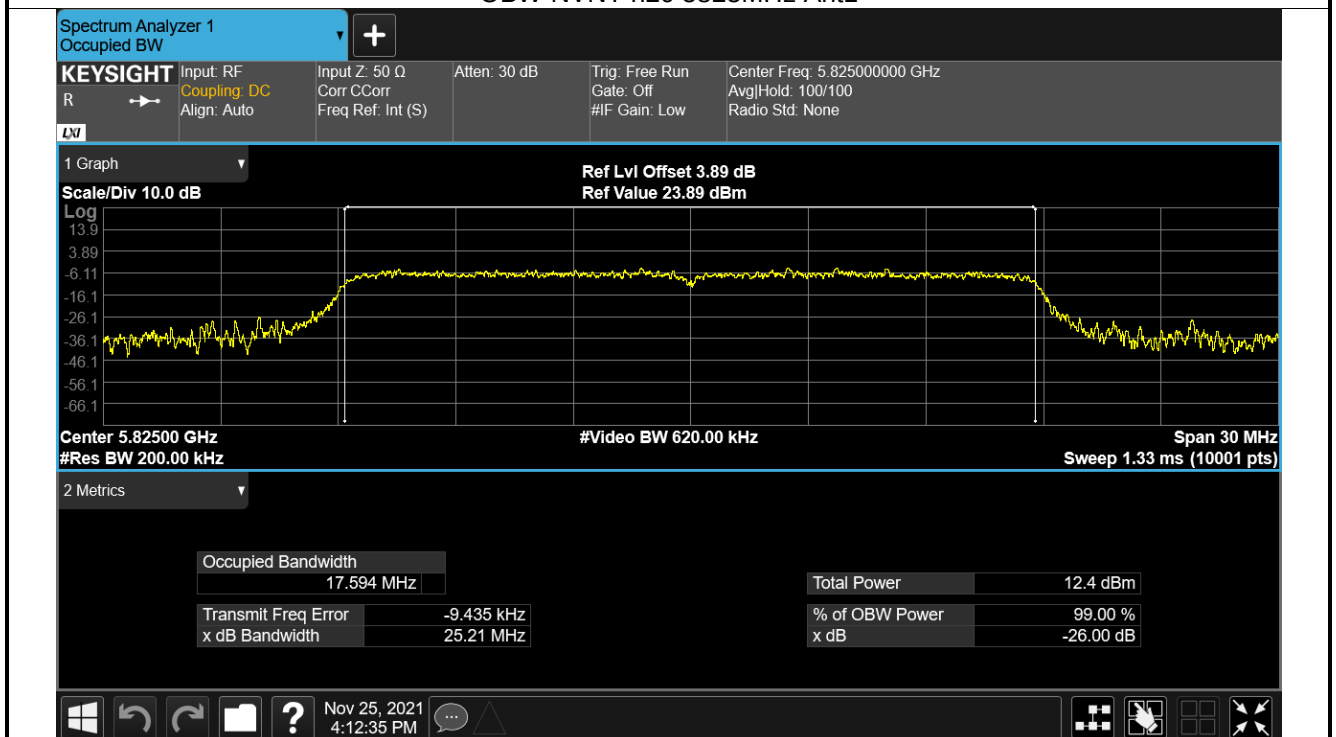
OBW NVNT n20 5745MHz Ant1



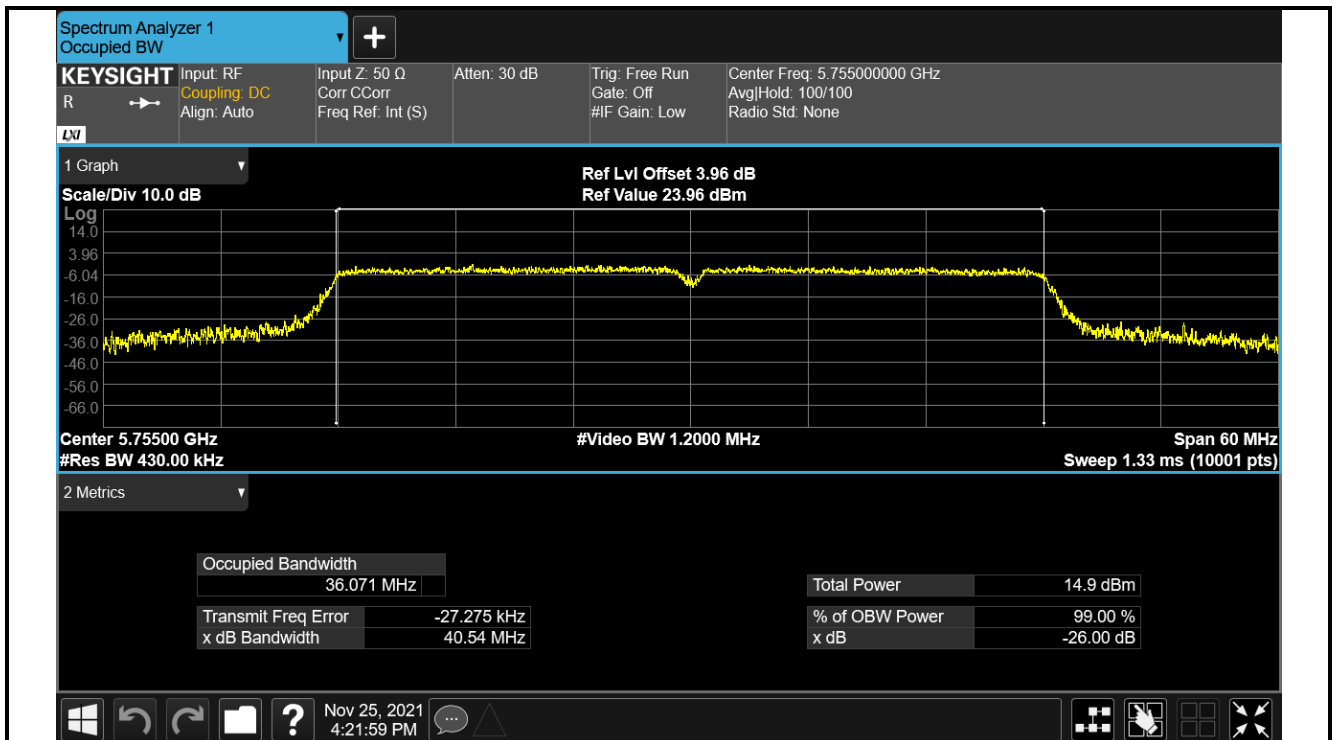
OBW NVNT n20 5785MHz Ant1



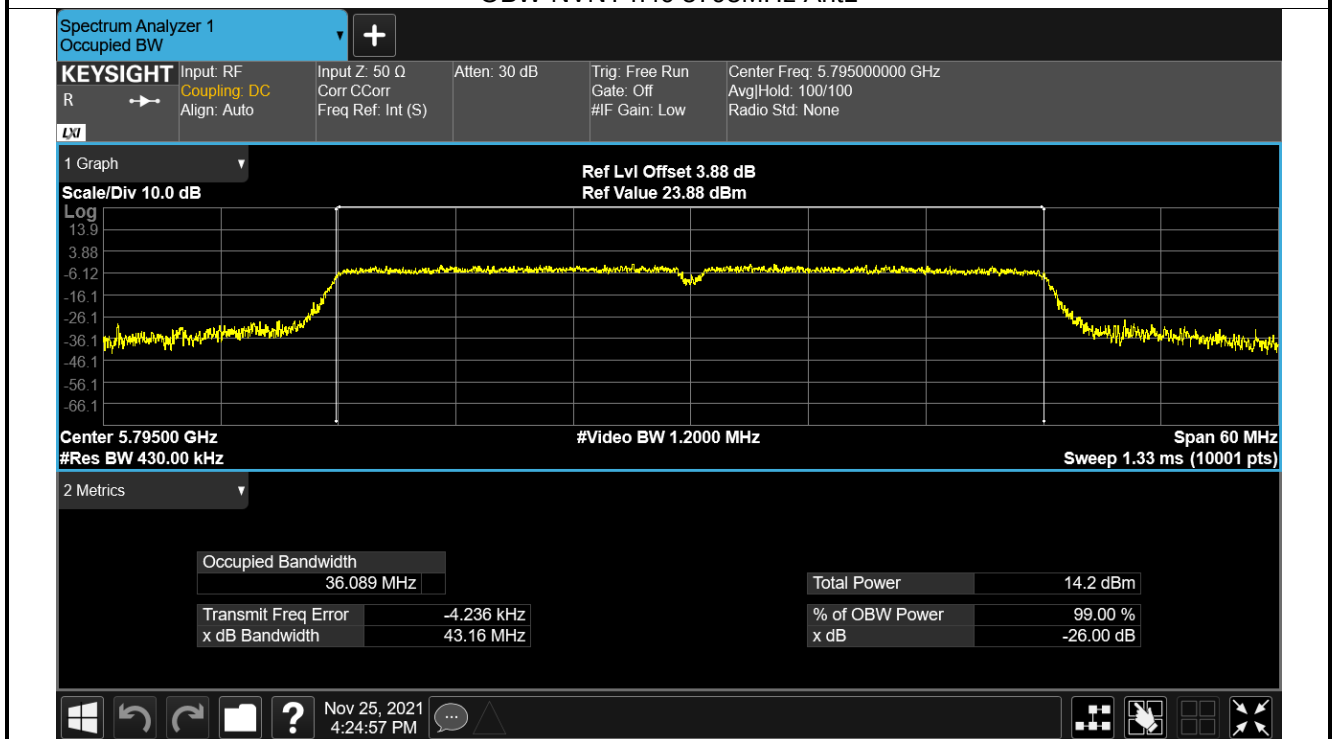
OBW NVNT n20 5825MHz Ant1



OBW NVNT n40 5755MHz Ant1



OBW NVNT n40 5795MHz Ant1

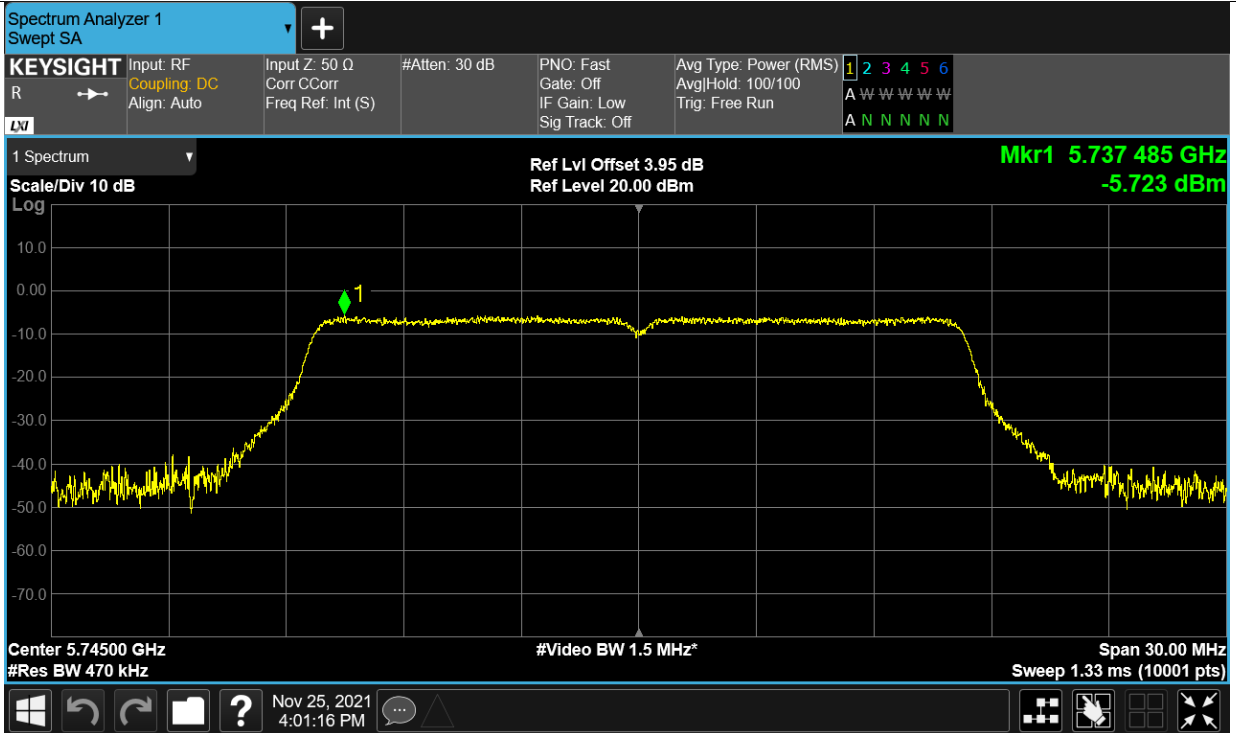


## Maximum Power Spectral Density Level

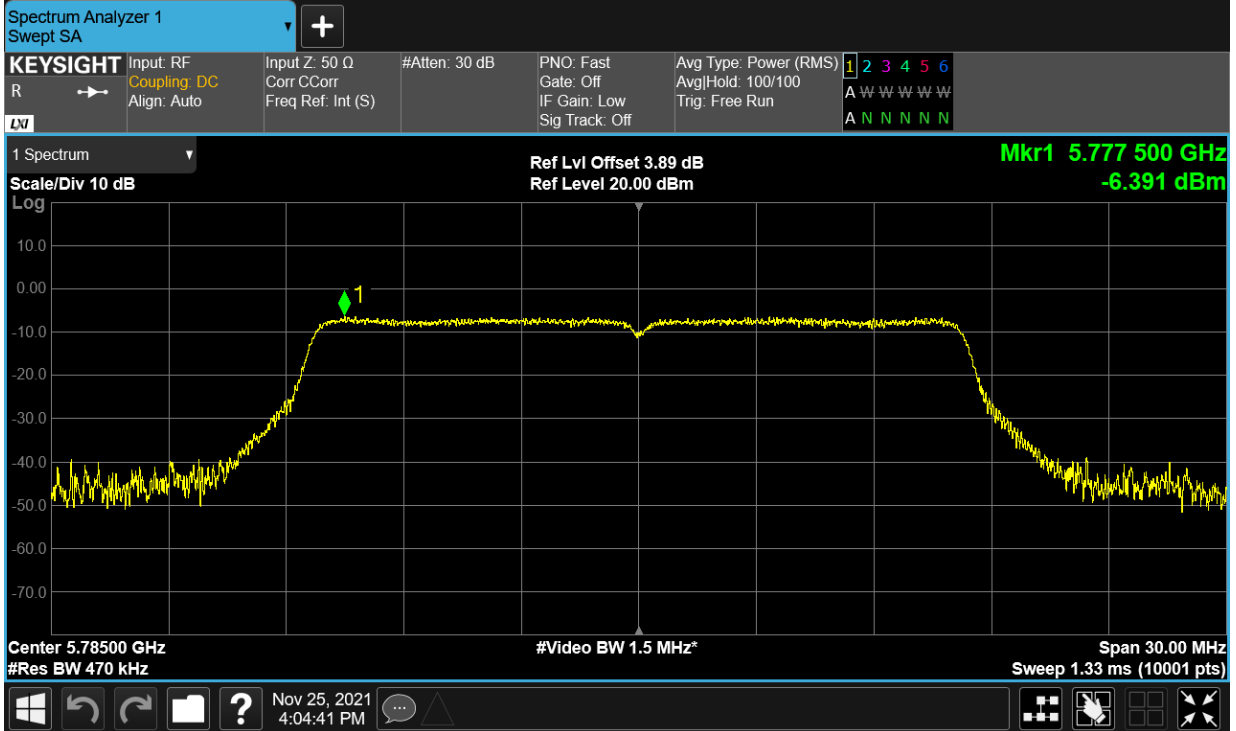
| Condition | Mode | Frequency (MHz) | Antenna | Max PSD (dBm) | Limit (dBm) | Verdict |
|-----------|------|-----------------|---------|---------------|-------------|---------|
| NVNT      | a    | 5745            | Ant1    | -5.723        | 30          | Pass    |
| NVNT      | a    | 5785            | Ant1    | -6.391        | 30          | Pass    |
| NVNT      | a    | 5825            | Ant1    | -7.19         | 30          | Pass    |
| NVNT      | ac20 | 5745            | Ant1    | -5.587        | 30          | Pass    |
| NVNT      | ac20 | 5785            | Ant1    | -5.768        | 30          | Pass    |
| NVNT      | ac20 | 5825            | Ant1    | -6.866        | 30          | Pass    |
| NVNT      | ac40 | 5755            | Ant1    | -8.267        | 30          | Pass    |
| NVNT      | ac40 | 5795            | Ant1    | -8.762        | 30          | Pass    |
| NVNT      | ac80 | 5775            | Ant1    | -11.845       | 30          | Pass    |
| NVNT      | n20  | 5745            | Ant1    | -5.814        | 30          | Pass    |
| NVNT      | n20  | 5785            | Ant1    | -6.746        | 30          | Pass    |
| NVNT      | n20  | 5825            | Ant1    | -7.506        | 30          | Pass    |
| NVNT      | n40  | 5755            | Ant1    | -7.956        | 30          | Pass    |
| NVNT      | n40  | 5795            | Ant1    | -9.066        | 30          | Pass    |

