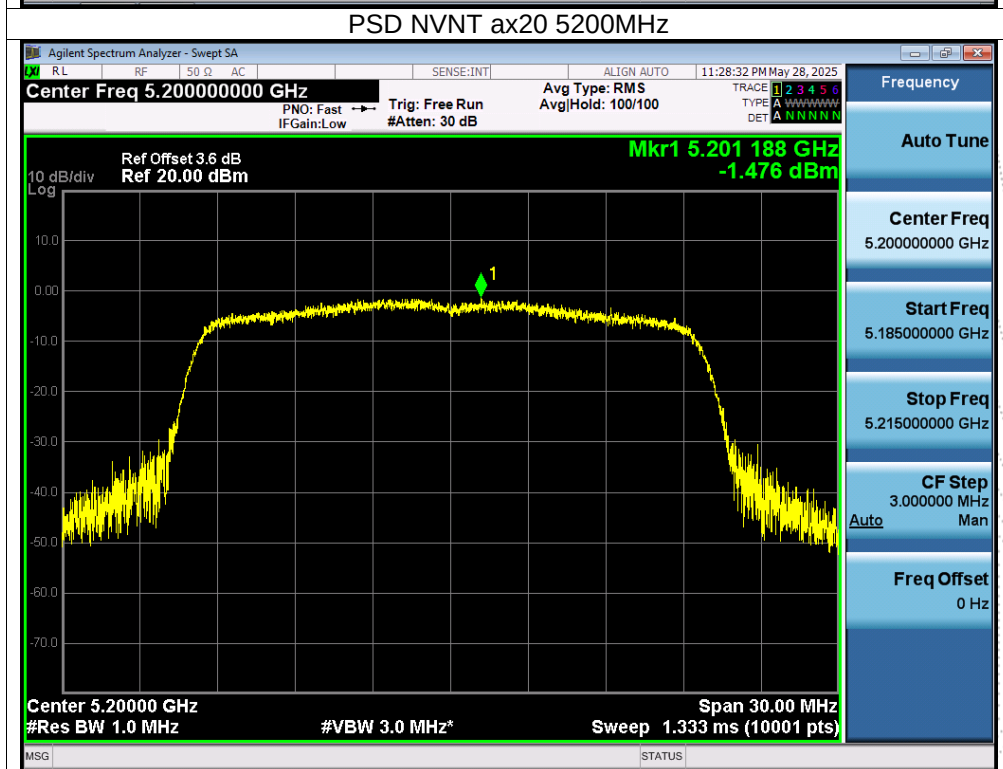
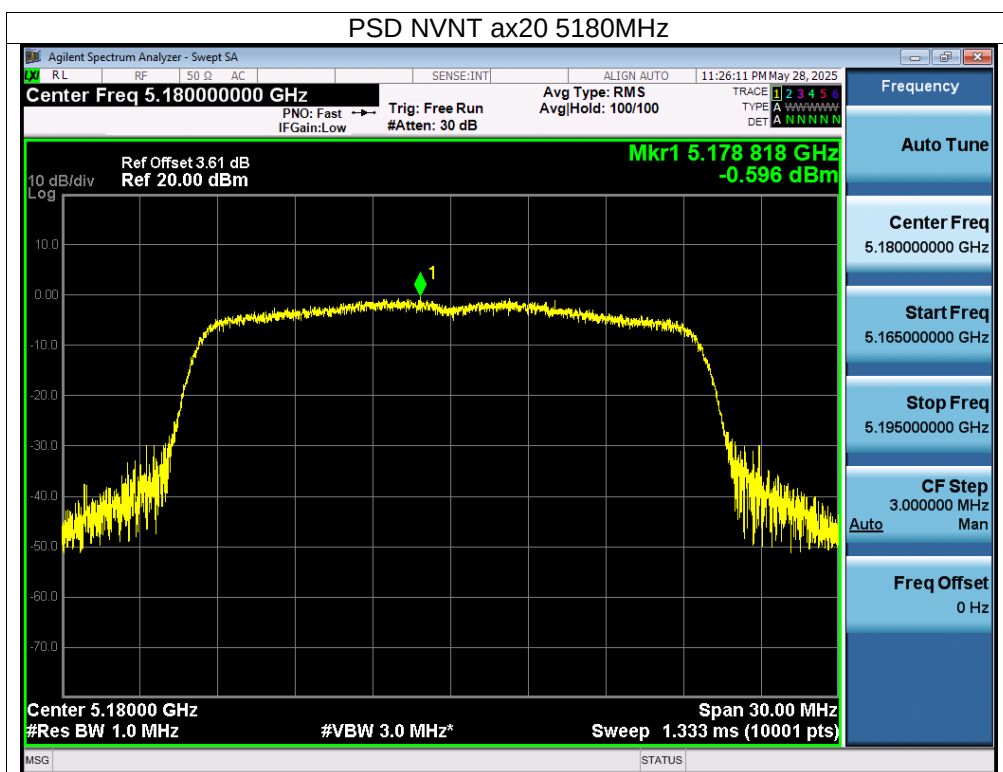
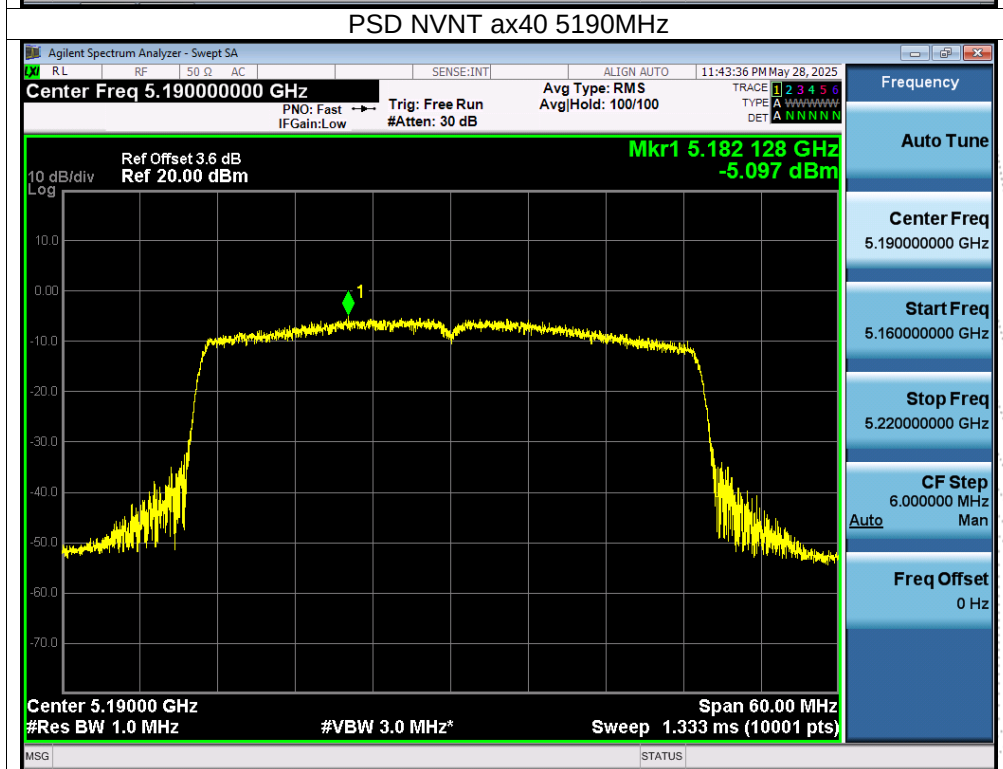
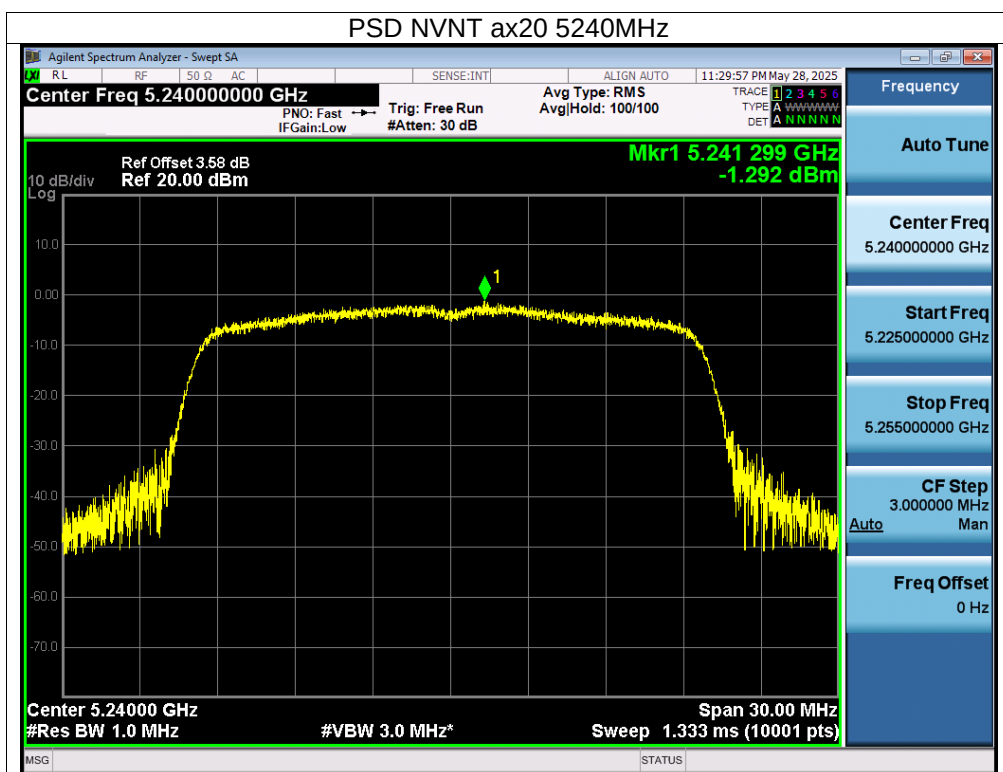
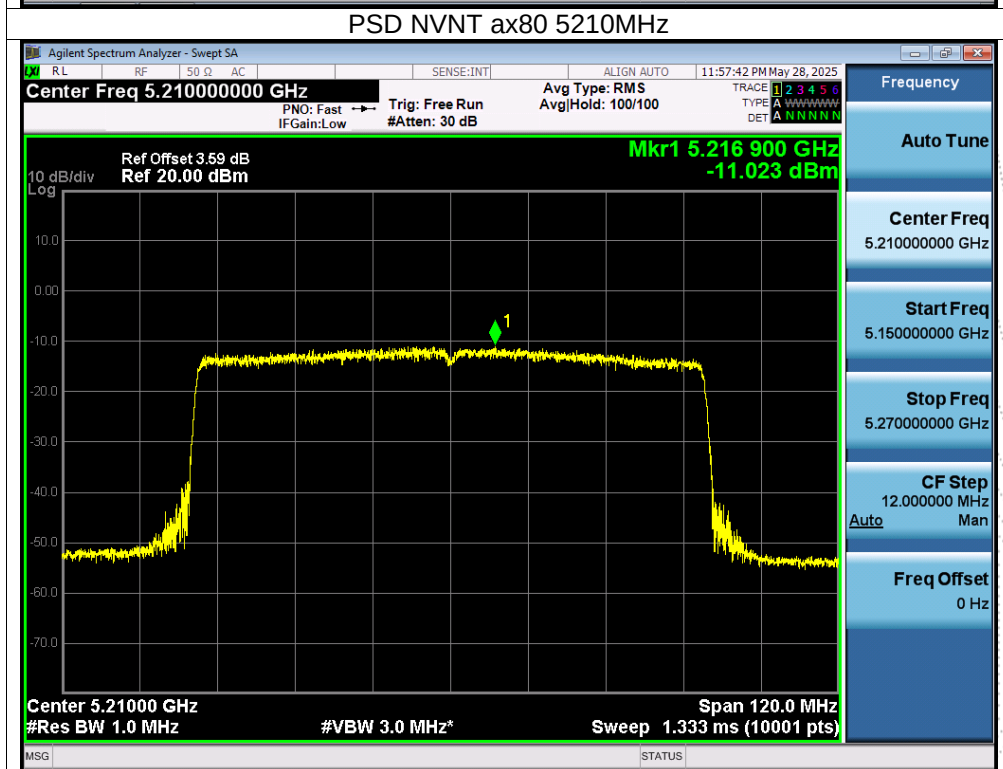
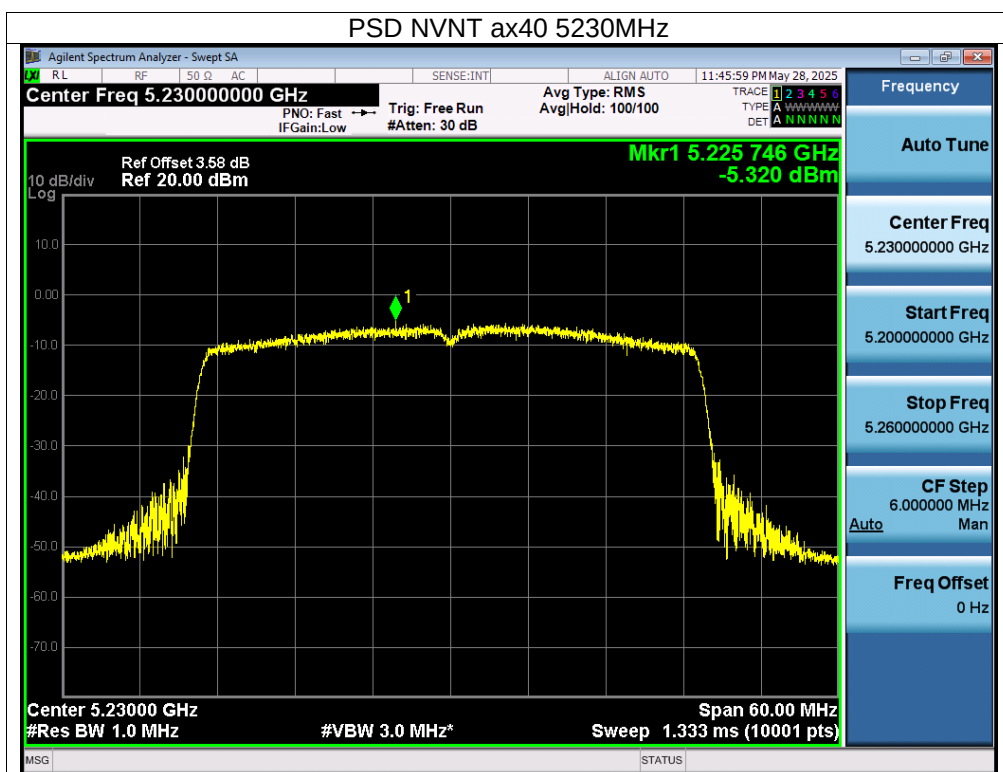








Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 3.3V
Test Mode:	(U-NII-2A) 5260MHz-5320MHz		

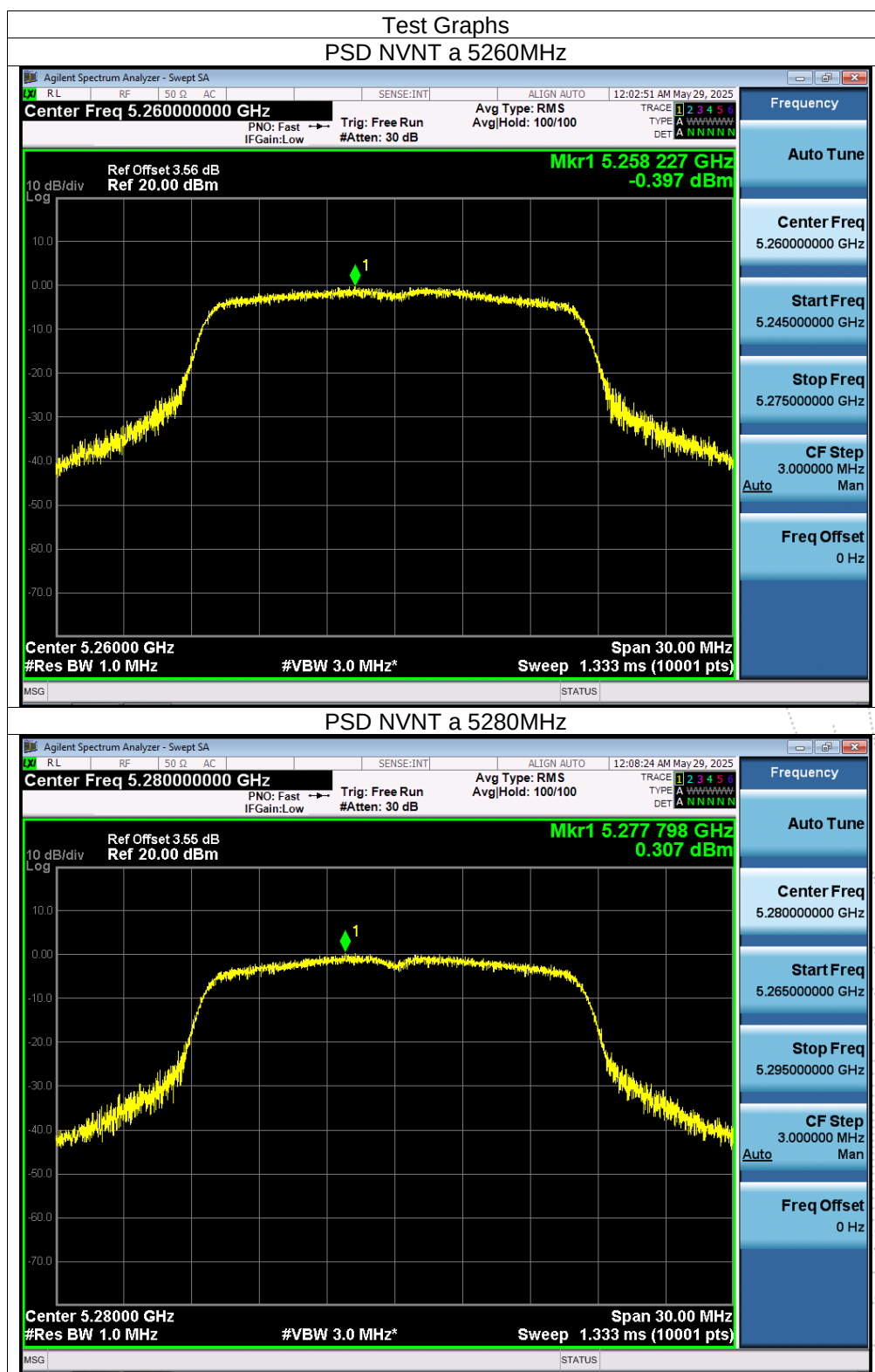
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant A	Ant B	Total		
NVNT	a	5260	-0.97	-0.4	/	11	Pass
NVNT	a	5280	-0.32	0.31	/	11	Pass
NVNT	a	5320	-0.61	0.26	/	11	Pass
NVNT	n20	5260	-4.15	-2.43	-0.20	11	Pass
NVNT	n20	5280	-3.12	-2.48	0.22	11	Pass
NVNT	n20	5320	-3.07	-2.11	0.45	11	Pass
NVNT	n40	5270	-6.82	-6.18	-3.48	11	Pass
NVNT	n40	5310	-7.4	-6.91	-4.14	11	Pass
NVNT	ac20	5260	-3.81	-0.81	0.95	11	Pass
NVNT	ac20	5280	-3.64	-0.69	1.09	11	Pass
NVNT	ac20	5320	-3.64	-1.08	0.84	11	Pass
NVNT	ac40	5270	-6.77	-4.87	-2.71	11	Pass
NVNT	ac40	5310	-7.4	-5.31	-3.22	11	Pass
NVNT	ac80	5290	-11.16	-10.07	-7.57	11	Pass
NVNT	ax20	5260	-3.15	-1.83	0.57	11	Pass
NVNT	ax20	5280	-2.78	-2.27	0.49	11	Pass
NVNT	ax20	5320	-2.6	-1.9	0.77	11	Pass
NVNT	ax40	5270	-6.57	-5.99	-3.26	11	Pass
NVNT	ax40	5310	-6.44	-6.35	-3.38	11	Pass
NVNT	ax80	5290	-9.86	-10.99	-7.38	11	Pass

