

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.

For the band 5.725-5.85 GHz

For the band 5.725-5.85 GHz, 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.

8.3 Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5).

For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set $RBW \geq 1/T$, where T is defined in section II.B.I.a).
- b) Set $VBW \geq 3 RBW$.
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/RBW)$ to the measured result, whereas $RBW (< 500 \text{ KHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10\log(1\text{MHz}/RBW)$ to the measured result, whereas $RBW (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since $RBW=100 \text{ KHz}$ is available on nearly all spectrum analyzers.

8.4 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.

8.5 Test Result

Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5180-5240MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant A	Ant B	Total		
NVNT	a	5180	3.88	3.72	/	11	Pass
NVNT	a	5200	3.57	3.17	/	11	Pass
NVNT	a	5240	3.95	3.81	/	11	Pass
NVNT	n20	5180	2.58	2.42	5.51	11	Pass
NVNT	n20	5200	2.41	2.72	5.58	11	Pass
NVNT	n20	5240	3.09	2.5	5.82	11	Pass
NVNT	n40	5190	-1.37	-1.52	1.57	11	Pass
NVNT	n40	5230	0.8	1.24	4.04	11	Pass
NVNT	ac20	5180	2.53	2.56	5.56	11	Pass
NVNT	ac20	5200	2.99	2.74	5.88	11	Pass
NVNT	ac20	5240	2.11	2.27	5.20	11	Pass
NVNT	ac40	5190	-1.28	-1.85	1.45	11	Pass
NVNT	ac40	5230	-1.05	-1.28	1.85	11	Pass
NVNT	ac80	5210	-5.67	-6.19	-2.91	11	Pass
NVNT	ax20	5180	2.56	2.33	5.46	11	Pass
NVNT	ax20	5200	2.46	2.49	5.49	11	Pass
NVNT	ax20	5240	3.54	2.8	6.20	11	Pass
NVNT	ax40	5190	-1.58	-1.29	1.58	11	Pass
NVNT	ax40	5230	-1.2	-1.25	1.79	11	Pass
NVNT	ax80	5210	-5.23	-5.58	-2.39	11	Pass
NVNT	be20	5180	1.69	1.63	4.67	11	Pass
NVNT	be20	5200	1.42	1.13	4.29	11	Pass
NVNT	be20	5240	1.68	1.95	4.83	11	Pass
NVNT	be40	5190	-1.8	-2.92	0.69	11	Pass
NVNT	be40	5230	-2.12	-1.84	1.03	11	Pass
NVNT	be80	5210	-6.96	-6.32	-3.62	11	Pass

The test results have been incorporated into Factor.

Note:

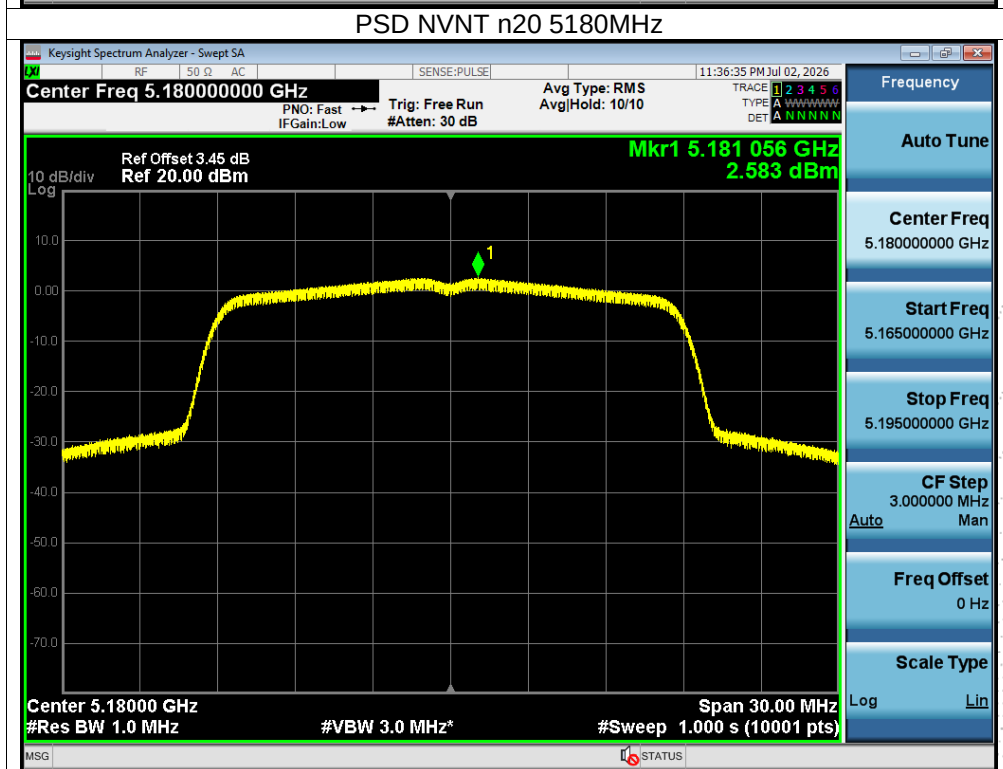
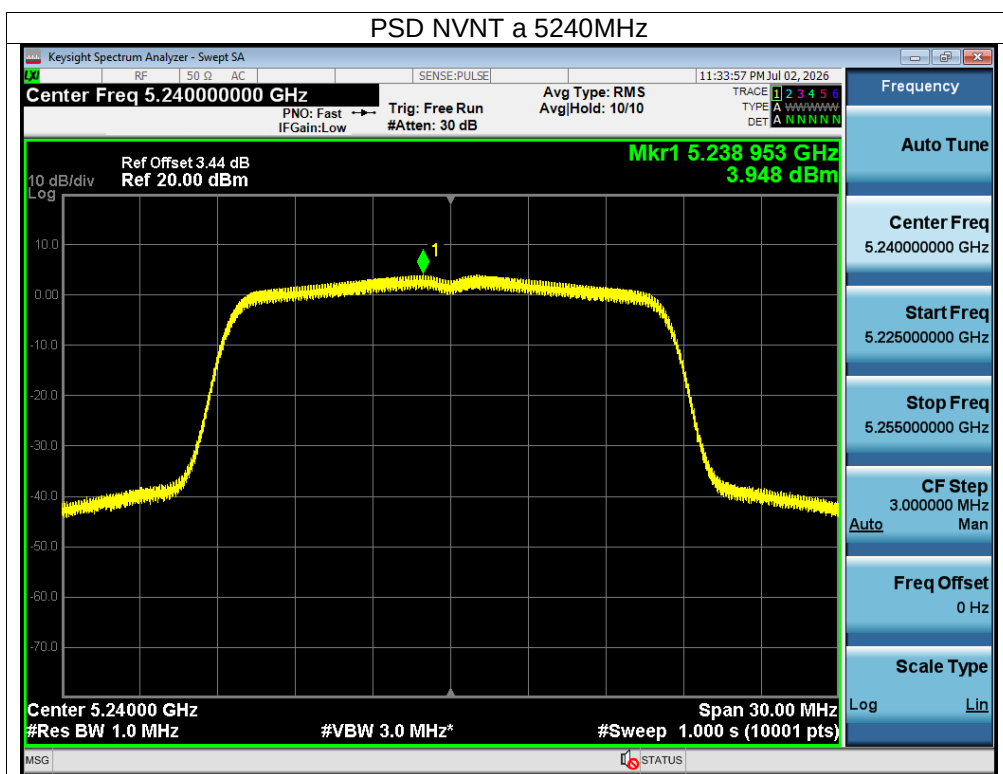
Antenna A gain: 1.95 dBi, Antenna B gain: 1.95 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]