## Test Graphs

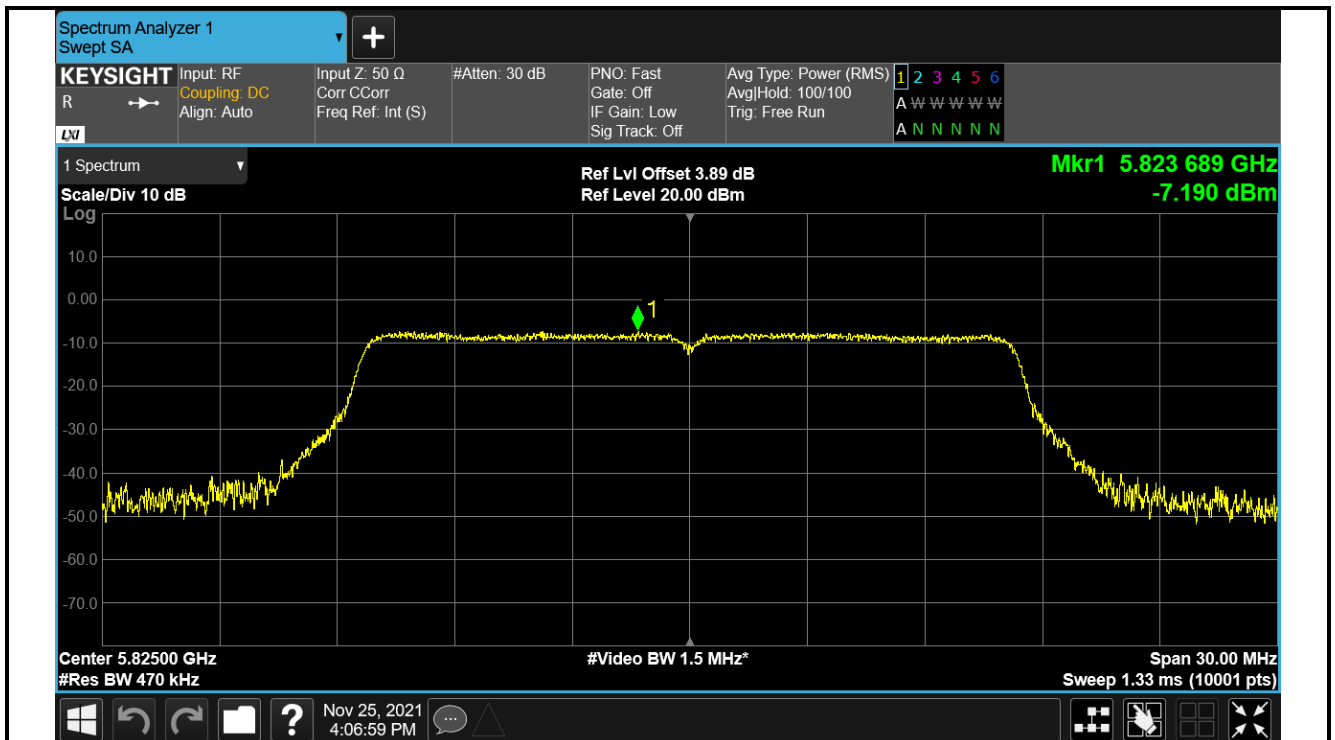
## PSD NVNT a 5745MHz Ant1



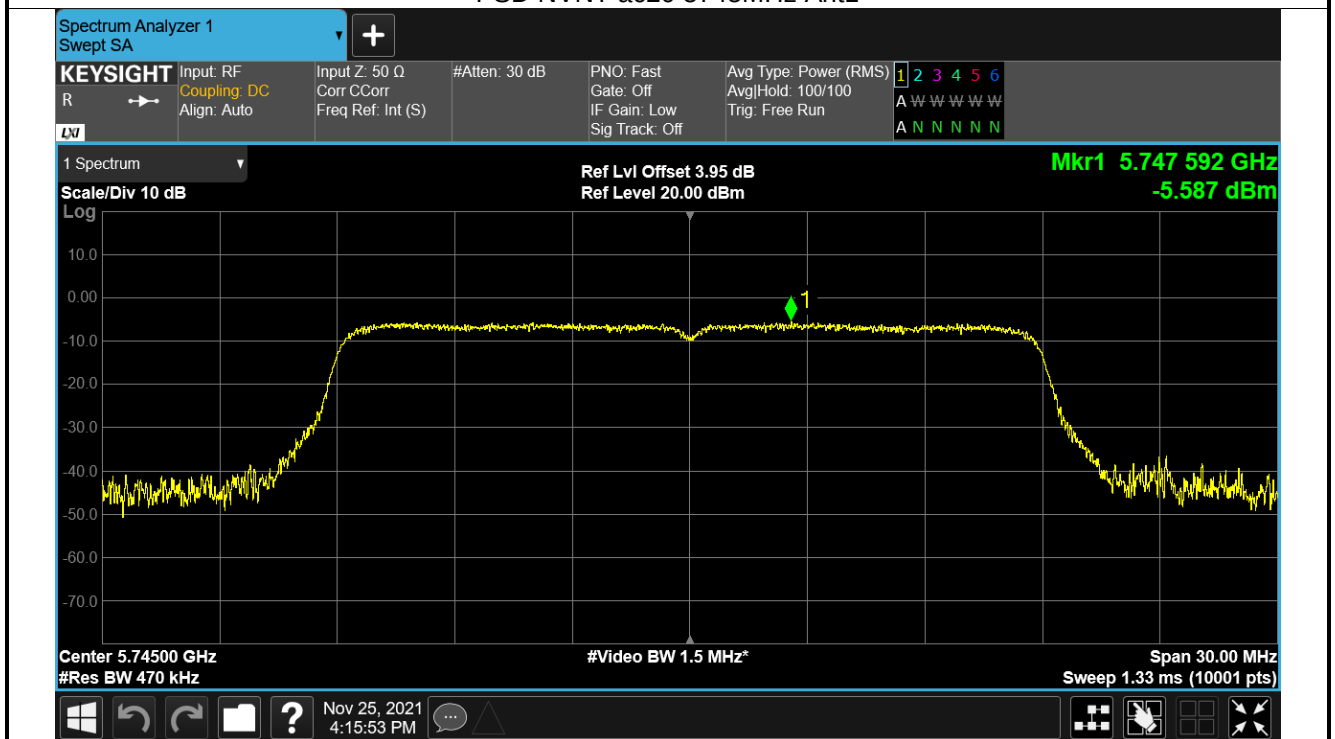
## PSD NVNT a 5785MHz Ant1