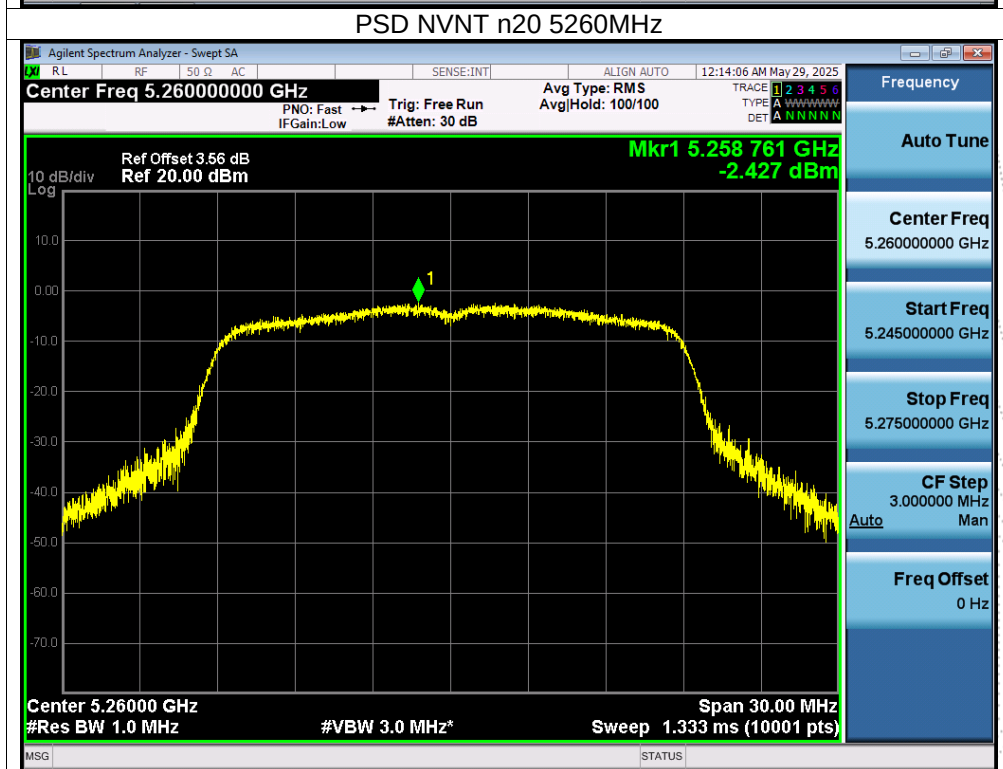
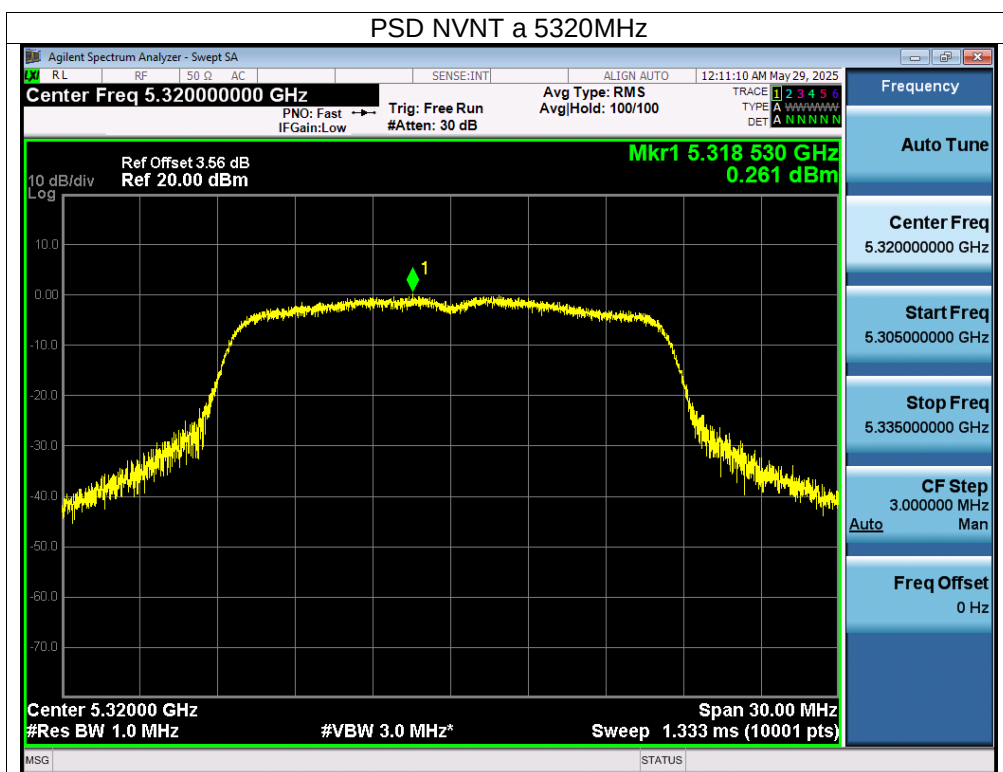
Note:

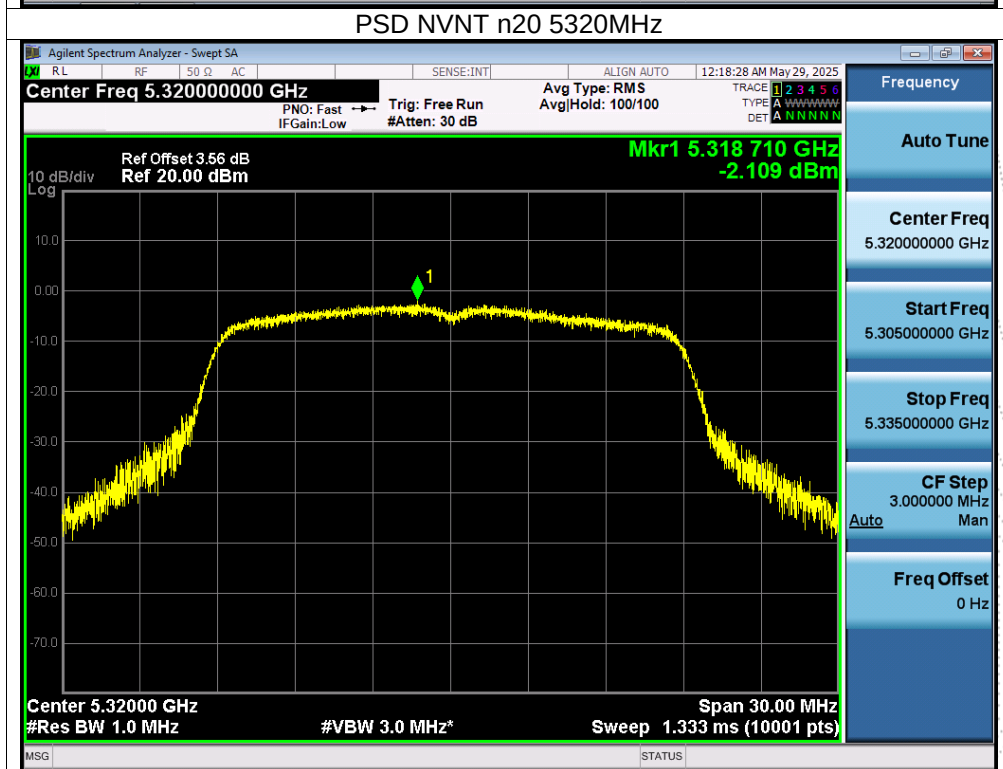
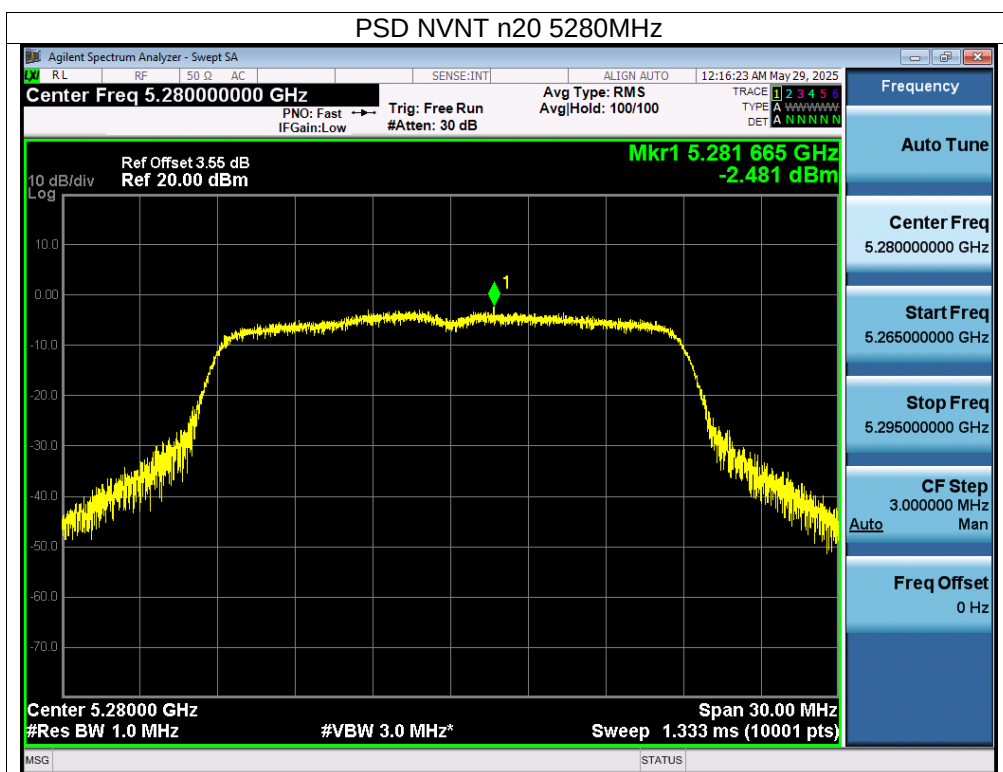
Antenna A gain: 0.76 dBi, Antenna B gain: 0.76 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]
=3.77 dBi<6dBi

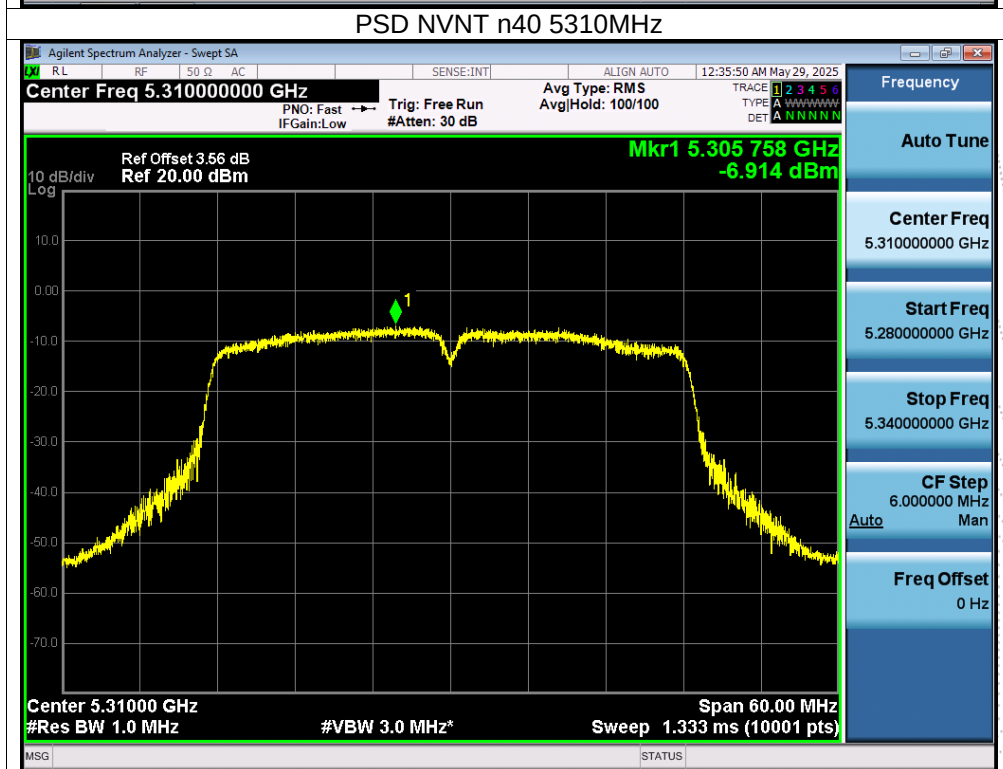
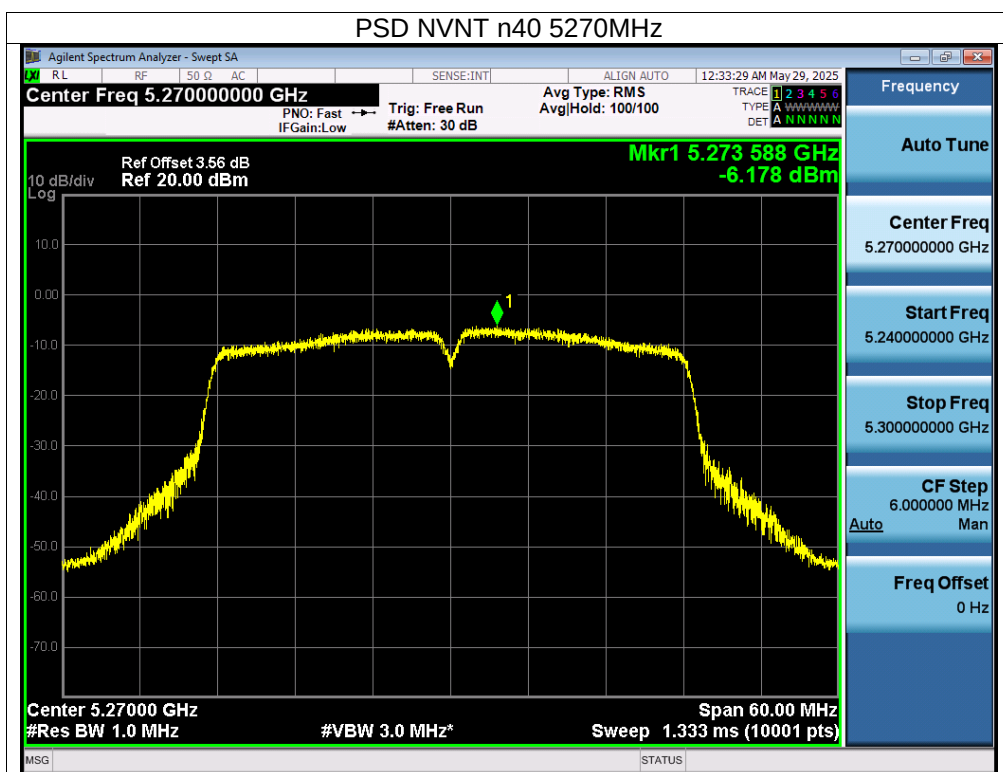
Limit=11 dBi

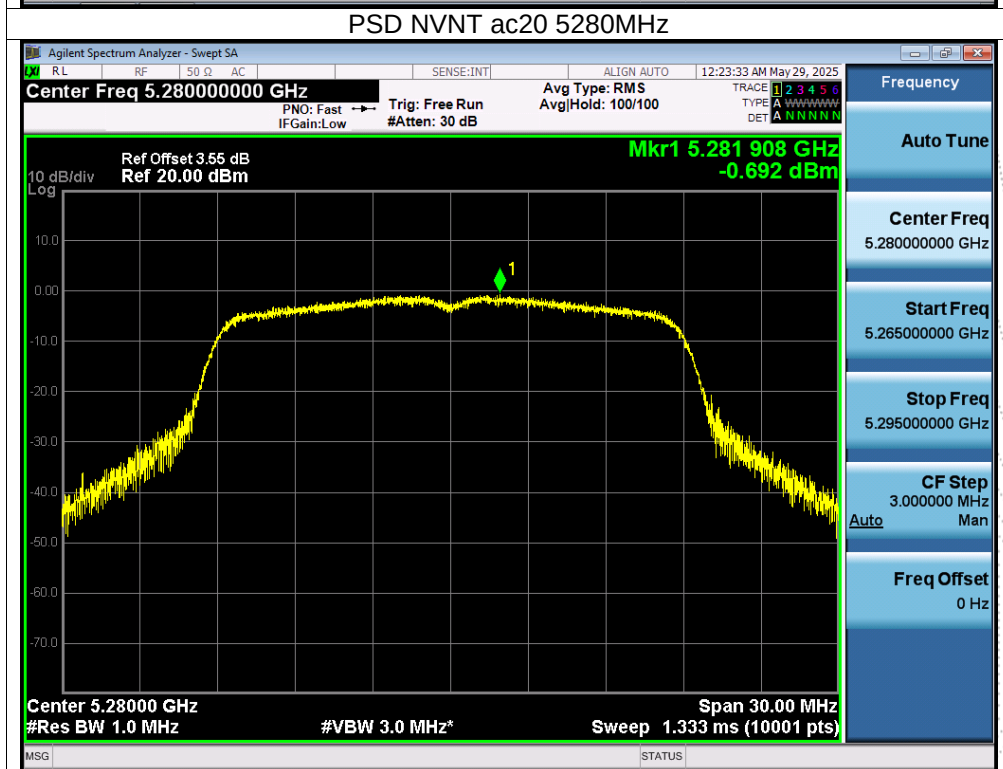
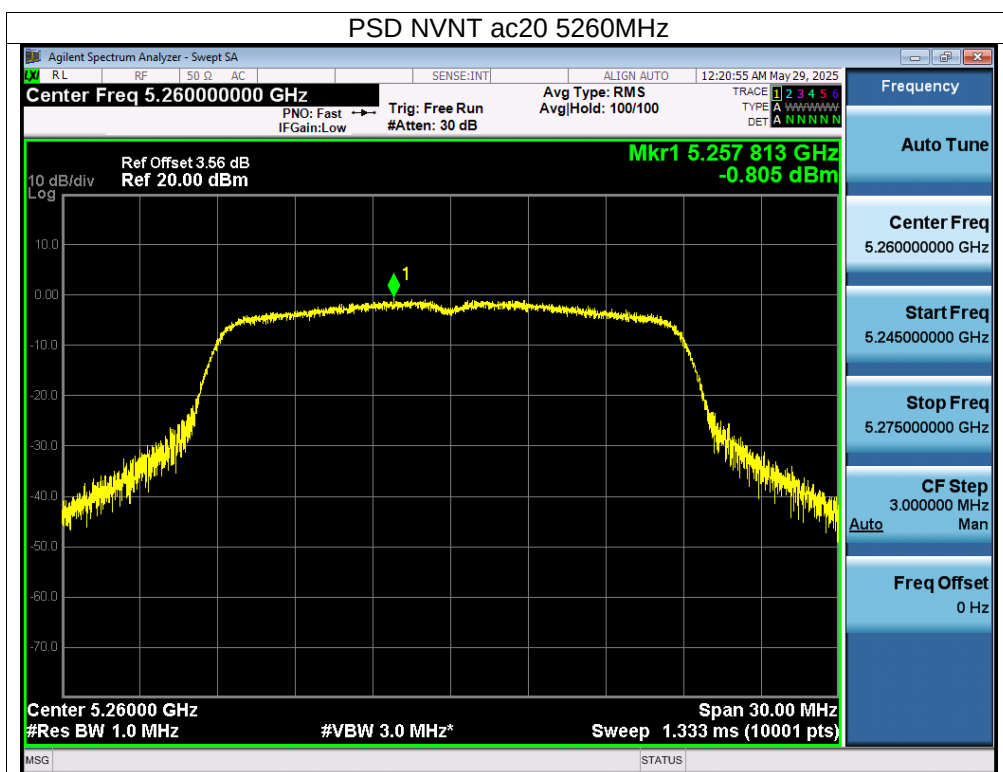
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

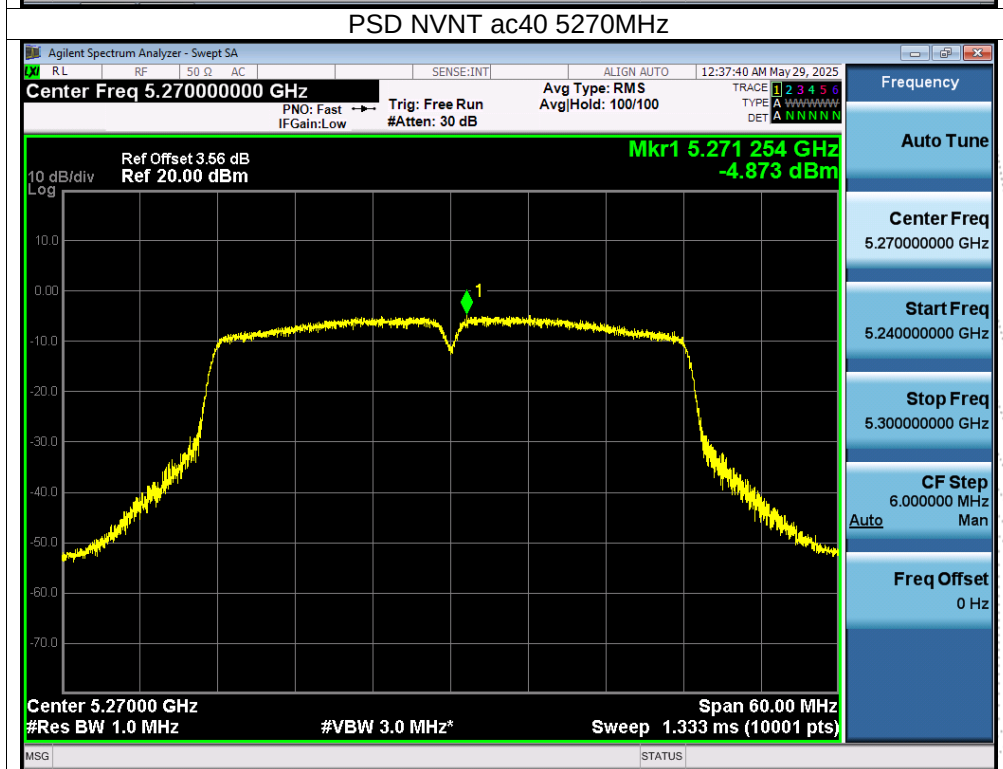
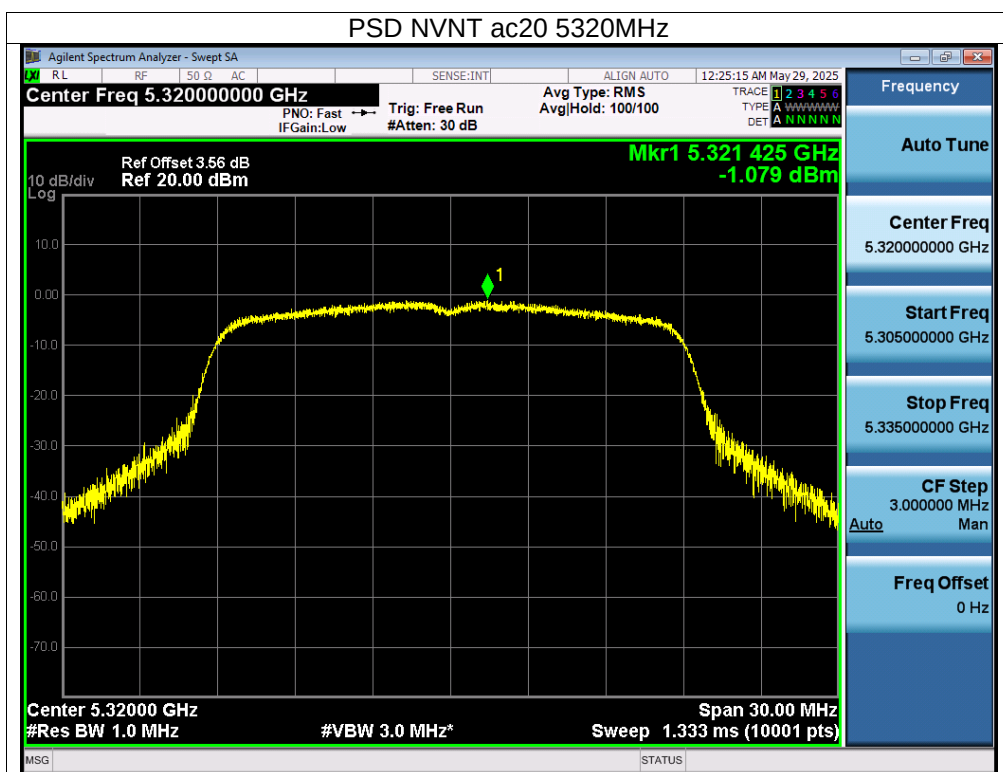