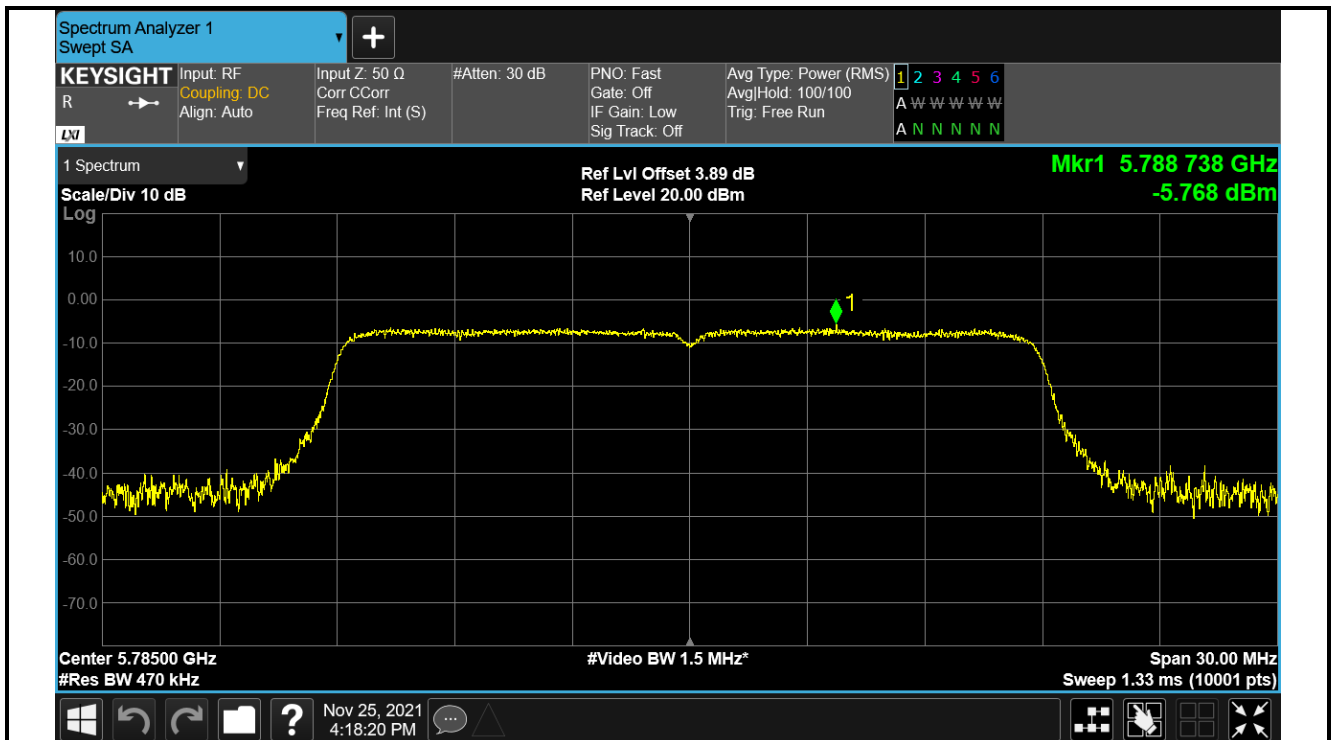
## PSD NVNT a 5825MHz Ant1



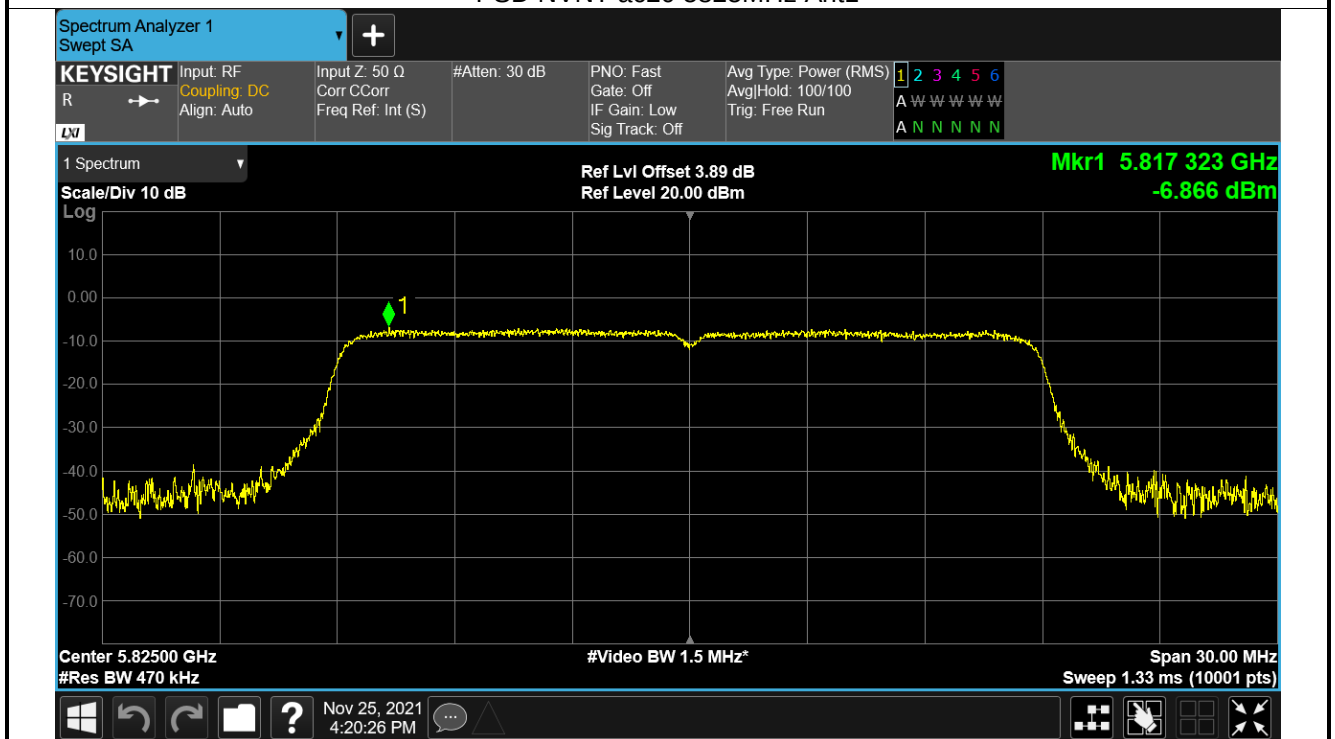
PSD NVNT ac20 5745MHz Ant1