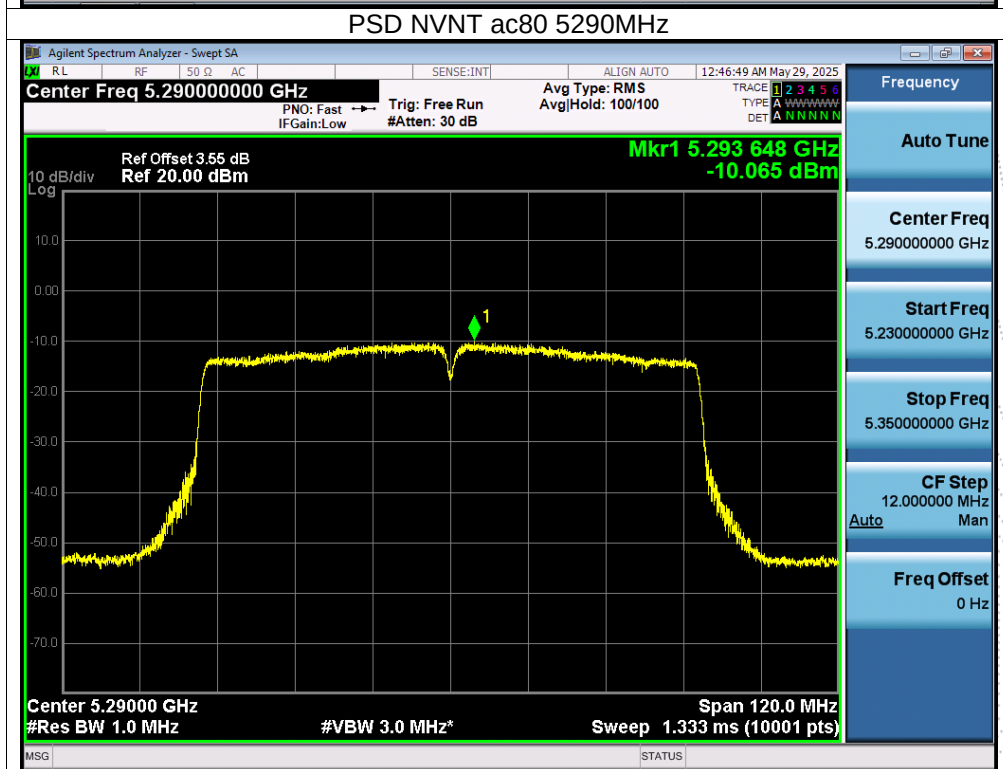
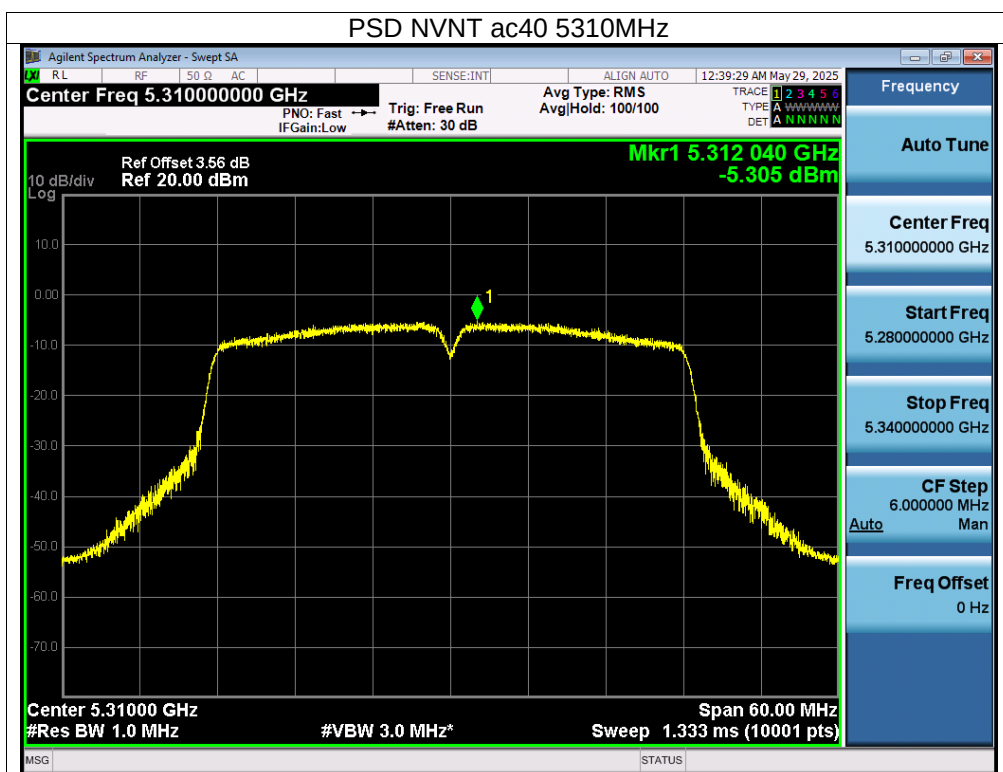


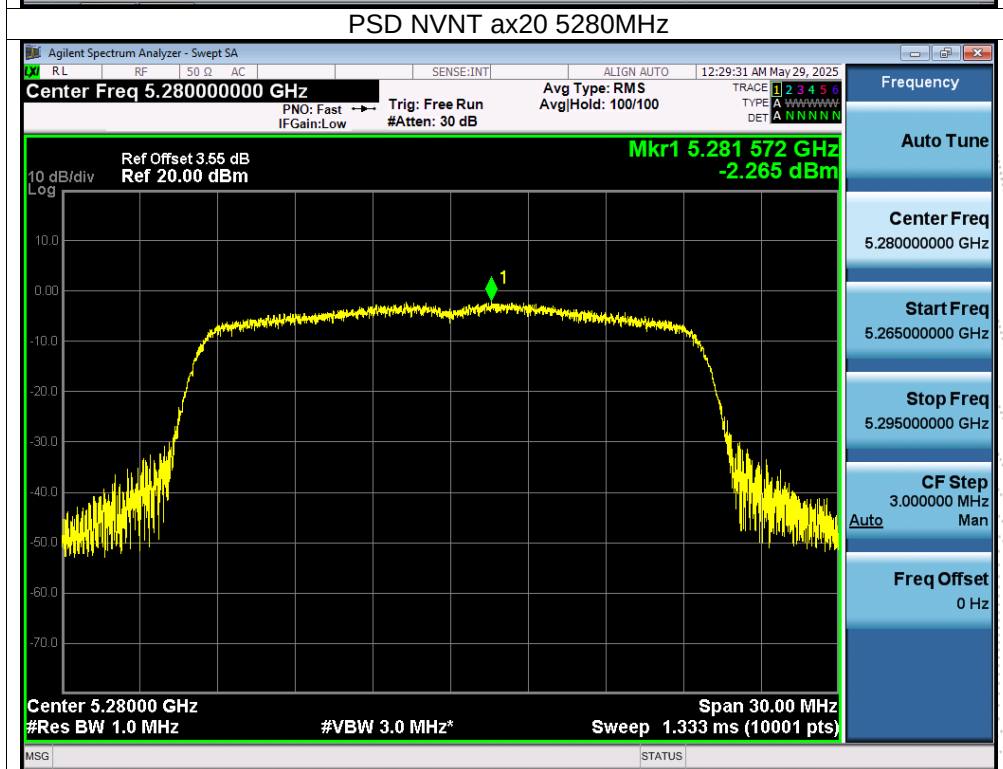
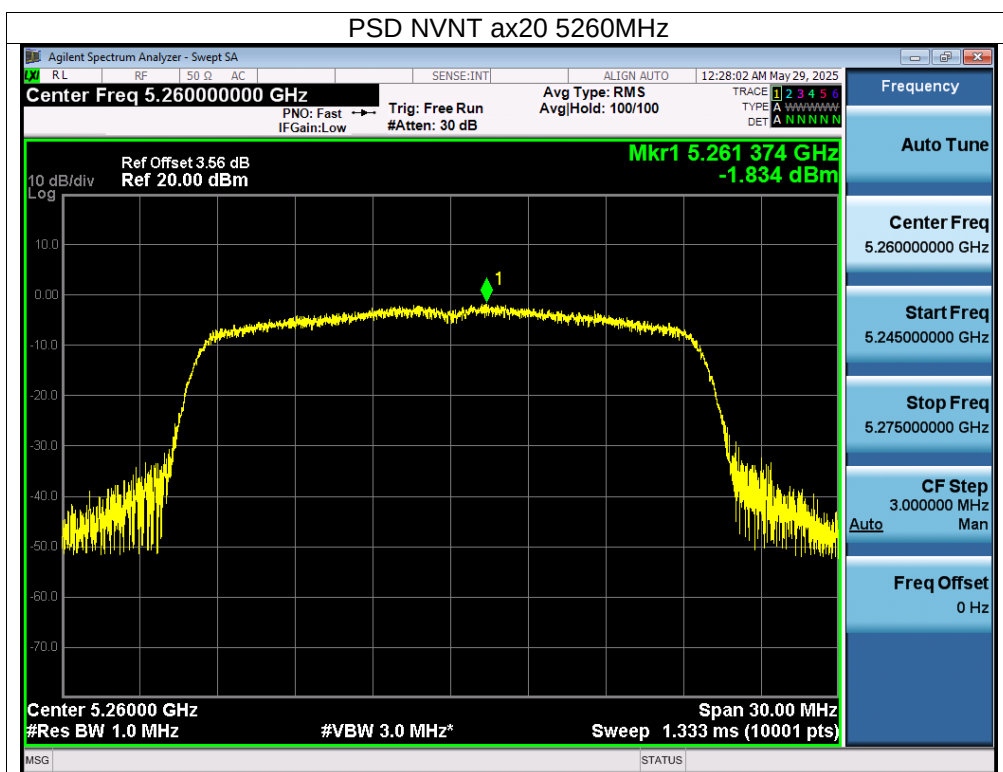


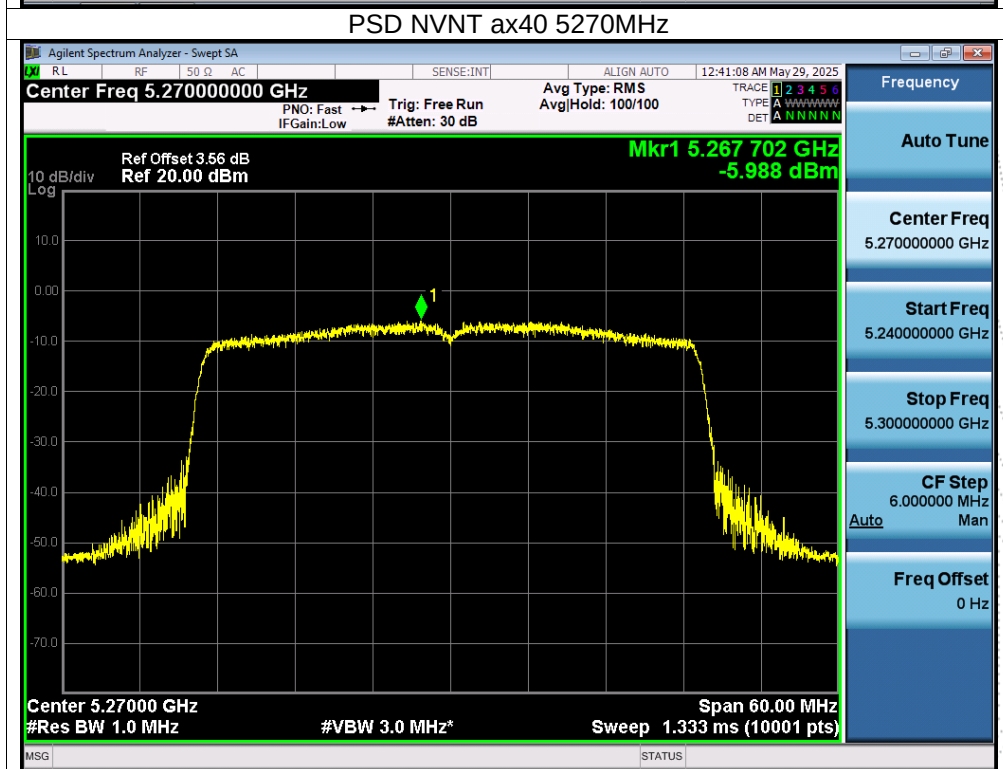
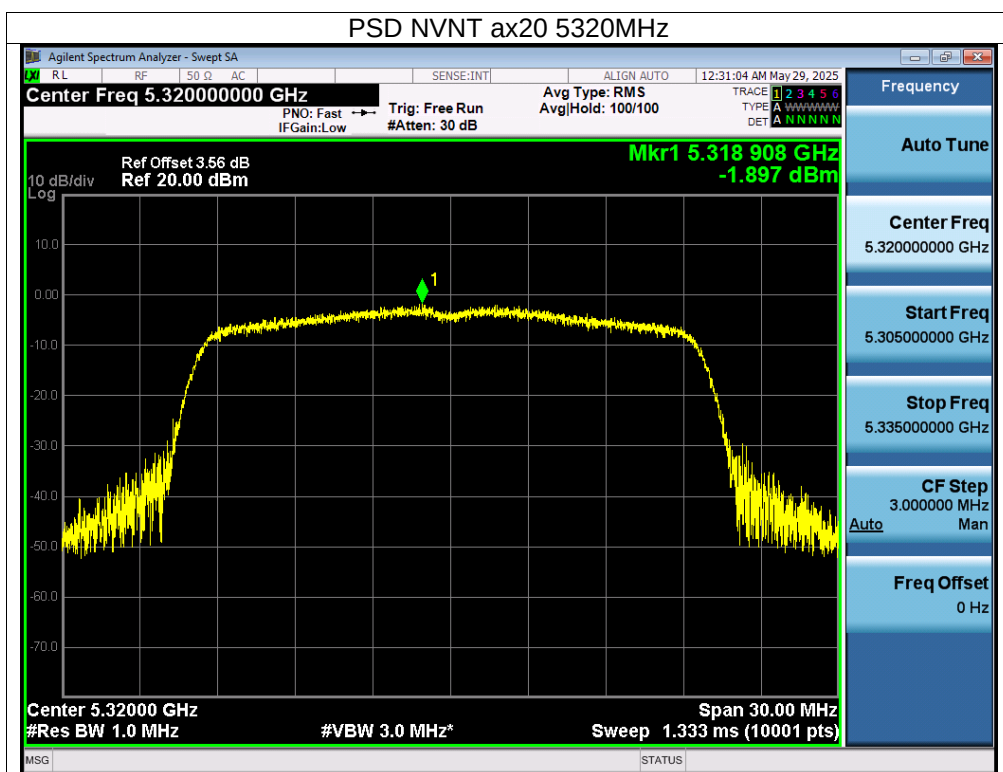


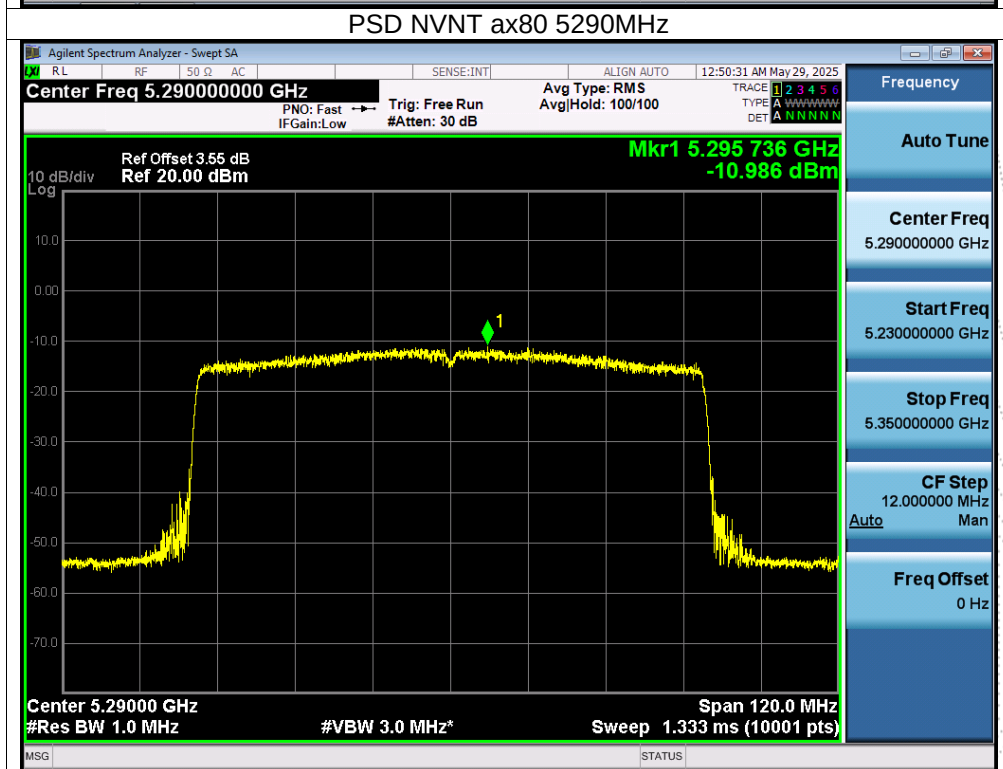
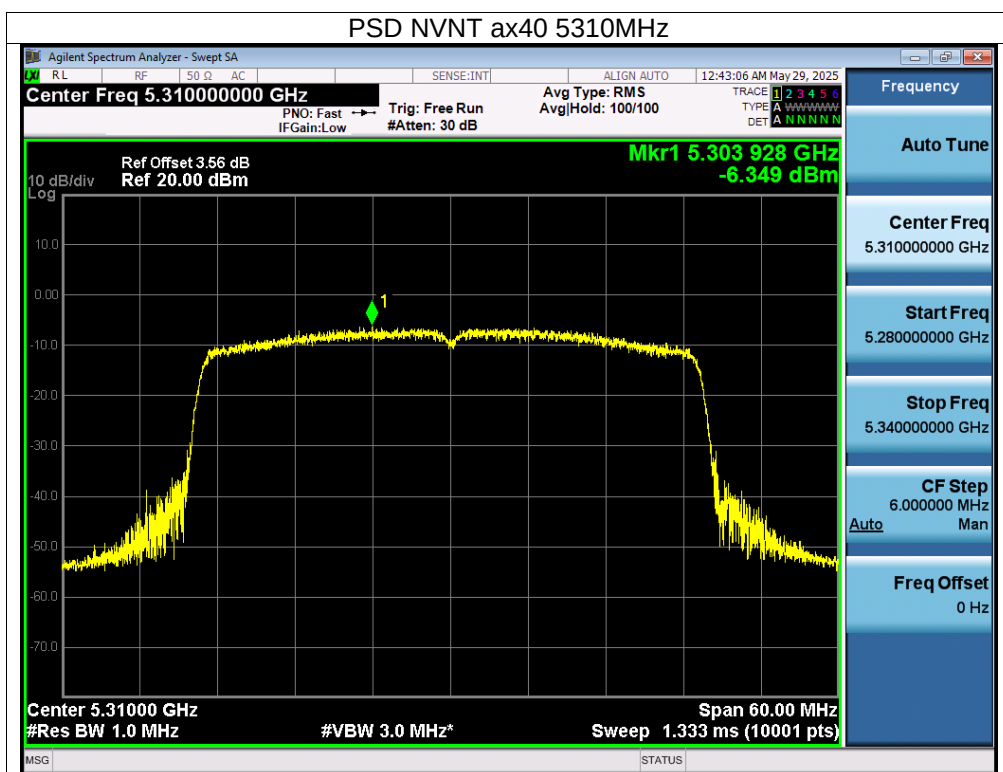












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 3.3V
Test Mode:	(U-NII-2C) 5500MHz-5700MHz		

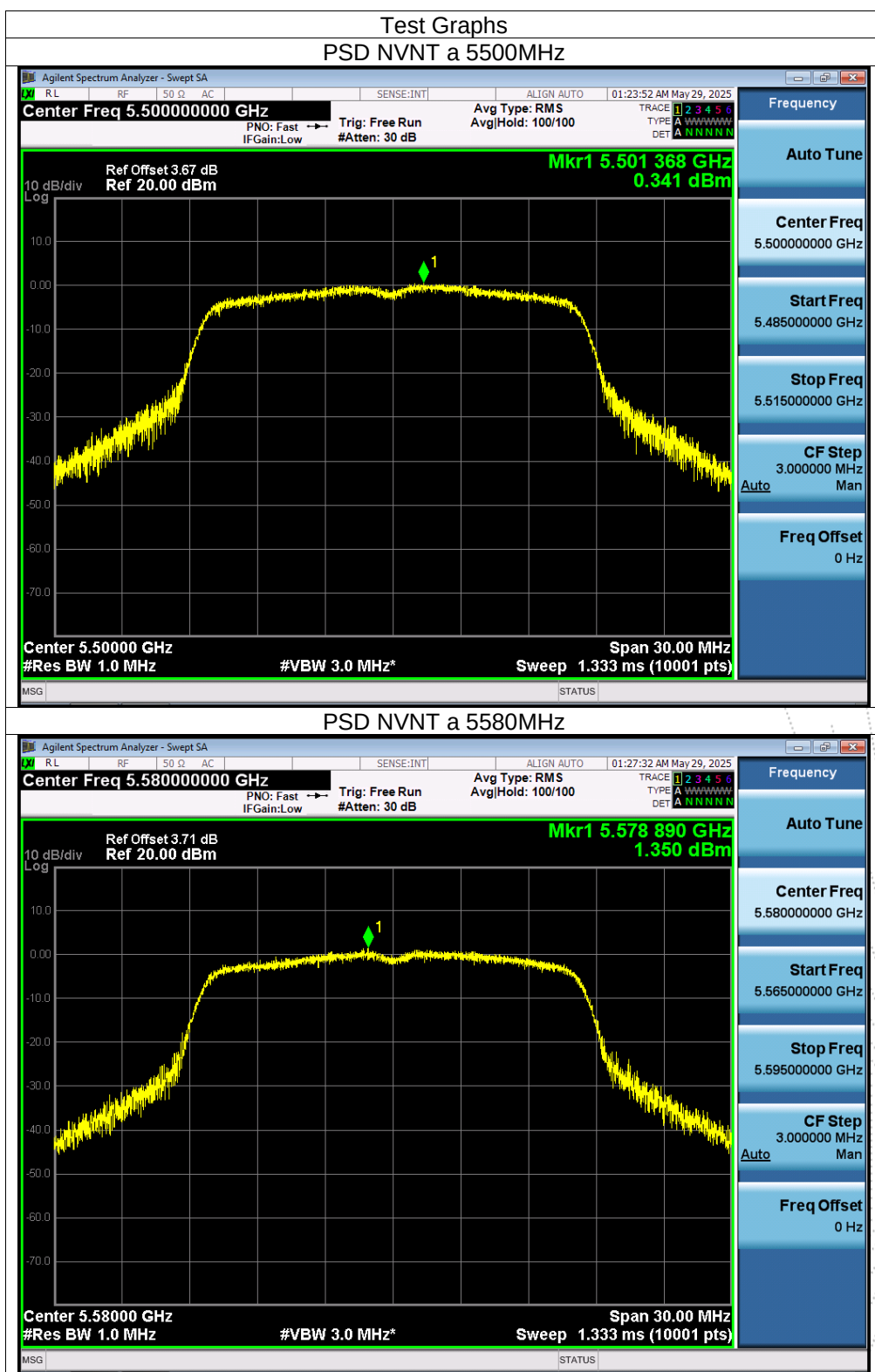
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant A	Ant B	Total		
NVNT	a	5500	-1.25	0.34	/	11	Pass
NVNT	a	5580	0.51	1.35	/	11	Pass
NVNT	a	5700	0.77	1.52	/	11	Pass
NVNT	n20	5500	-3.81	-2.99	-0.37	9.41	Pass
NVNT	n20	5580	-1.93	-2.57	0.77	9.41	Pass
NVNT	n20	5700	-2.6	-2.06	0.69	9.41	Pass
NVNT	n40	5510	-8.81	-7.17	-4.90	9.41	Pass
NVNT	n40	5550	-8.1	-7.03	-4.52	9.41	Pass
NVNT	n40	5670	-6.93	-6.32	-3.60	9.41	Pass
NVNT	ac20	5500	-3.39	-1.3	0.79	9.41	Pass
NVNT	ac20	5580	-2.51	-0.71	1.49	9.41	Pass
NVNT	ac20	5700	-1.9	-0.45	1.90	9.41	Pass
NVNT	ac40	5510	-8.28	-5.46	-3.63	9.41	Pass
NVNT	ac40	5550	-8.28	-5.15	-3.43	9.41	Pass
NVNT	ac40	5670	-6.54	-4.49	-2.38	9.41	Pass
NVNT	ac80	5530	-12.13	-8.33	-6.82	9.41	Pass
NVNT	ax20	5500	-4.04	-1.66	0.32	9.41	Pass
NVNT	ax20	5580	-2.13	-2.04	0.93	9.41	Pass
NVNT	ax20	5700	-1.63	-1.12	1.64	9.41	Pass
NVNT	ax40	5510	-7.76	-6.58	-4.12	9.41	Pass
NVNT	ax40	5550	-6.69	-6.05	-3.35	9.41	Pass
NVNT	ax40	5670	-5.92	-5.56	-2.73	9.41	Pass
NVNT	ax80	5530	-10.69	-9.71	-7.16	9.41	Pass

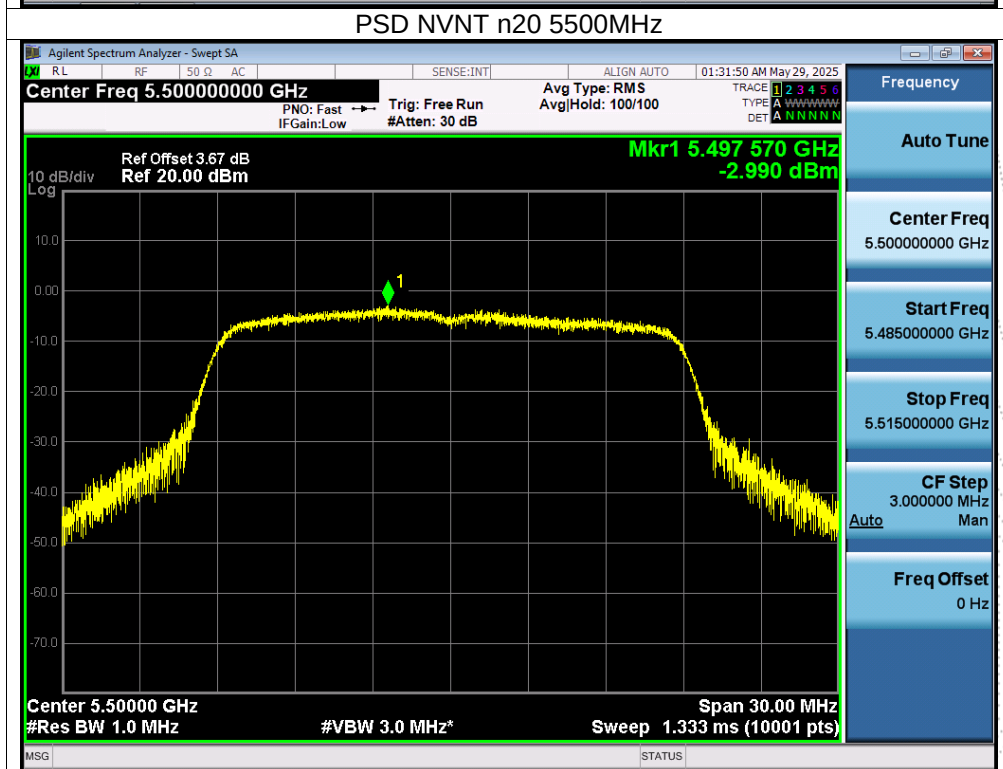
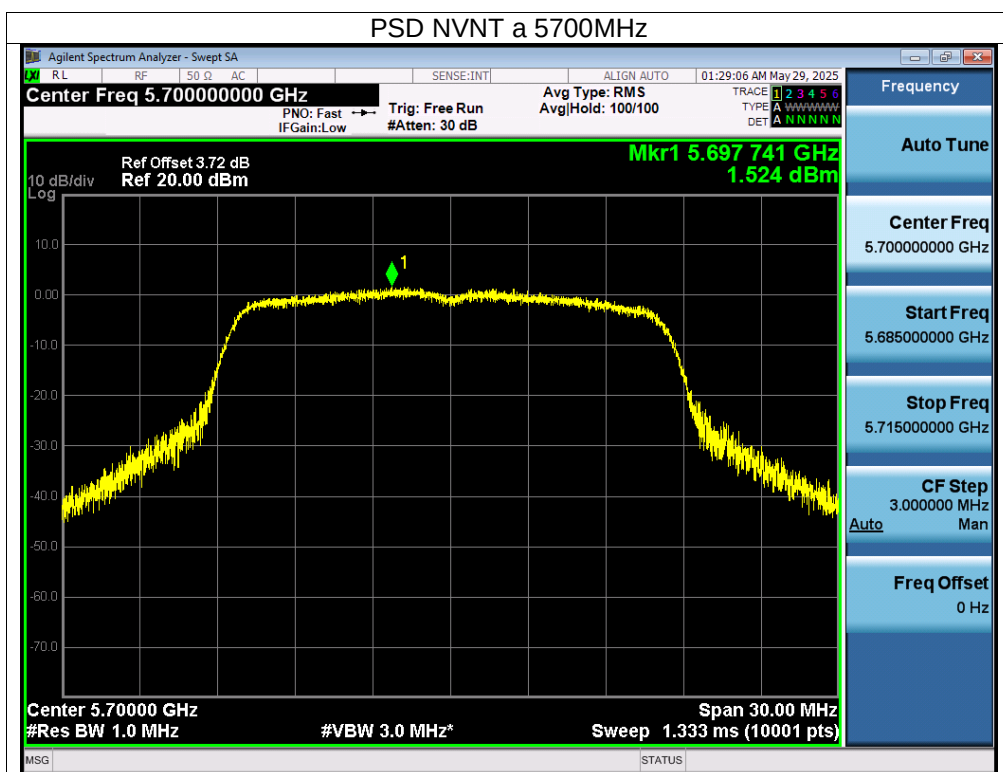
Note:

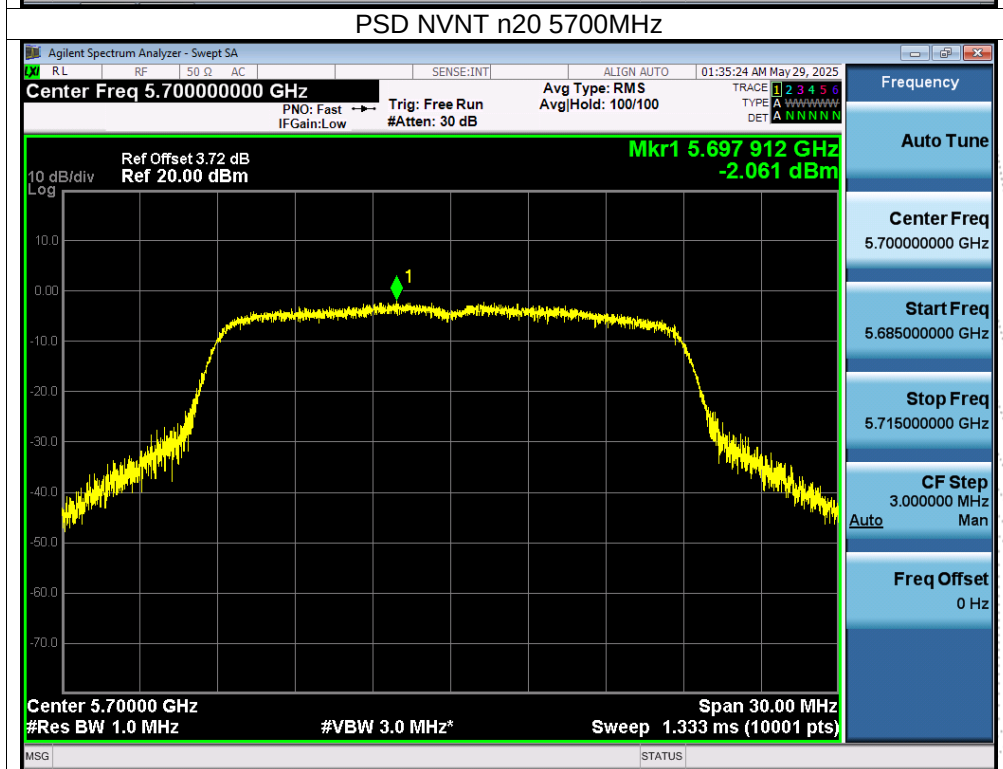
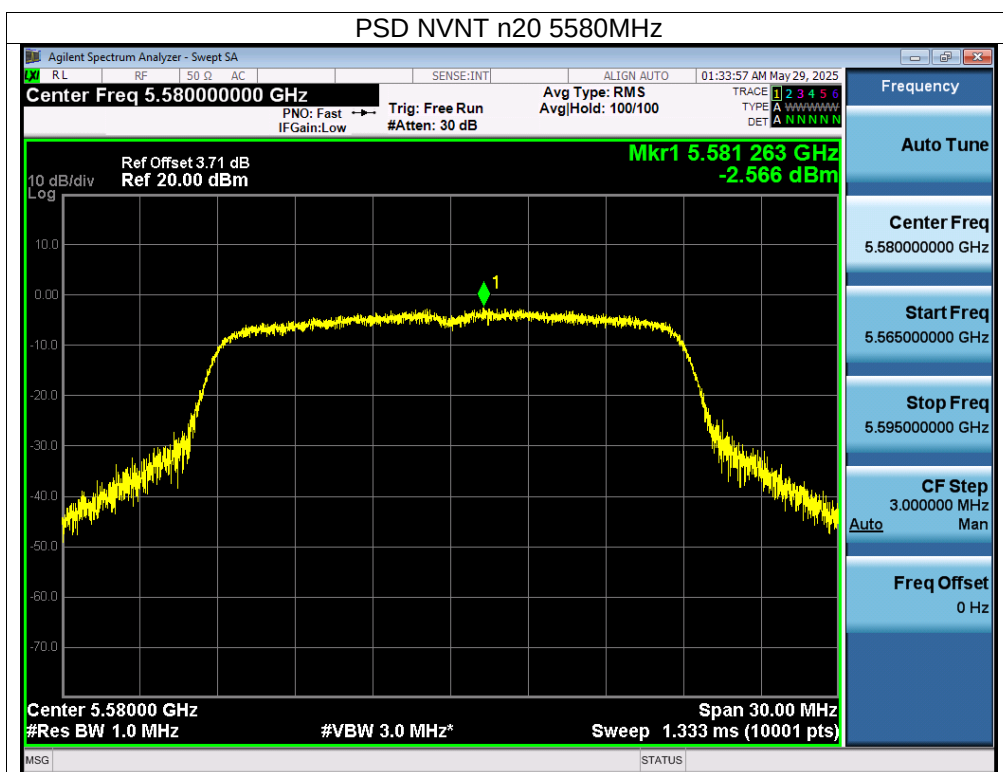
Antenna A gain: 4.58 dBi, Antenna B gain: 4.58 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]
=7.59 dBi>6dBi

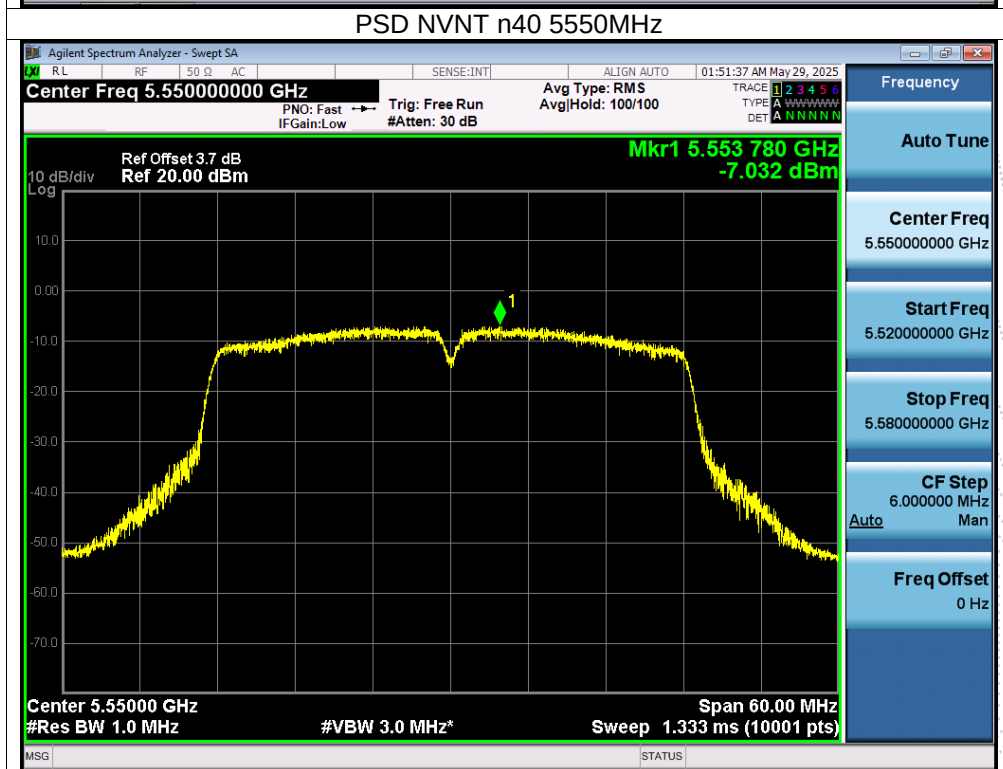
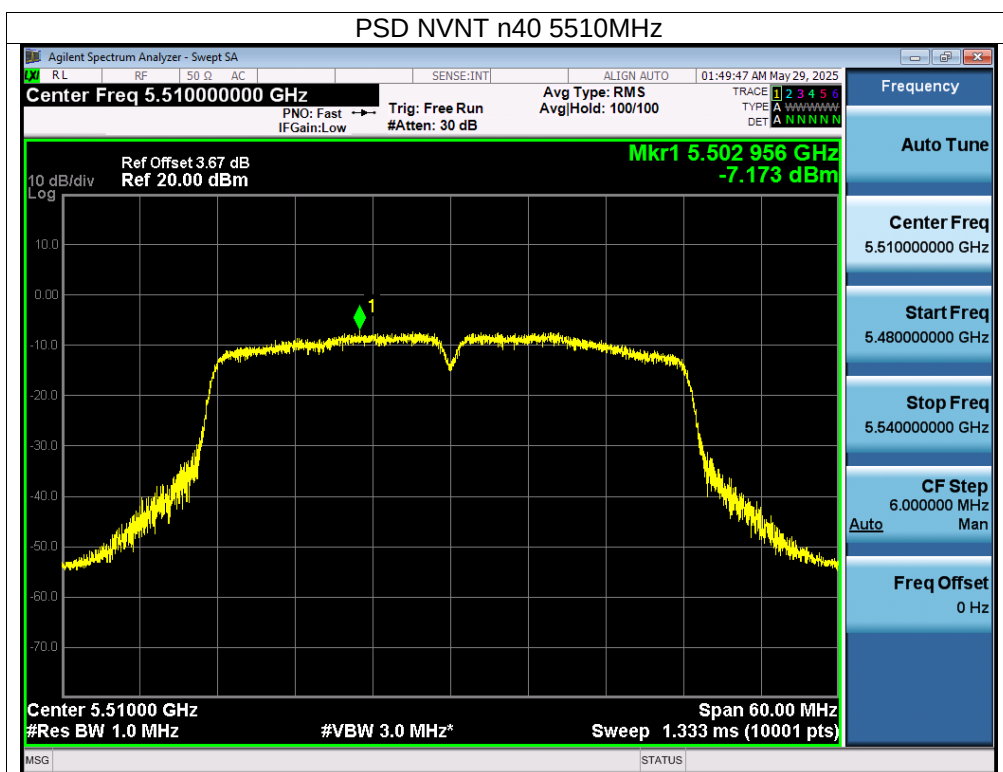
Limit=11-(7.59-6)=9.41 dBi

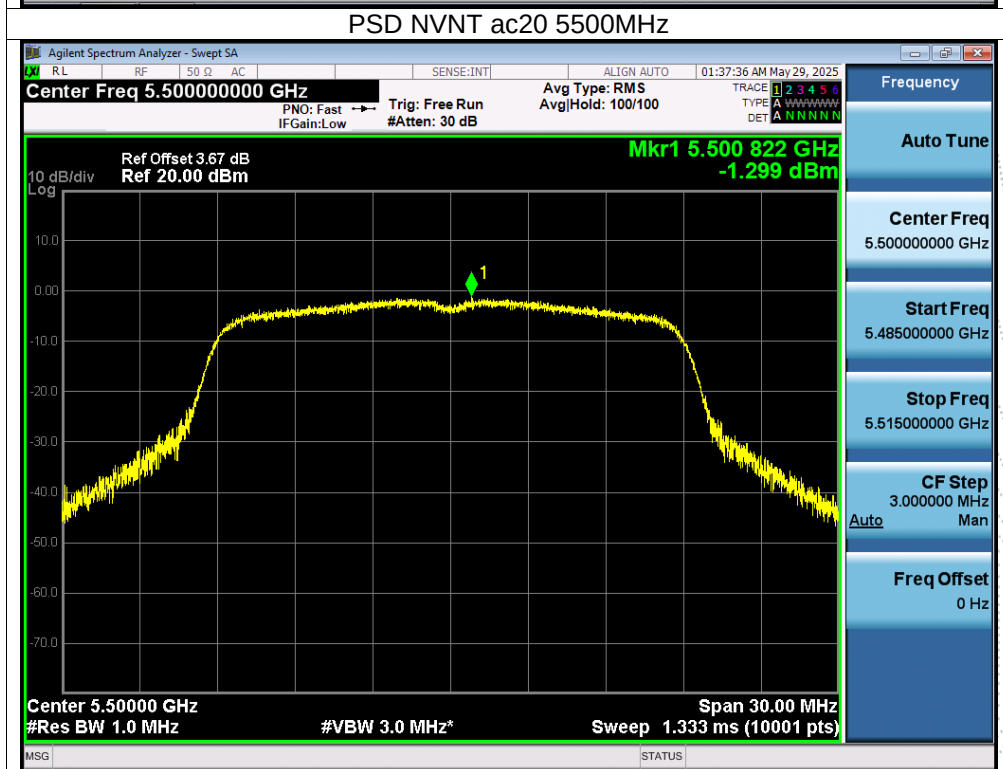
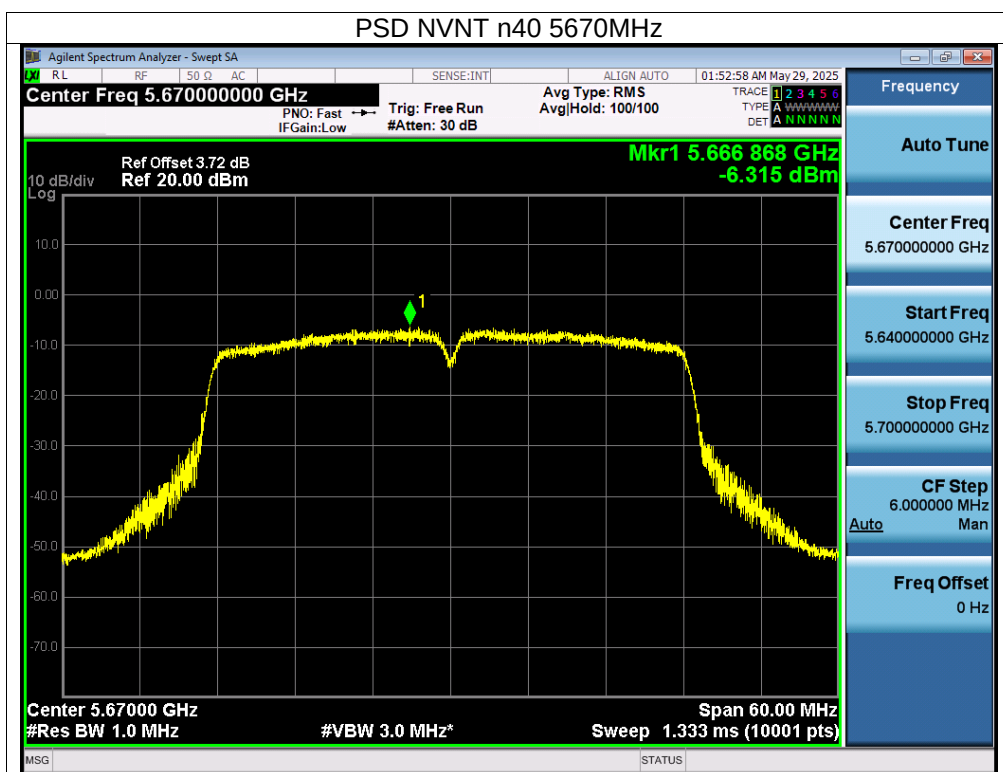
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