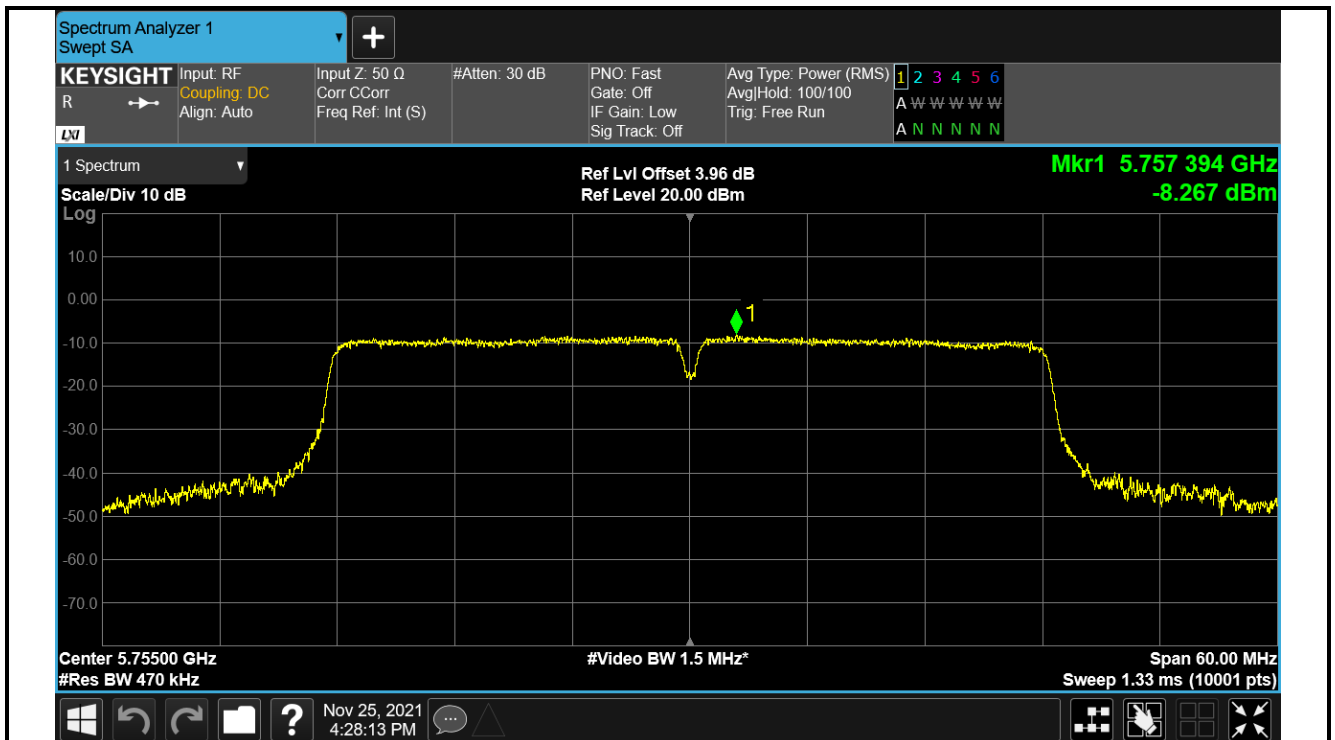
PSD NVNT ac20 5785MHz Ant1



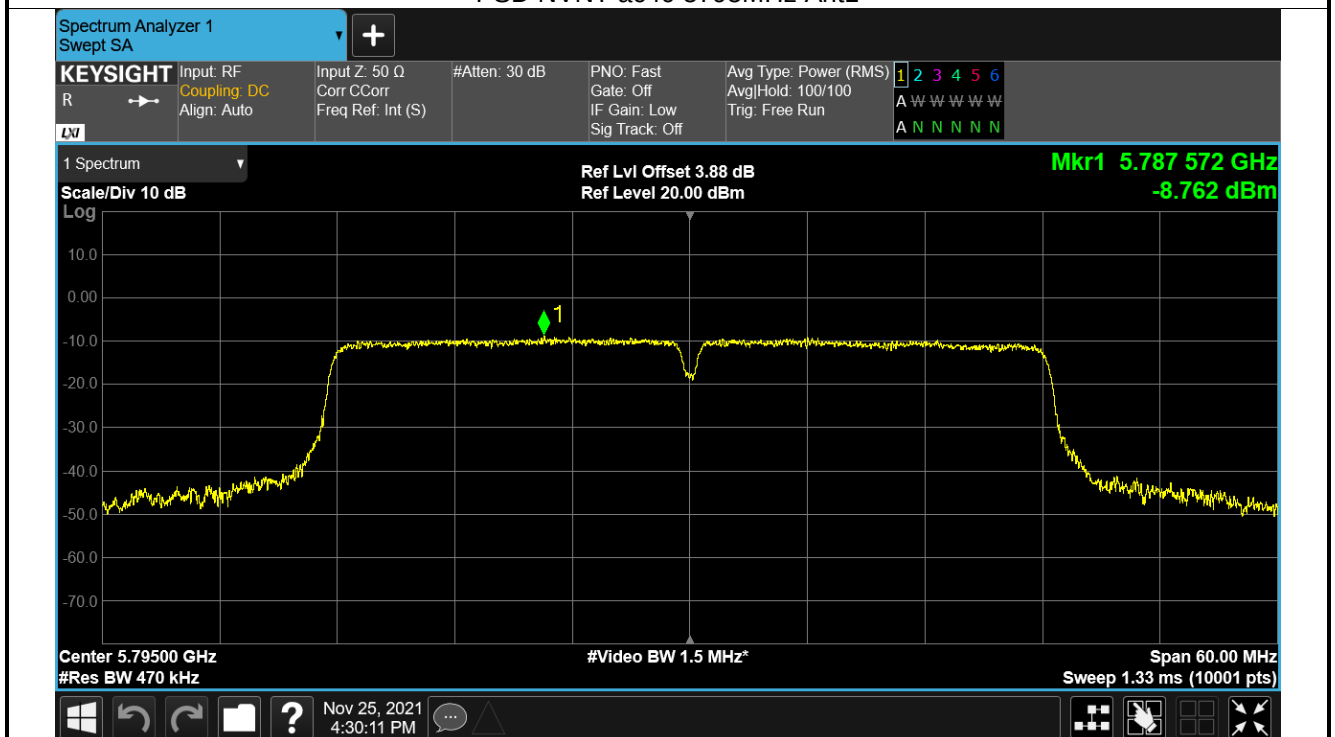
PSD NVNT ac20 5825MHz Ant1



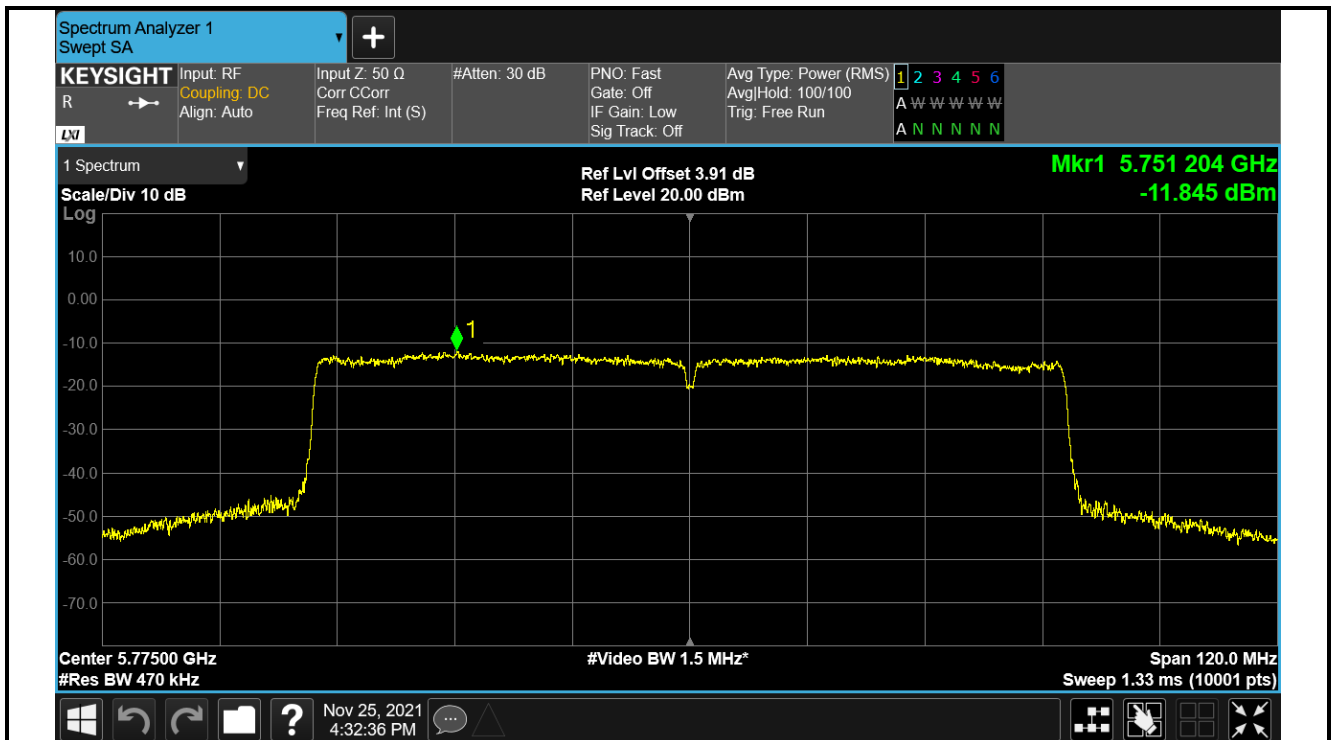