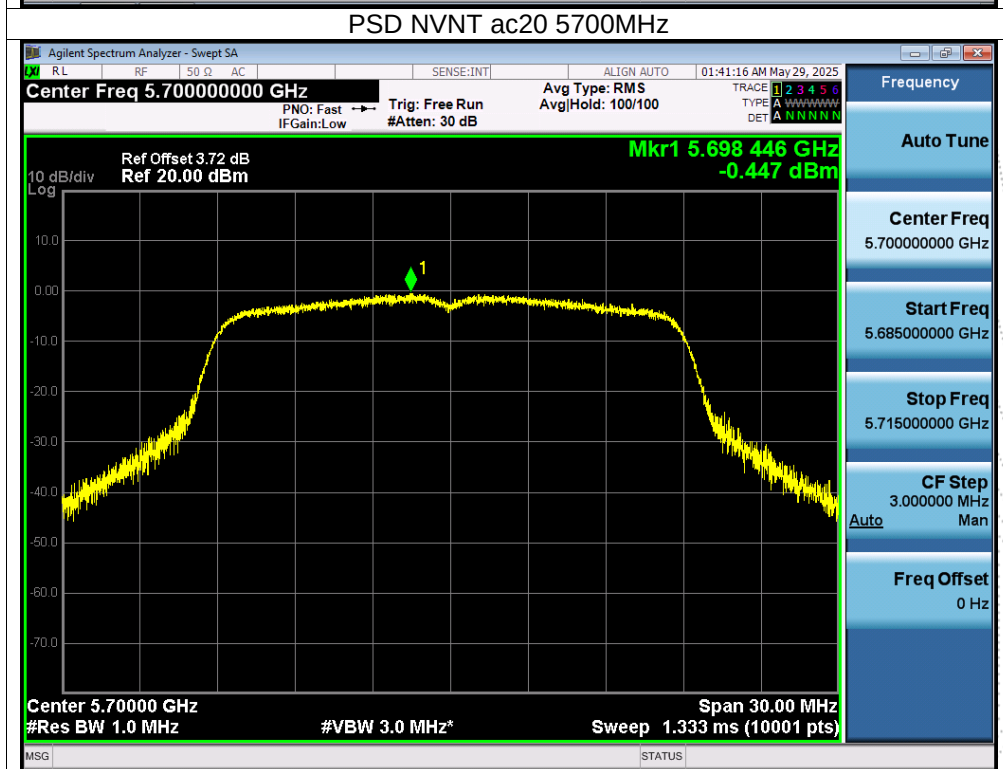
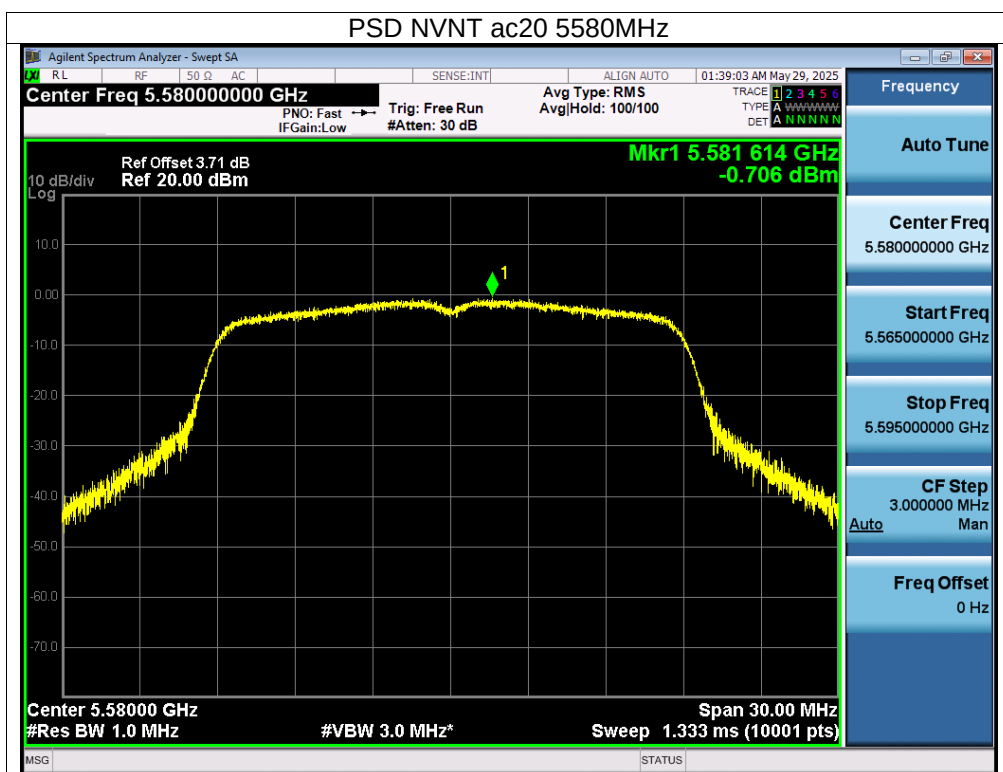


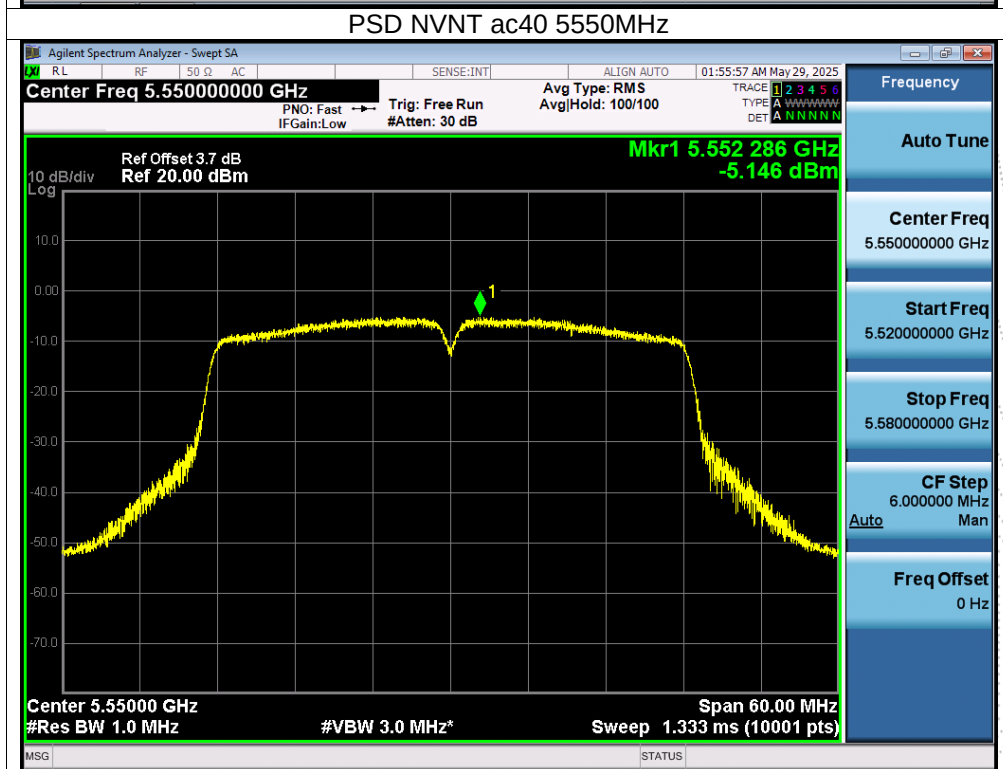
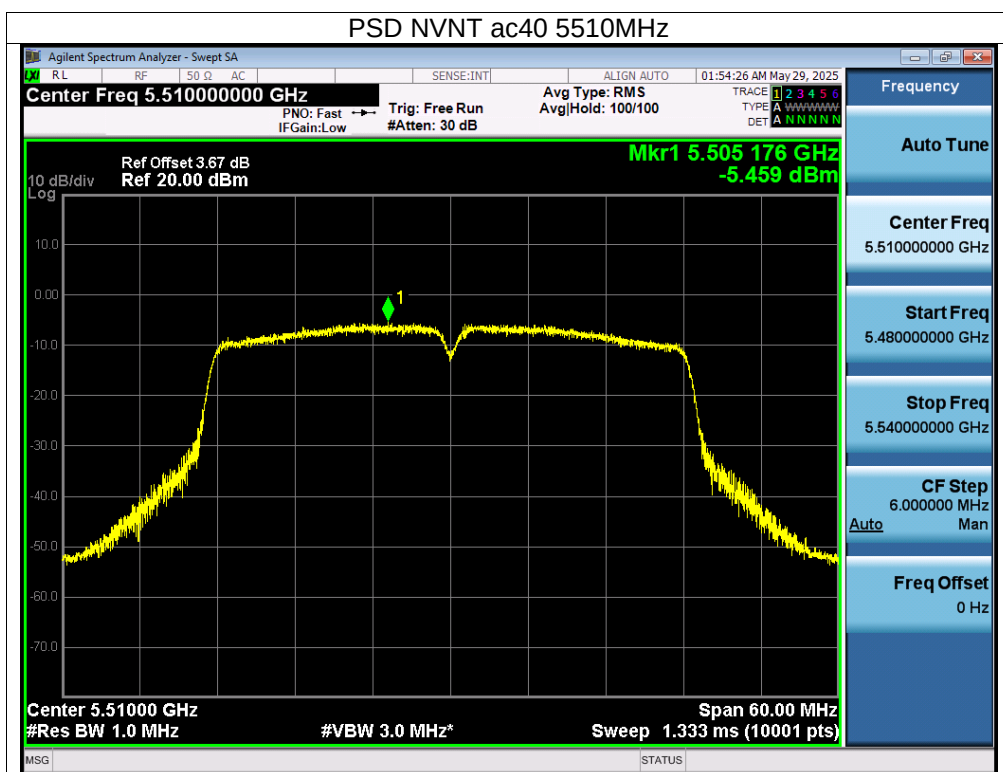


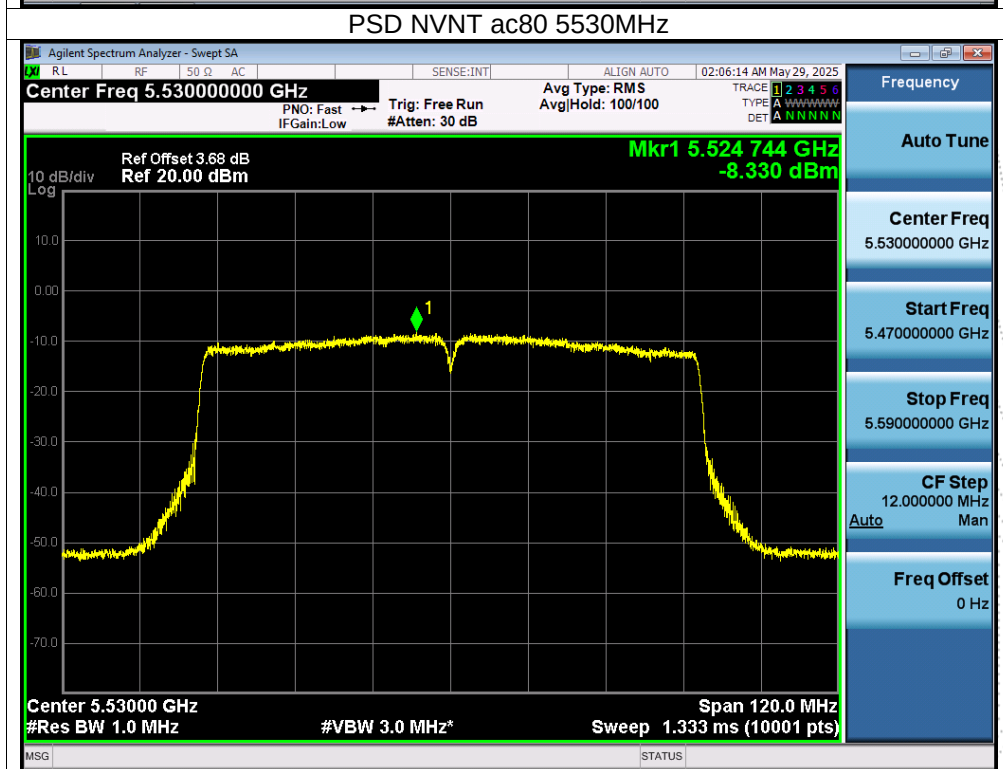
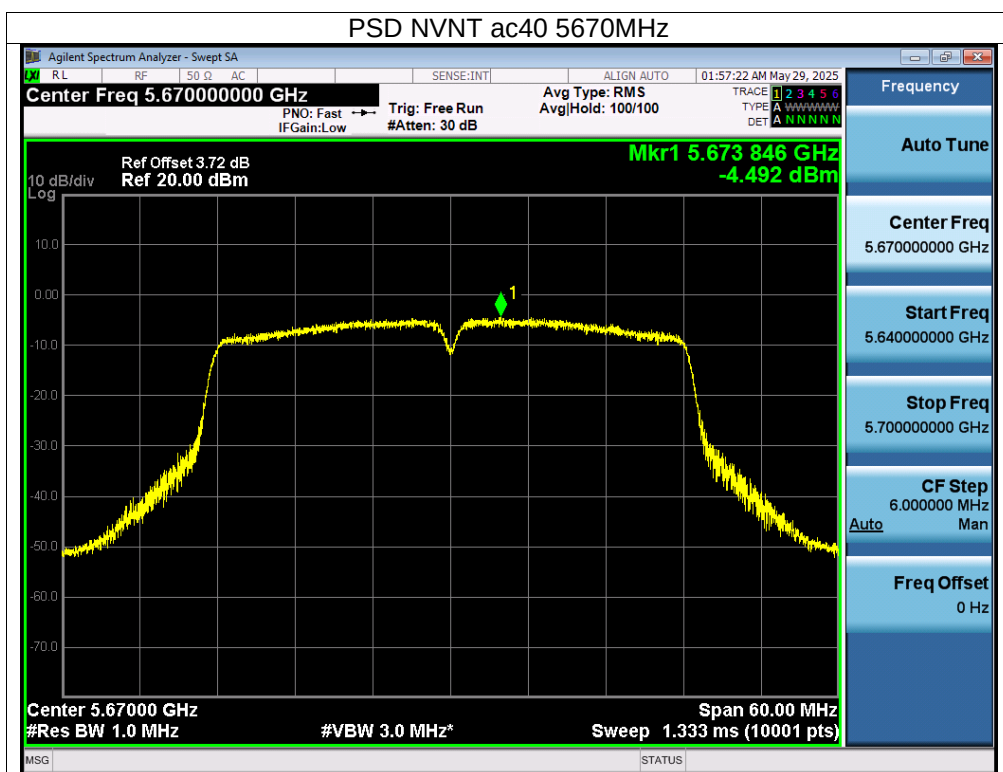


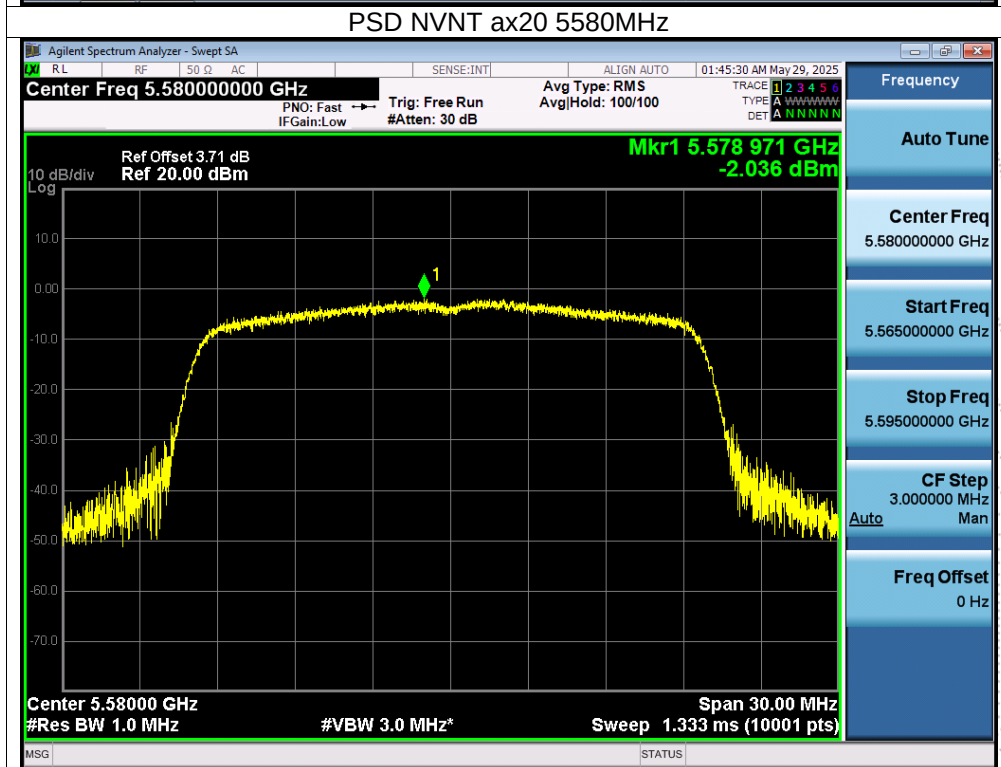
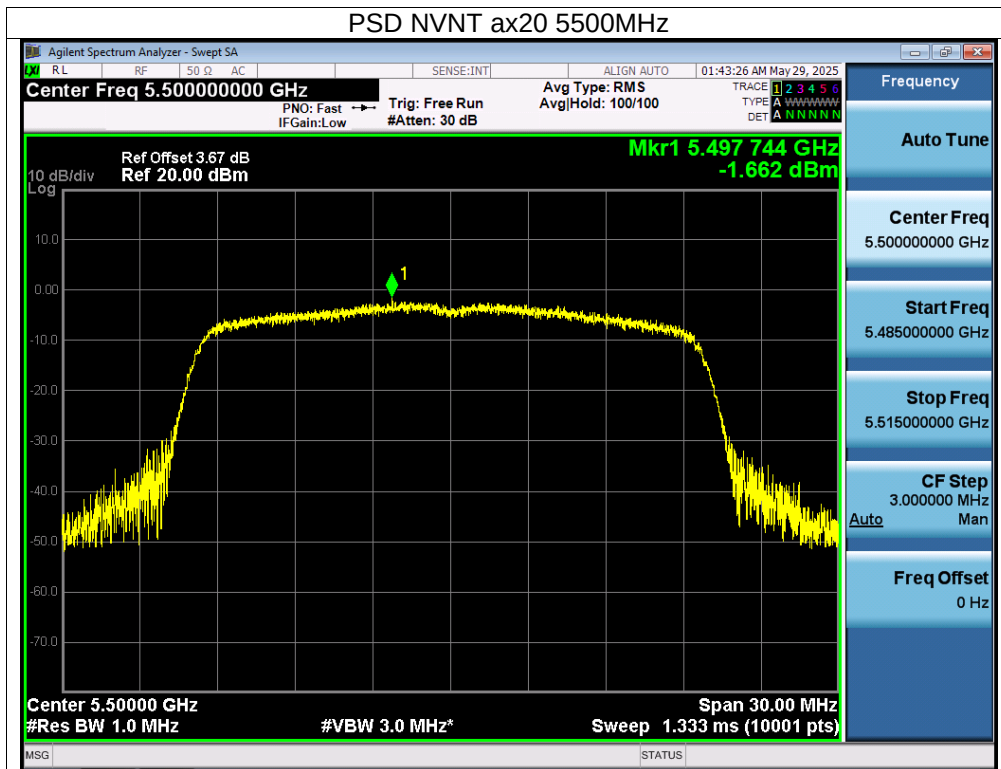


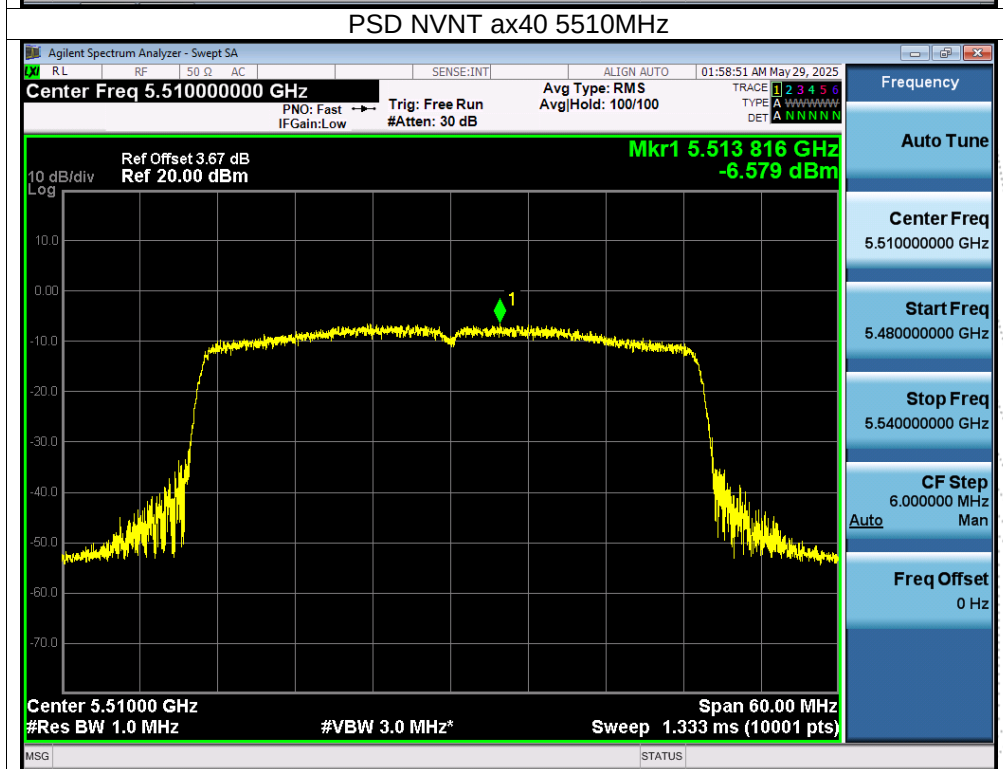
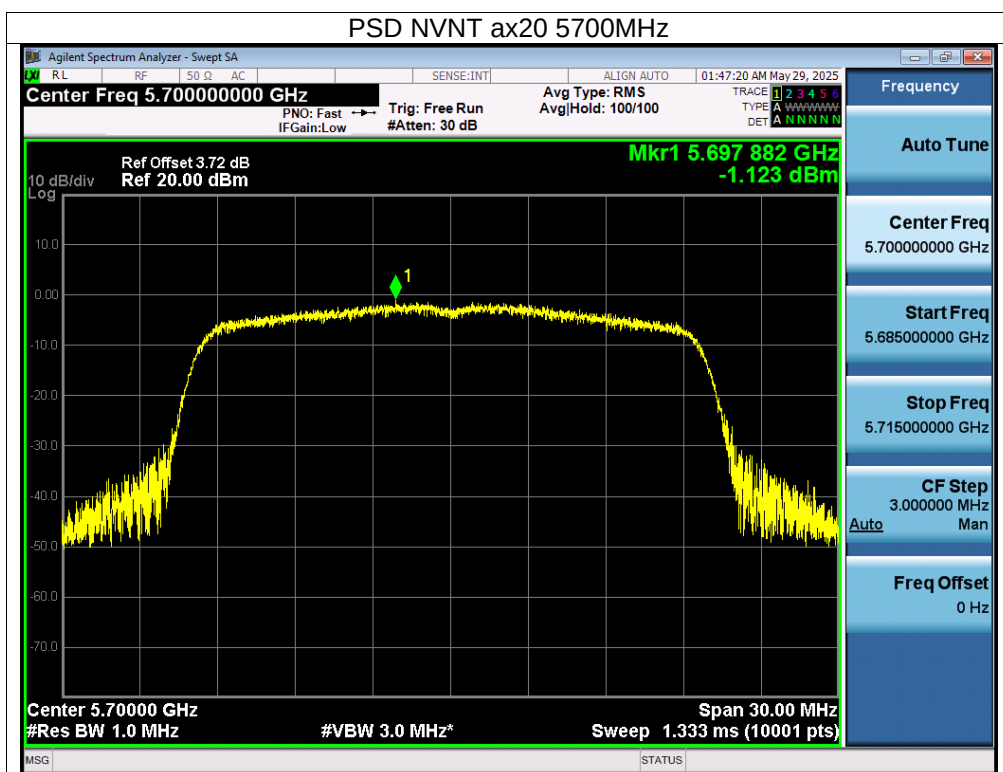


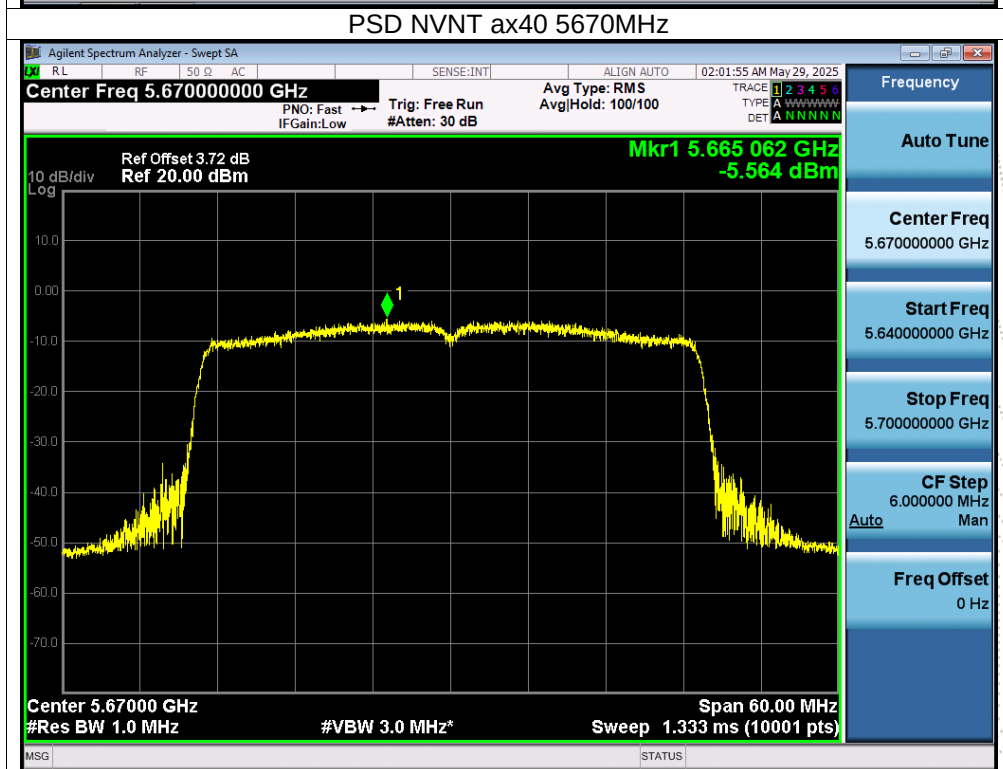
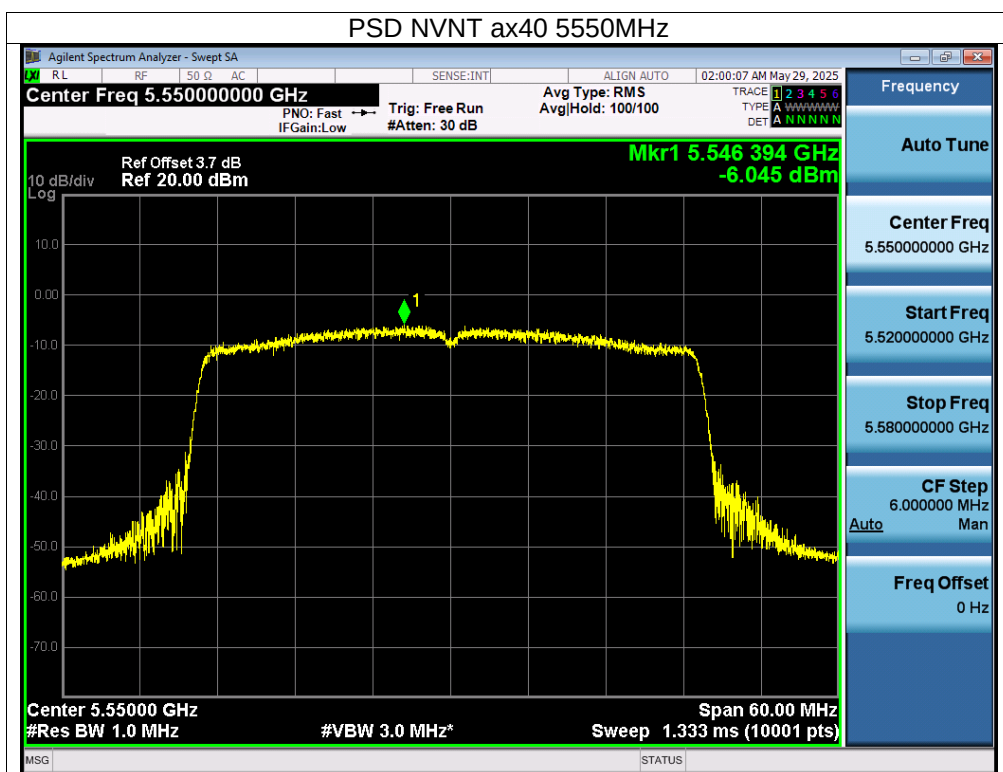


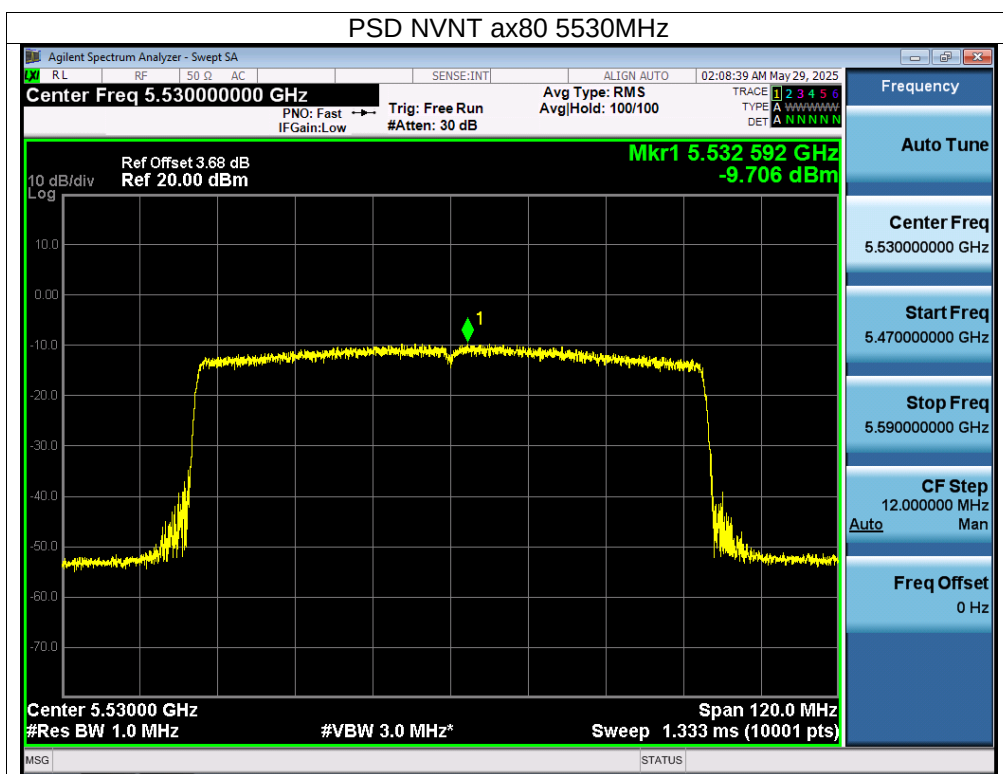












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 3.3V
Test Mode:	(U-NII-3) 5745MHz-5825MHz		

Condi- tion	Mode	Fre- quency (MHz)	Conducted PSD (dBm/510KHz)		Conducted PSD (dBm/500KHz)			Limit (dBm/ 500KHz)	Verdict
			Ant A	Ant B	Ant A	Ant B	Total		
NVNT	a	5745	-2.39	-2.31	-2.476	-2.396	/	30	Pass
NVNT	a	5785	-2.49	-2.32	-2.576	-2.406	/	30	Pass
NVNT	a	5825	-3.76	-2.86	-3.846	-2.946	/	30	Pass
NVNT	n20	5745	-5.67	-5.59	-5.756	-5.676	-2.71	28.14	Pass
NVNT	n20	5785	-6.18	-6.65	-6.266	-6.736	-3.48	28.14	Pass
NVNT	n20	5825	-6.98	-6.33	-7.066	-6.416	-3.72	28.14	Pass
NVNT	n40	5755	-9.73	-9.63	-9.816	-9.716	-6.76	28.14	Pass
NVNT	n40	5795	-10.82	-10.13	-10.906	-10.216	-7.54	28.14	Pass
NVNT	ac20	5745	-5.58	-3.67	-5.666	-3.756	-1.60	28.14	Pass
NVNT	ac20	5785	-6.38	-4.04	-6.466	-4.126	-2.13	28.14	Pass
NVNT	ac20	5825	-6.77	-4.22	-6.856	-4.306	-2.39	28.14	Pass
NVNT	ac40	5755	-9.7	-8.04	-9.786	-8.126	-5.87	28.14	Pass
NVNT	ac40	5795	-10.44	-8.24	-10.526	-8.326	-6.28	28.14	Pass
NVNT	ac80	5775	-14.71	-12.4	-14.796	-12.486	-10.48	28.14	Pass
NVNT	ax20	5745	-4.31	-4.76	-4.396	-4.846	-1.60	28.14	Pass
NVNT	ax20	5785	-5.69	-5.22	-5.776	-5.306	-2.52	28.14	Pass
NVNT	ax20	5825	-5.81	-5.45	-5.896	-5.536	-2.70	28.14	Pass
NVNT	ax40	5755	-8.62	-8.81	-8.706	-8.896	-5.79	28.14	Pass
NVNT	ax40	5795	-9.42	-9.6	-9.506	-9.686	-6.58	28.14	Pass
NVNT	ax80	5775	-12.86	-13.84	-12.946	-13.926	-10.40	28.14	Pass

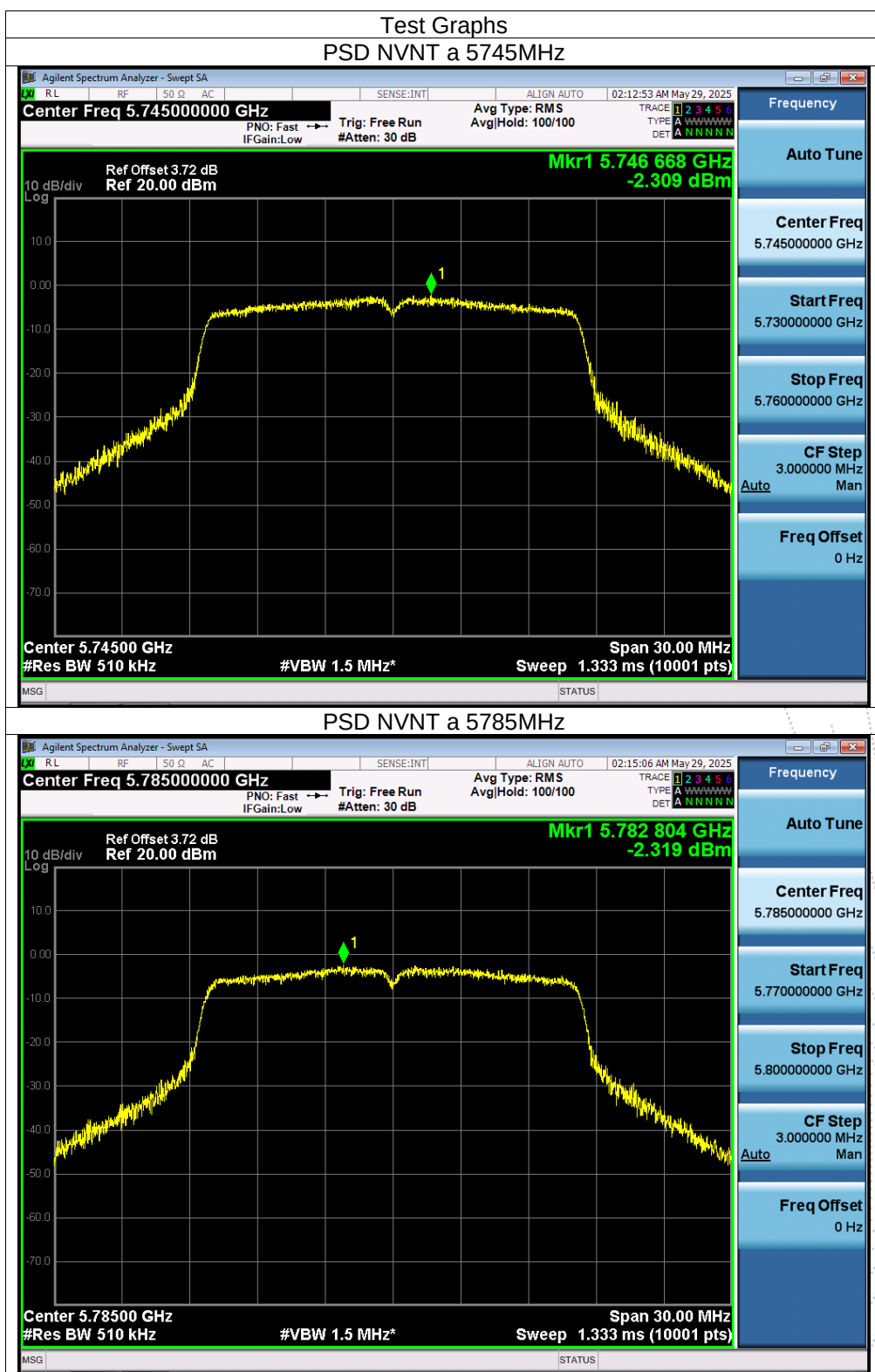
Note: Correction Factor = $10\log(500\text{KHz}/\text{RBW in measurement}) = -0.086$

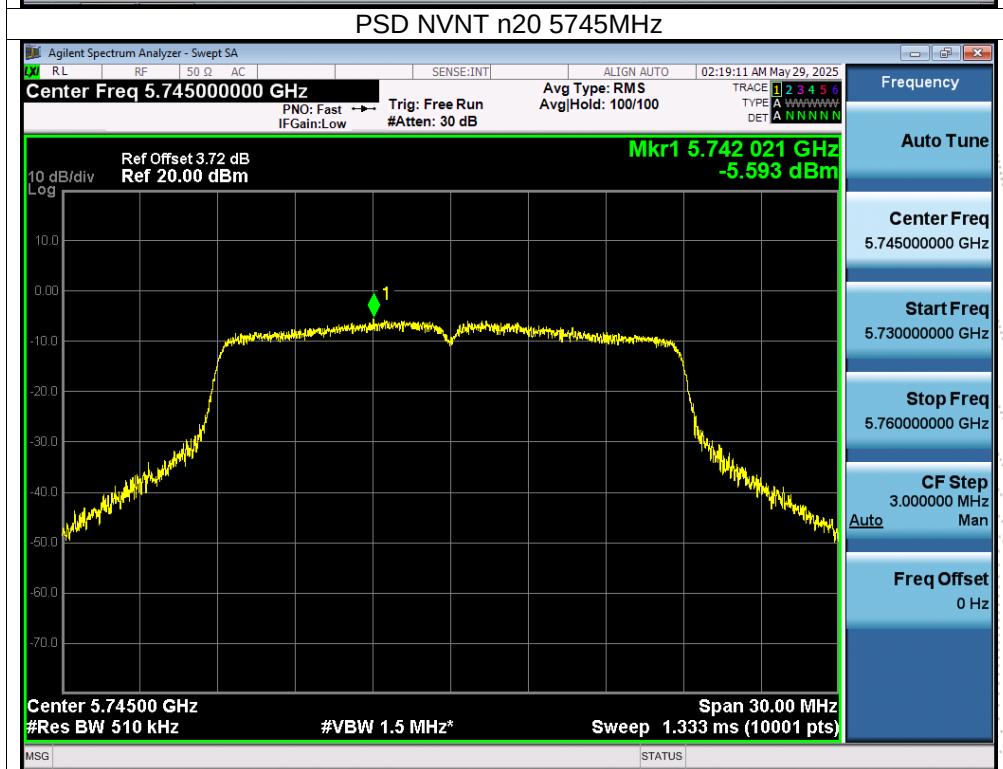
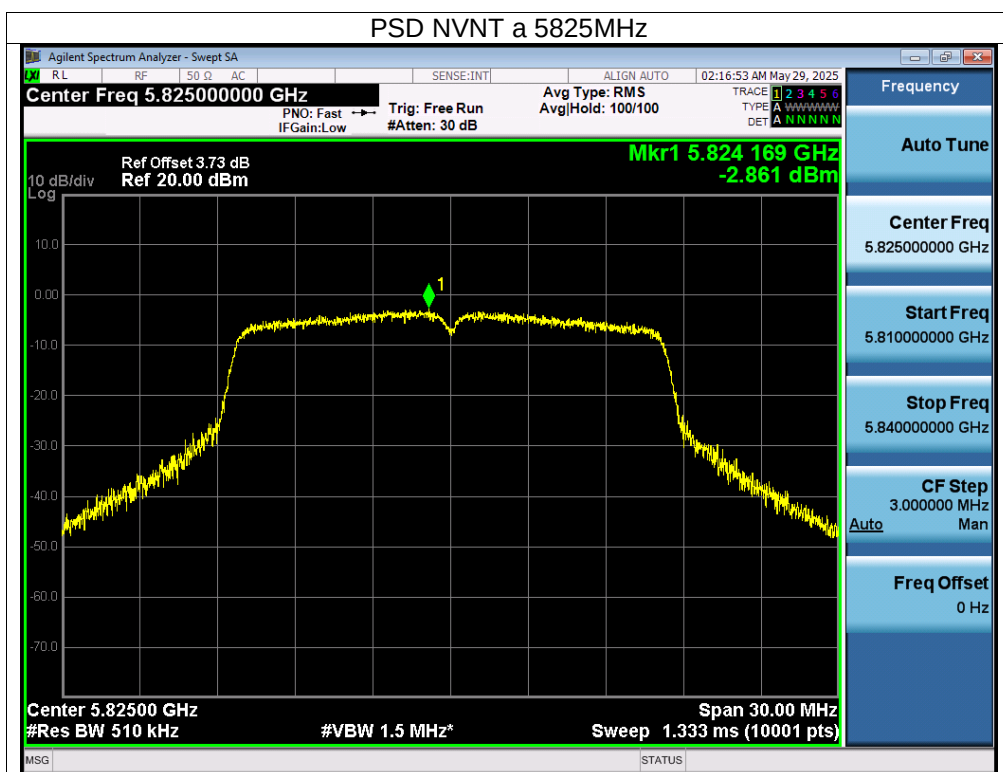
Note:

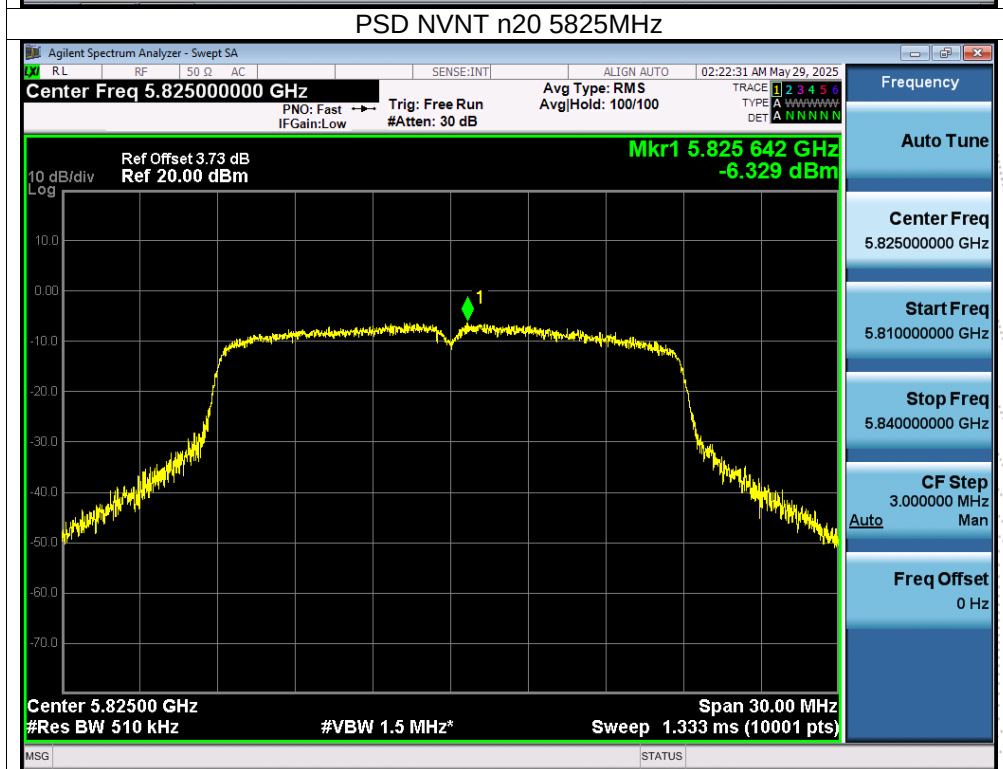
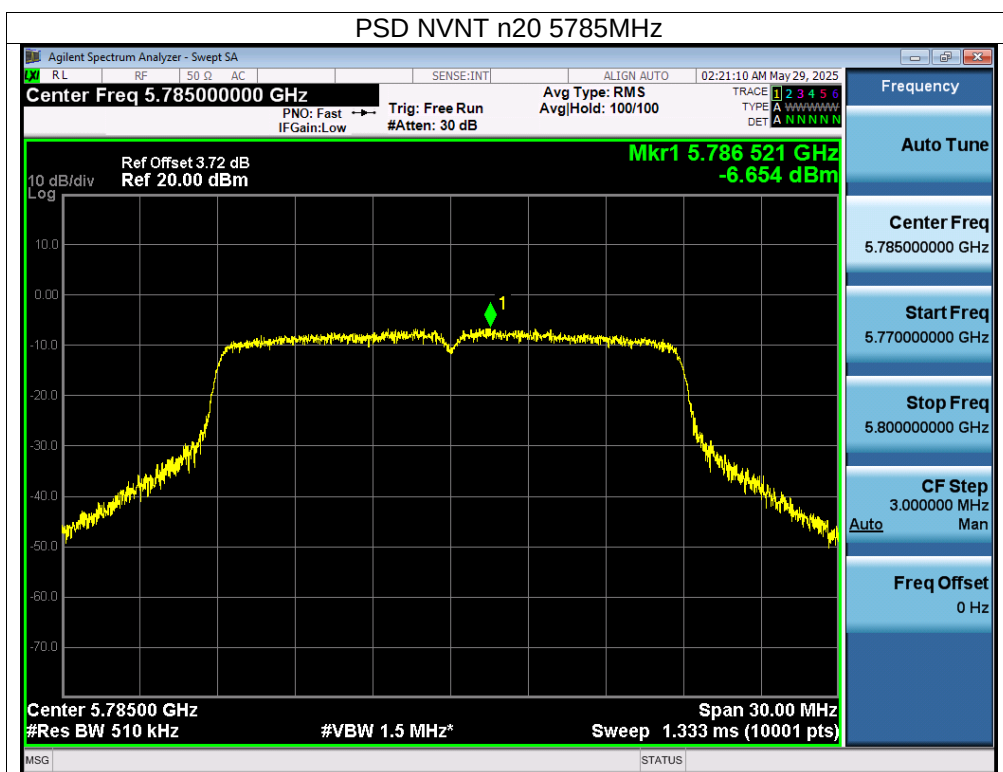
Antenna A gain: 4.15 dBi, Antenna B gain: 4.15 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]
=7.16 dBi>6dBi

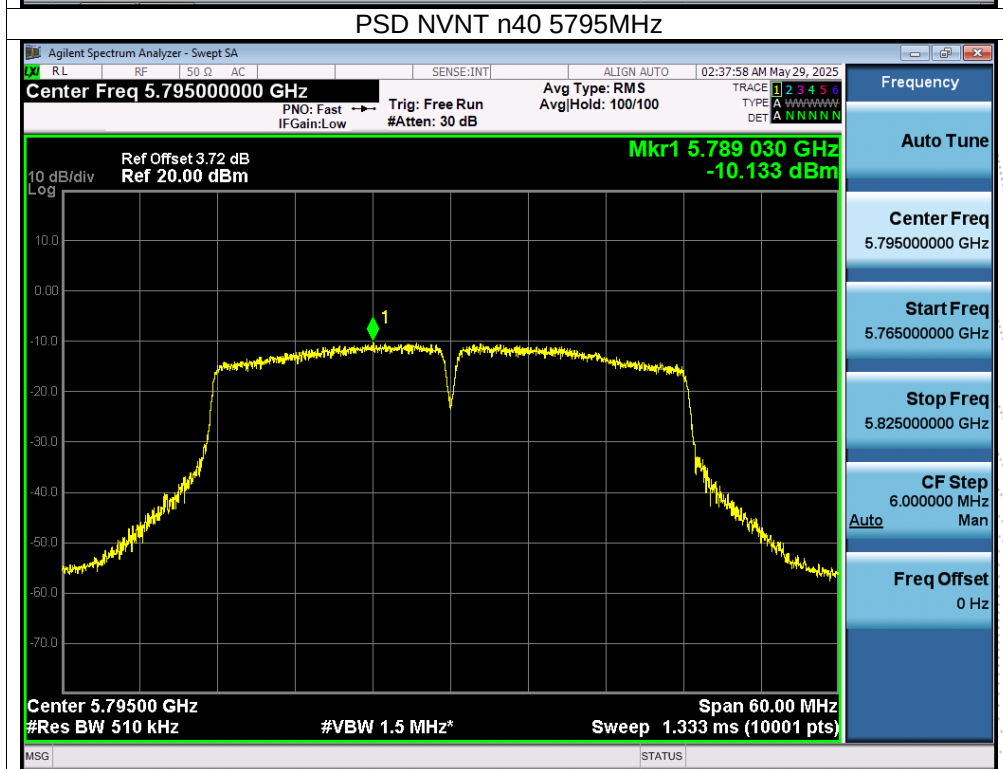
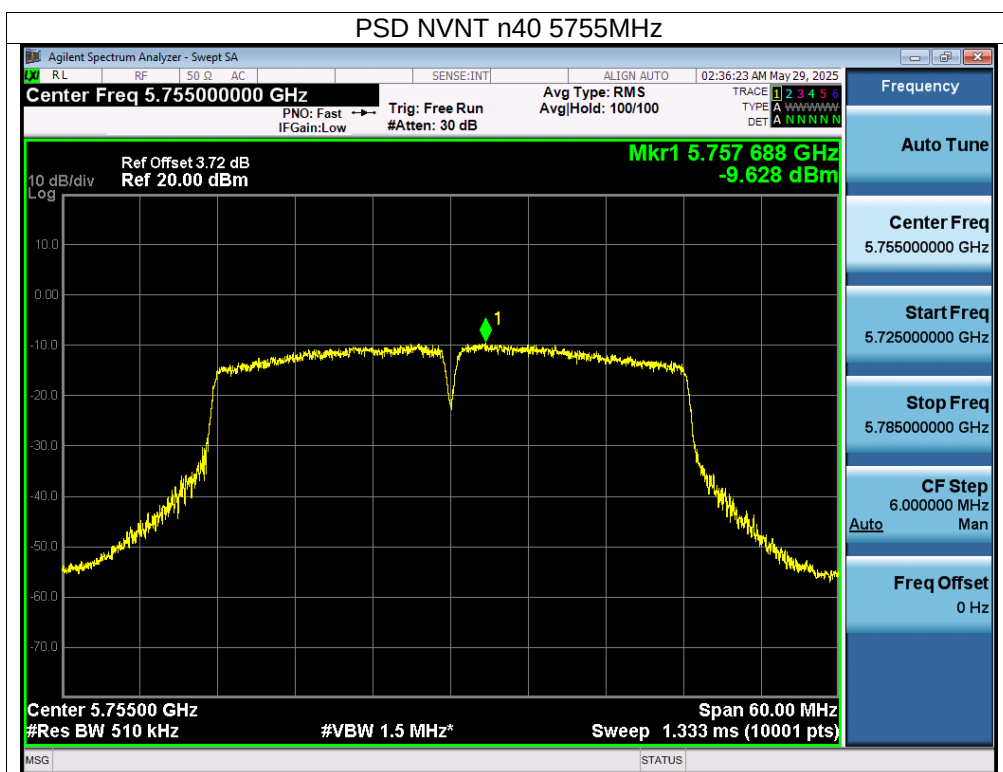
Limit=30-(7.16-6)=28.84dBi

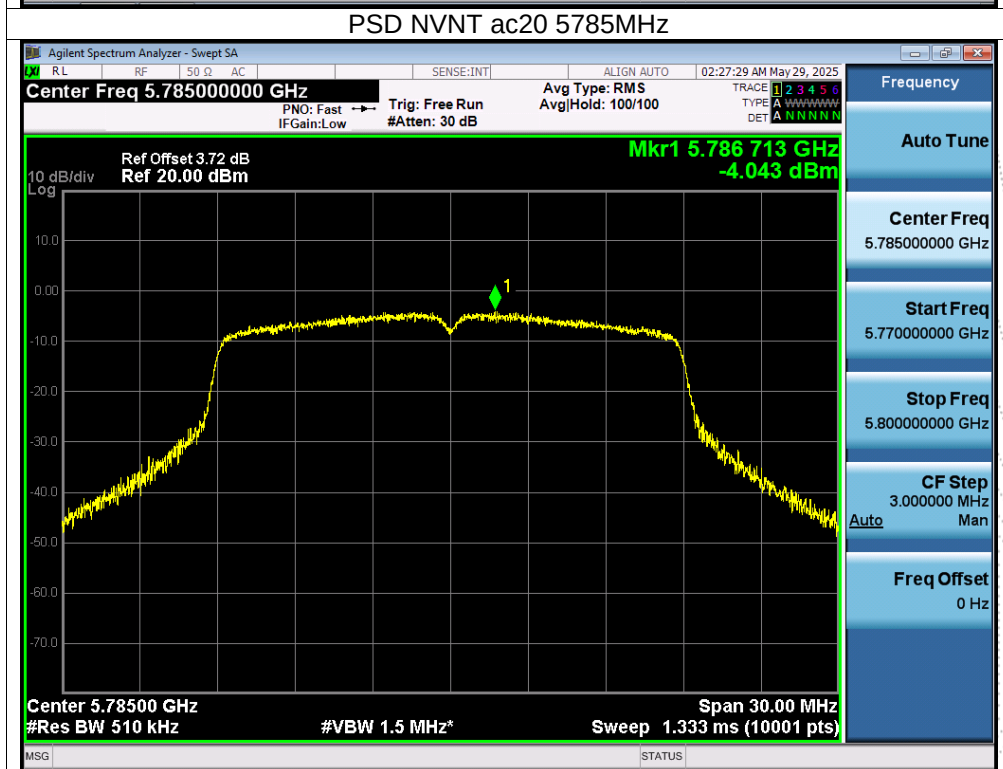
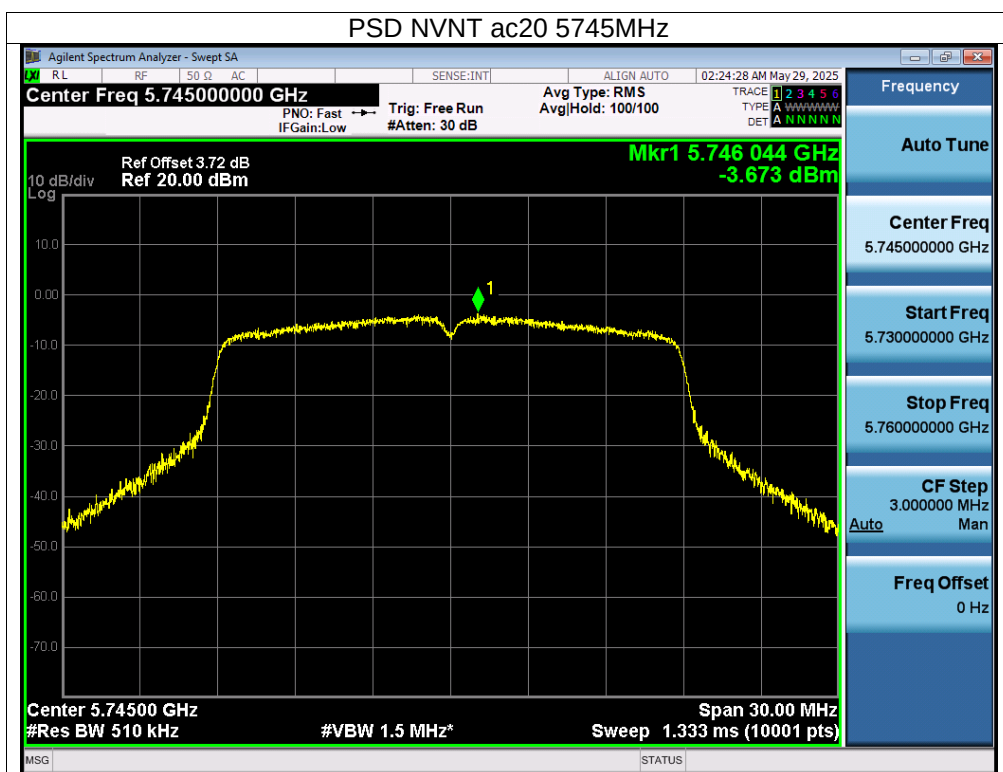
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

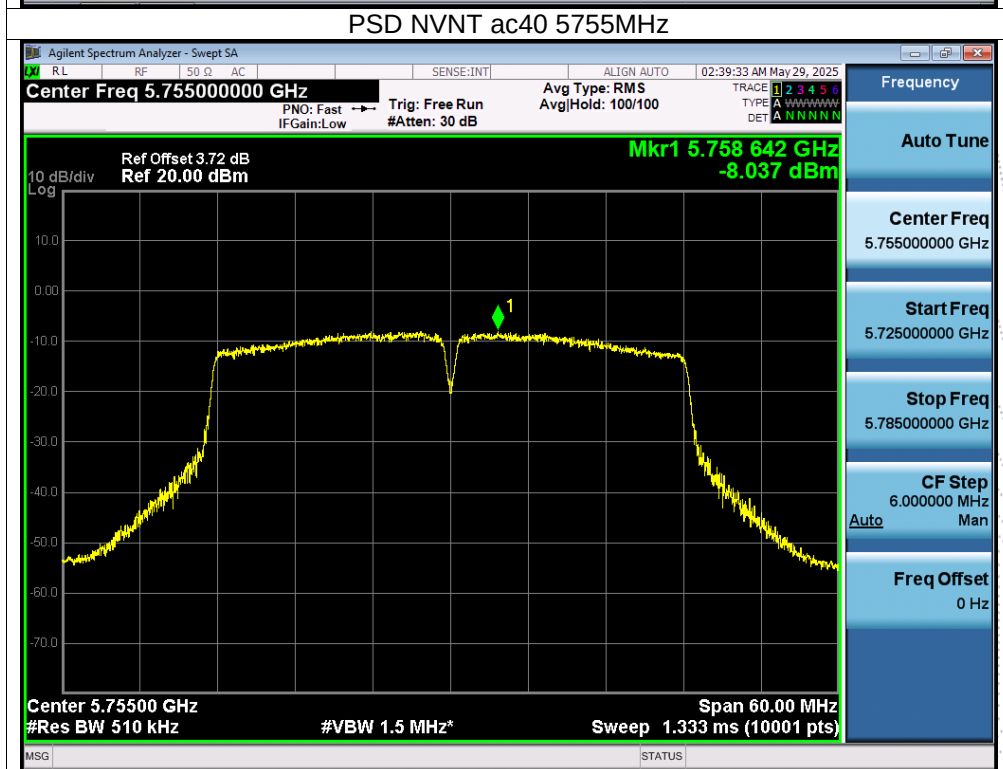
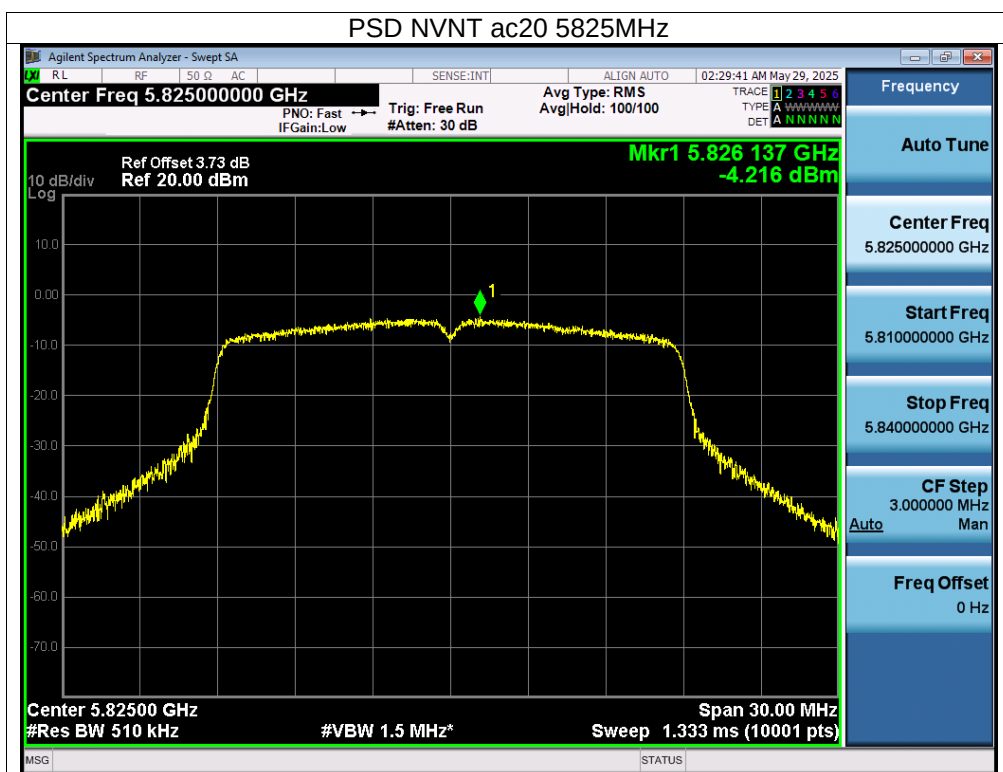


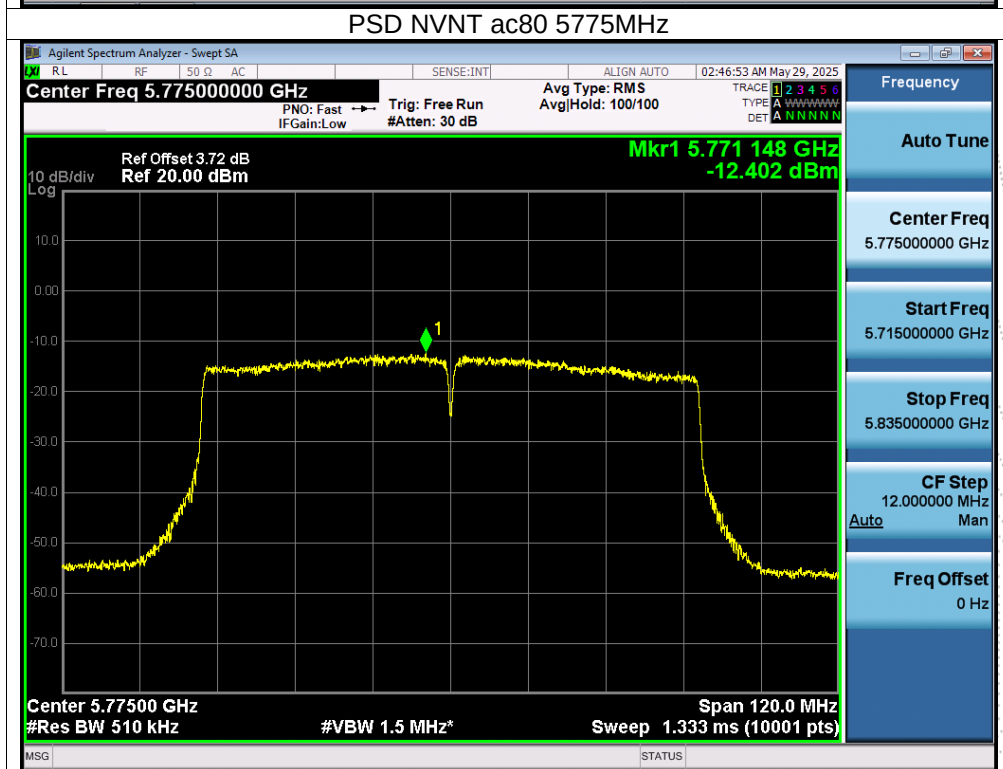
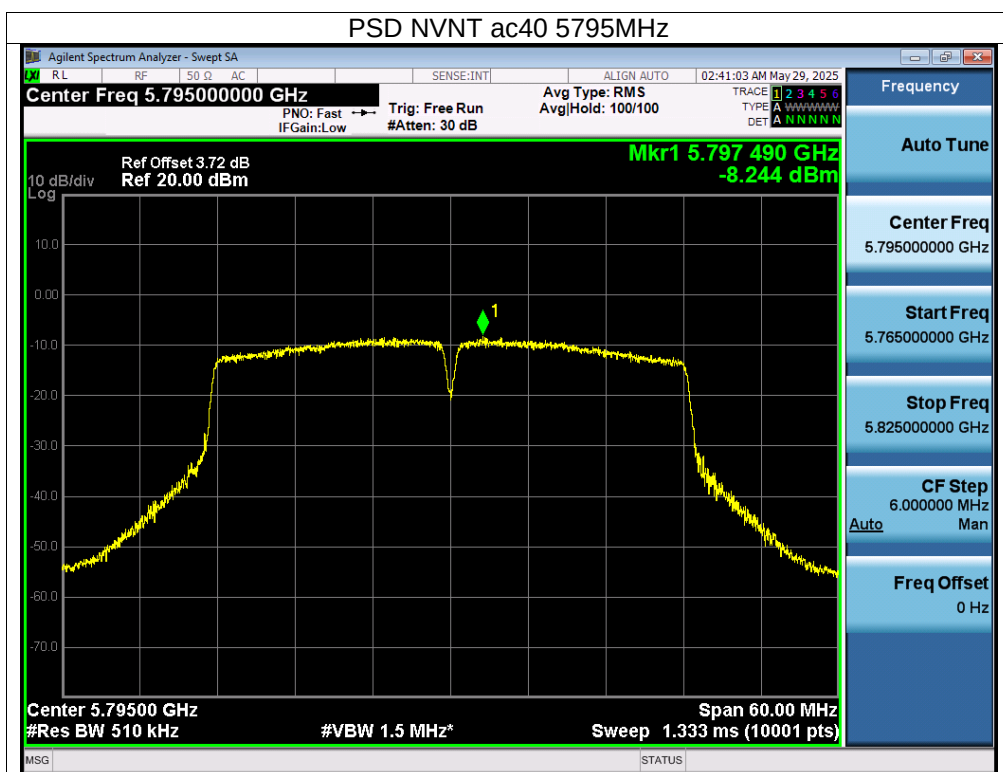