PSD NVNT ac40 5755MHz Ant1



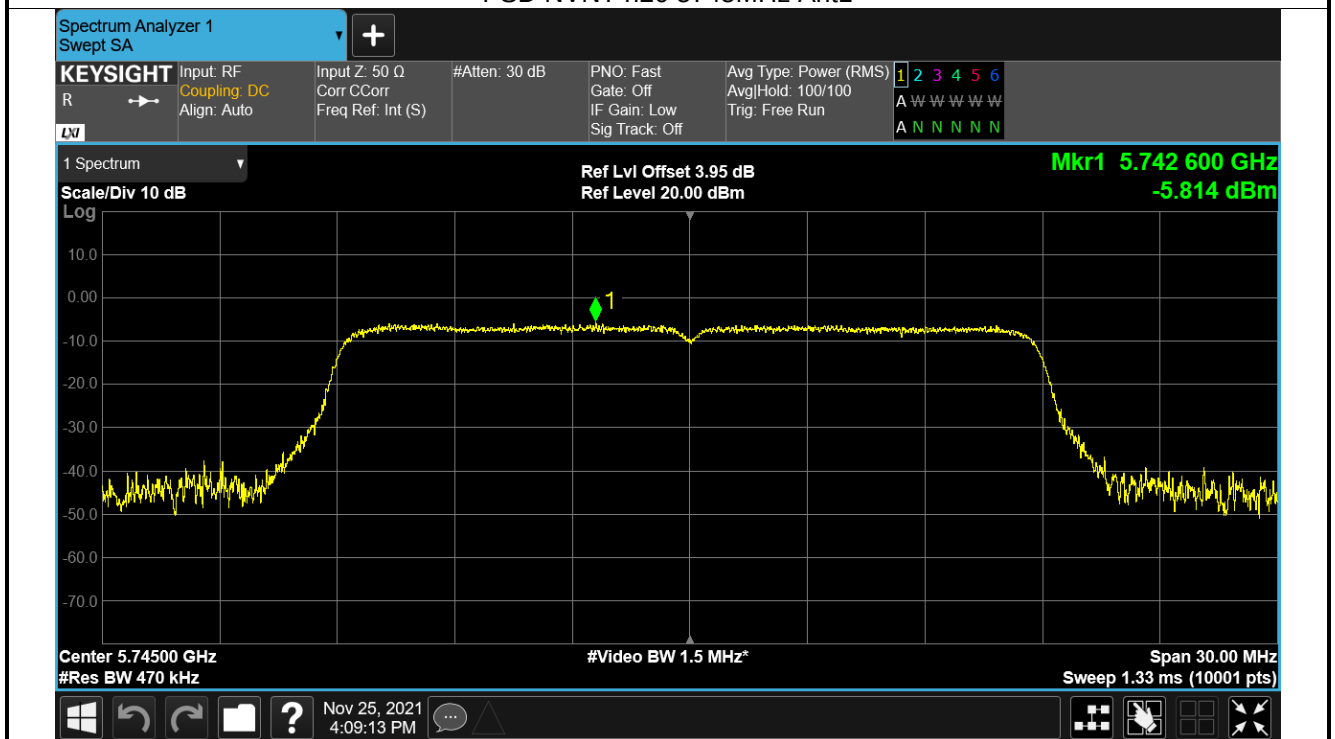
PSD NVNT ac40 5795MHz Ant1



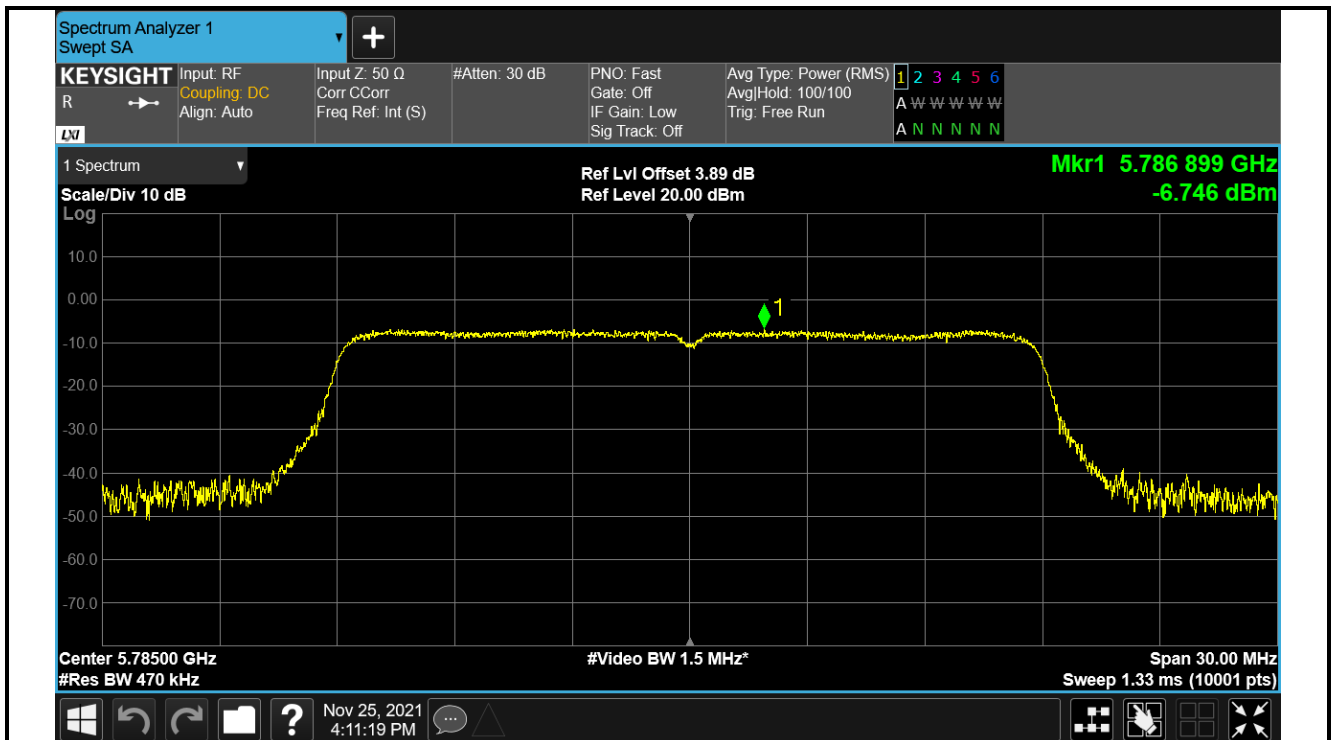
PSD NVNT ac80 5775MHz Ant1



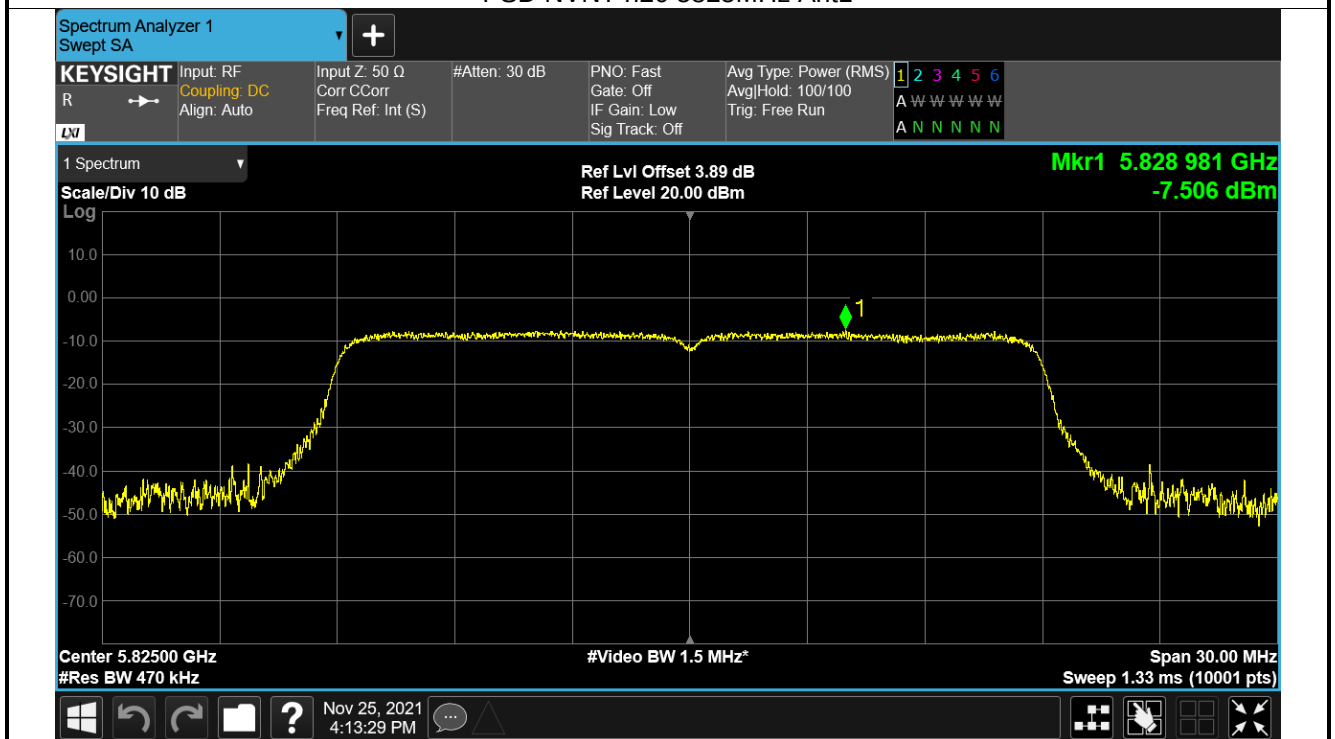
PSD NVNT n20 5745MHz Ant1



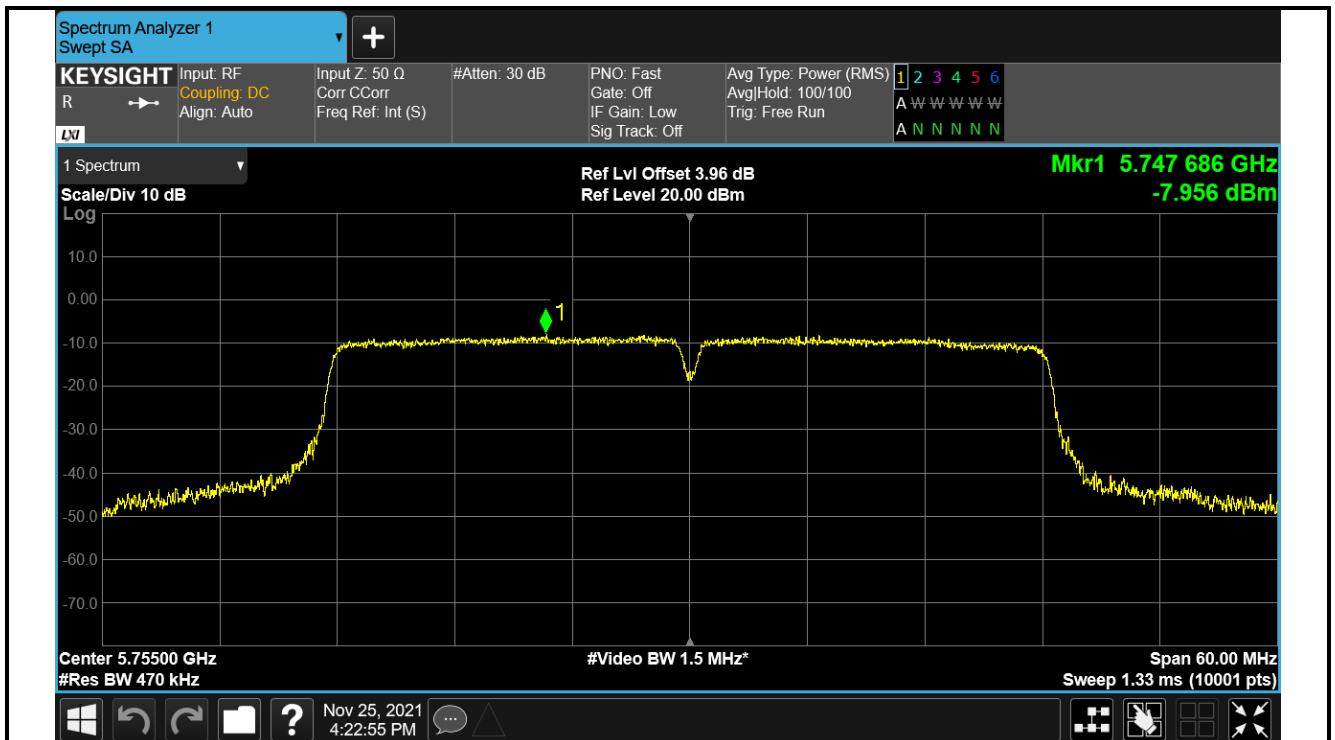
PSD NVNT n20 5785MHz Ant1