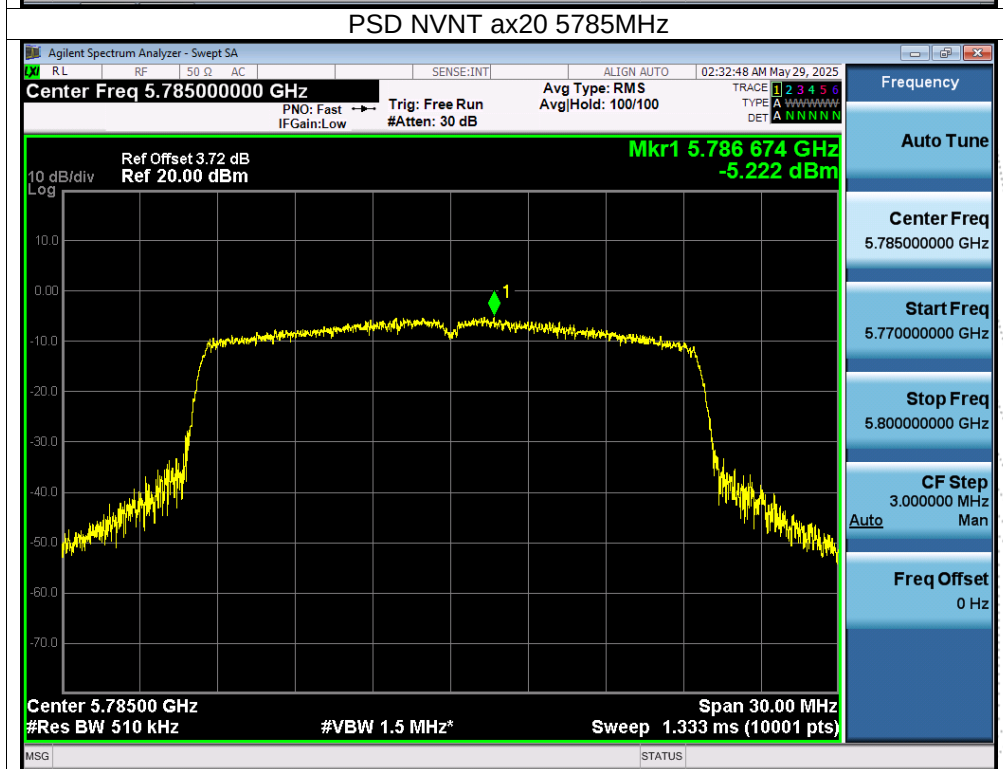
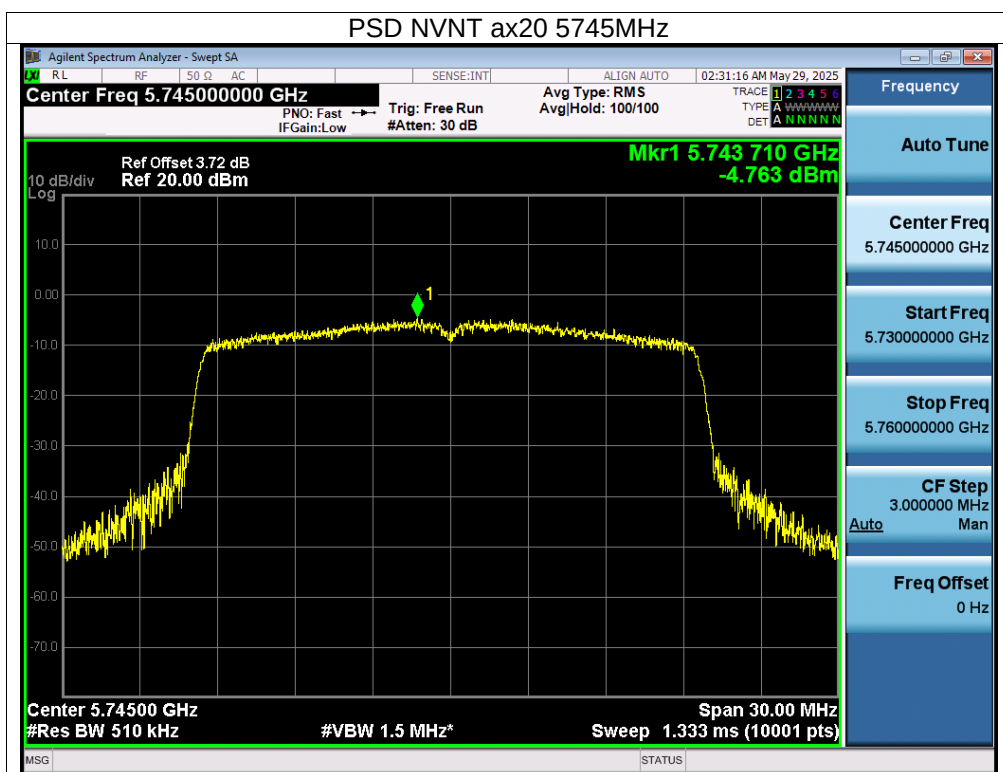


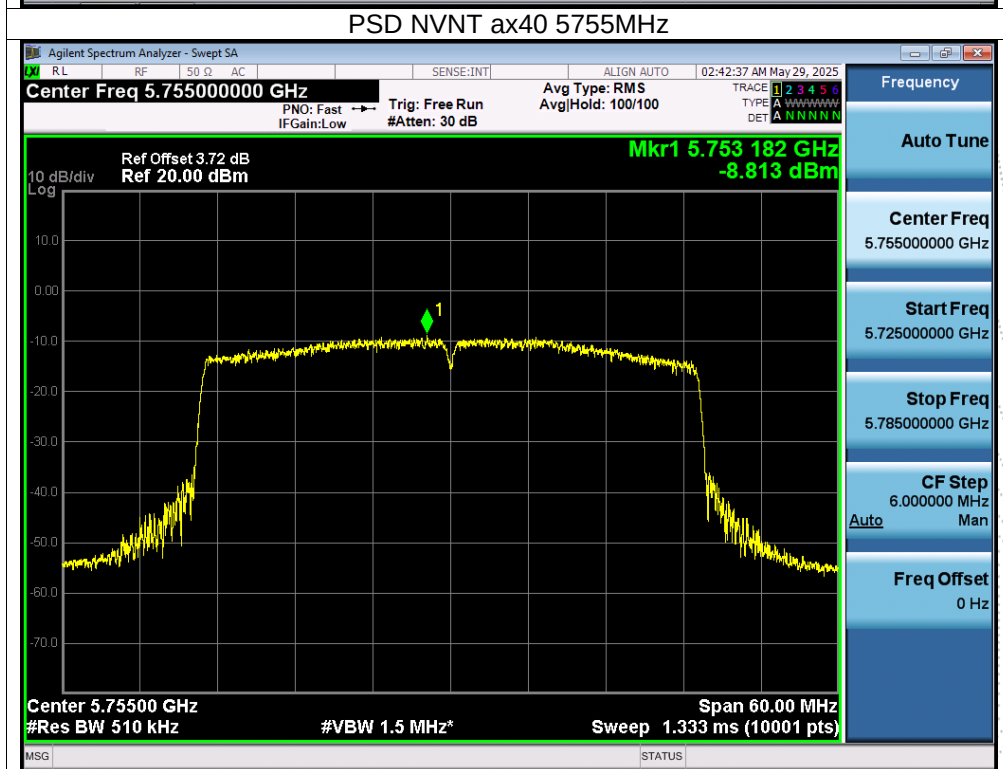
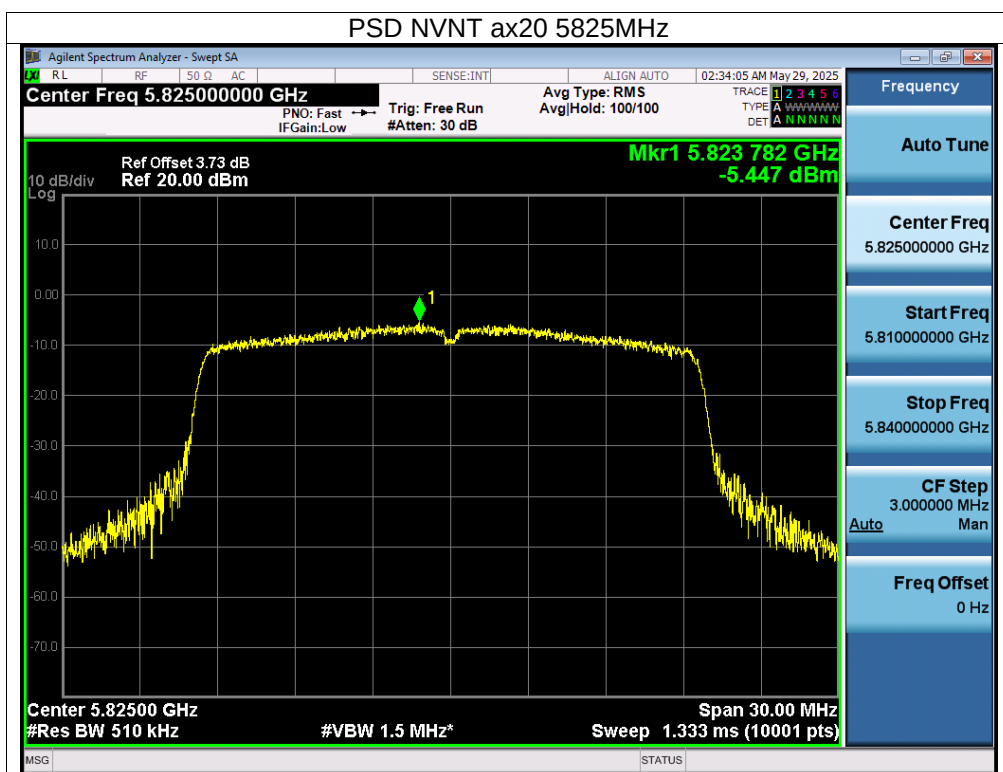


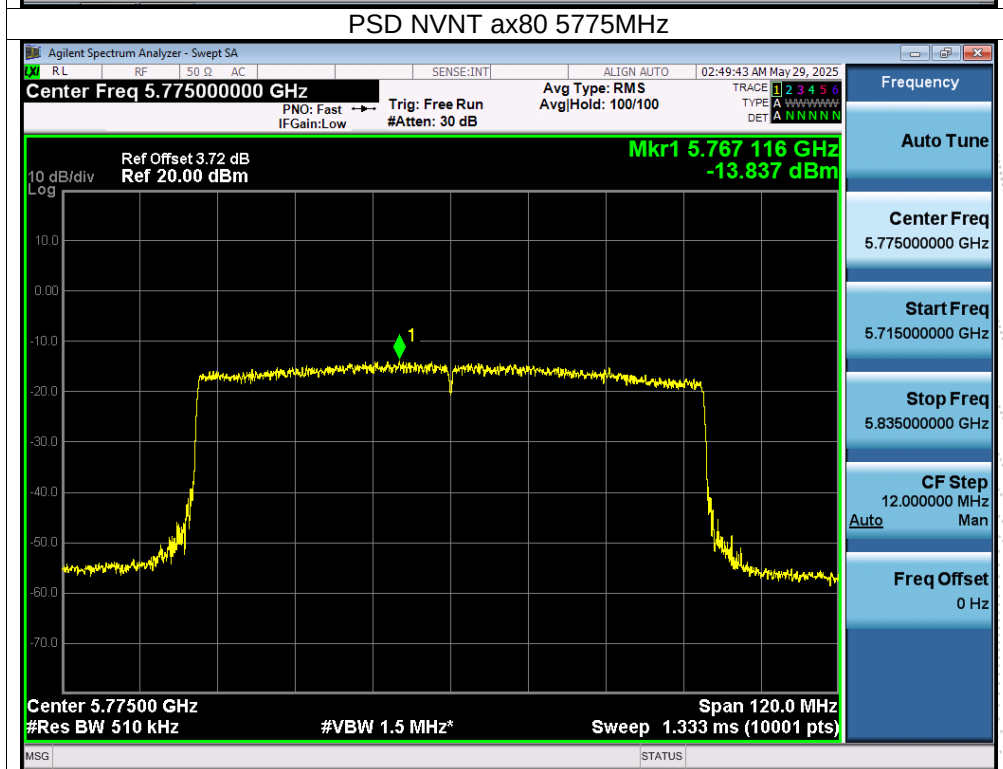
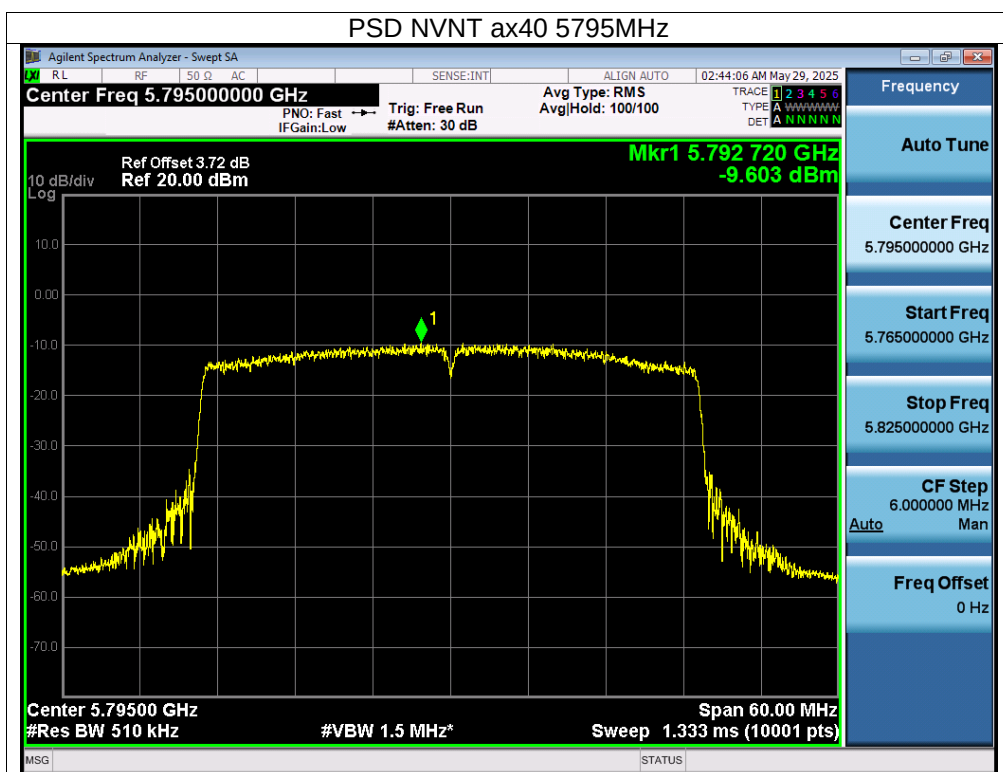






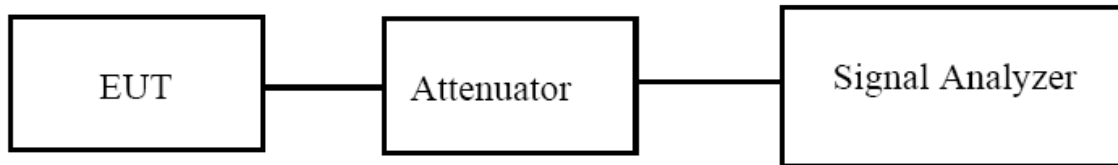






9. 26dB & 6dB & 99% Emission Bandwidth

9.1 Block Diagram Of Test Setup



9.2 Limit

(1) For the band 5.15-5.25 GHz.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(3) For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

9.3 Test Procedure

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

The following procedure shall be used for measuring (99 %) power bandwidth:

- Set center frequency to the nominal EUT channel center frequency.

2. Set span = 1.5 times to 5.0 times the OBW.

3. Set RBW = 1 % to 5 % of the OBW

4. Set VBW $\geq 3 \cdot$ RBW

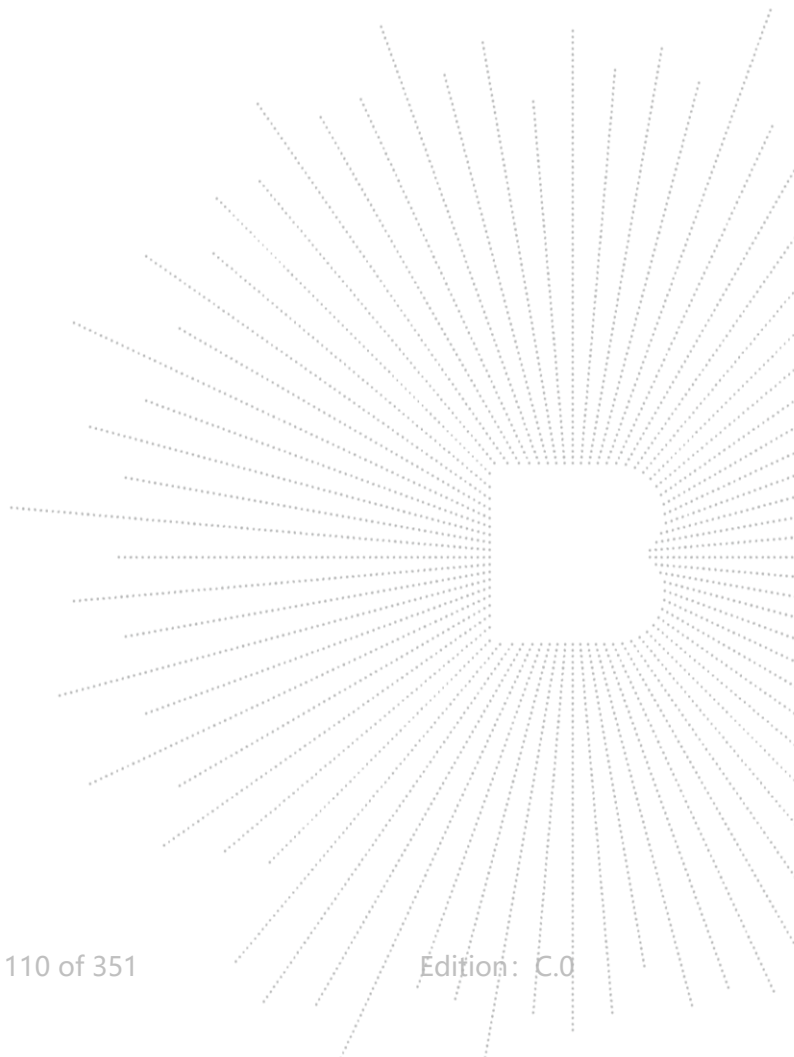
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

6. Use the 99 % power bandwidth function of the instrument (if available).

7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

9.4 EUT Operating Conditions

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



9.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	DC 3.3V
Test Mode:	(U-NII-1) 5180MHz-5240MHz		

Condition	Mode	Frequency (MHz)	-26 dB Bandwidth (MHz)		99% OBW (MHz)		Verdict
			Ant A	Ant B	Ant A	Ant B	
NVNT	a	5180	21.113	21.381	16.404	16.411	Pass
NVNT	a	5200	20.566	20.949	16.395	16.41	Pass
NVNT	a	5240	20.327	20.778	16.415	16.403	Pass
NVNT	n20	5180	21.82	21.473	17.574	17.528	Pass
NVNT	n20	5200	21.752	21.153	17.555	17.577	Pass
NVNT	n20	5240	21.871	21.451	17.589	17.552	Pass
NVNT	n40	5190	43.421	43.316	36.15	36.065	Pass
NVNT	n40	5230	42.017	42.614	36.069	36.157	Pass
NVNT	ac20	5180	21.794	21.398	17.576	17.536	Pass
NVNT	ac20	5200	21.331	21.423	17.595	17.563	Pass
NVNT	ac20	5240	21.081	21.348	17.592	17.551	Pass
NVNT	ac40	5190	43.575	42.721	36.098	36.149	Pass
NVNT	ac40	5230	42.696	42.683	36.216	36.1	Pass
NVNT	ac80	5210	83.889	86.031	75.475	75.653	Pass
NVNT	ax20	5180	21.555	21.487	18.814	18.842	Pass
NVNT	ax20	5200	22.382	22.292	18.83	18.832	Pass
NVNT	ax20	5240	21.879	22.048	18.817	18.808	Pass
NVNT	ax40	5190	42.733	42.419	37.534	37.665	Pass
NVNT	ax40	5230	42.545	42.496	37.658	37.658	Pass
NVNT	ax80	5210	84.463	84.3	77.061	77.306	Pass

Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