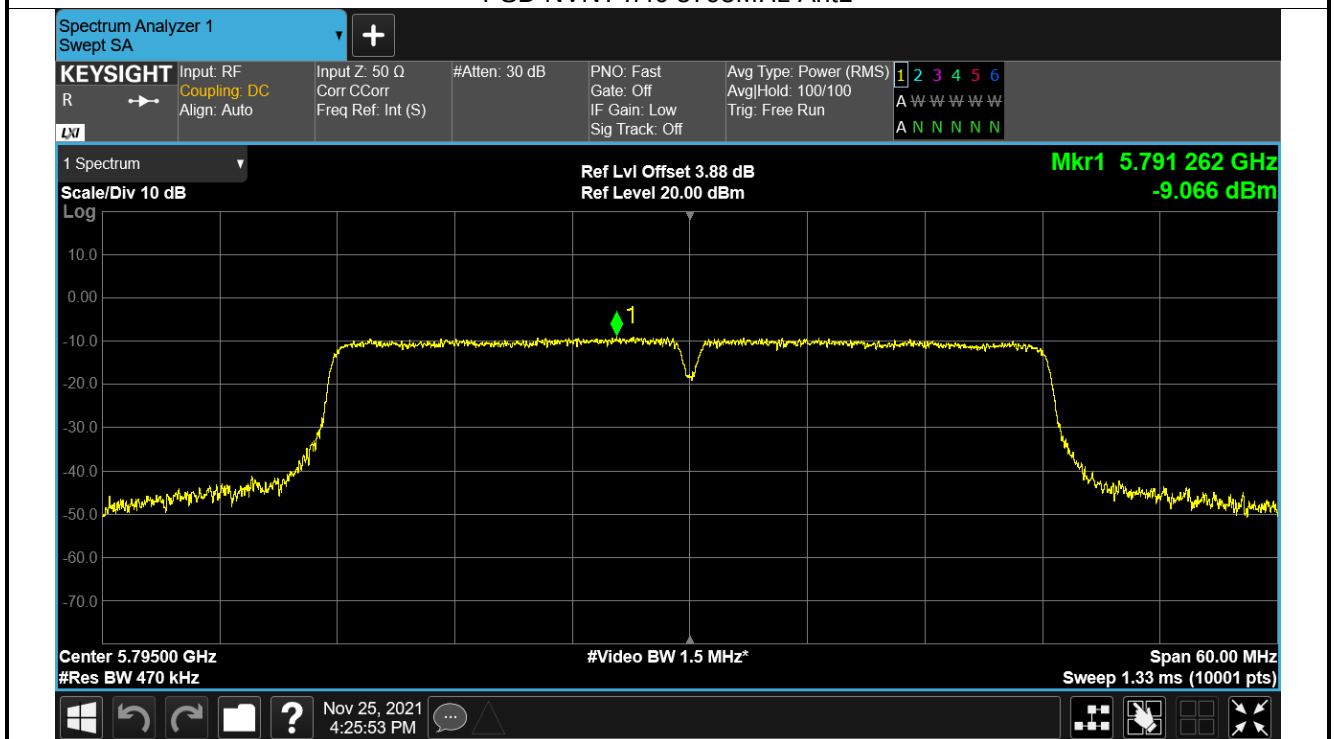
PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1



PSD NVNT n40 5795MHz Ant1



-----End of report-----