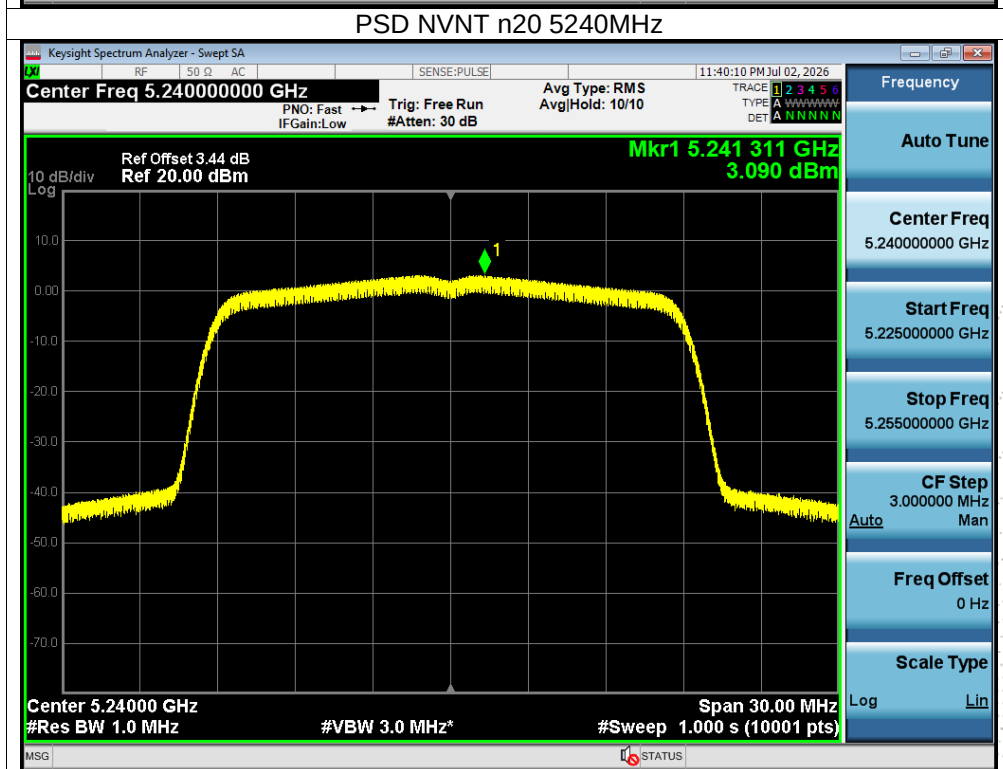
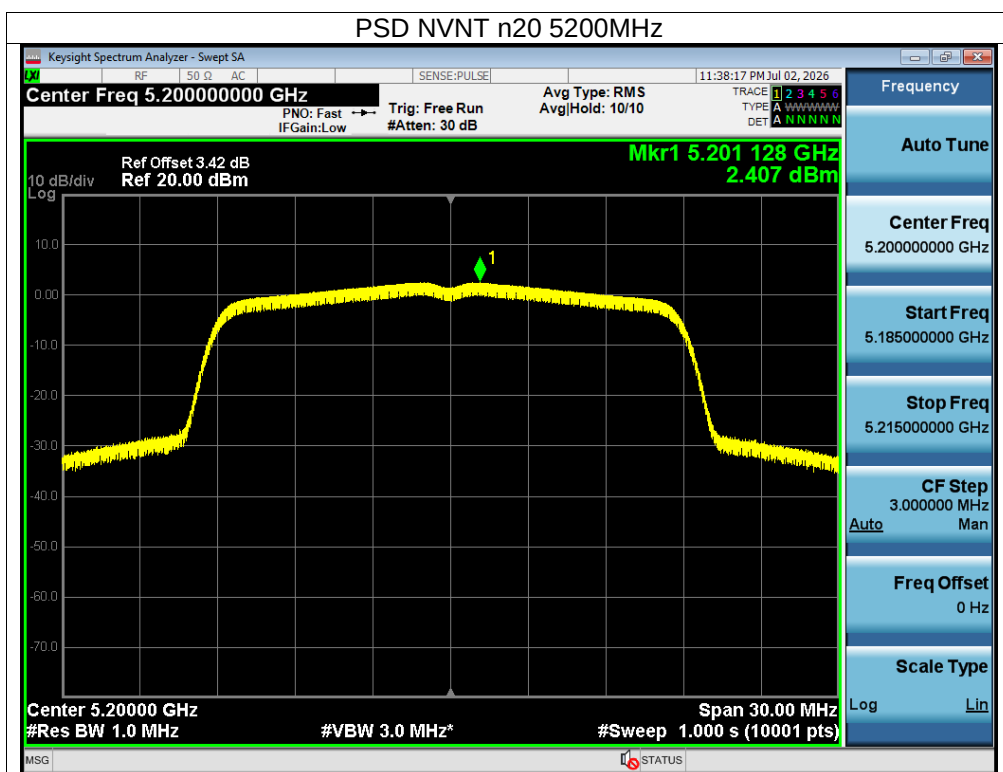
=4.96 dBi<6dBi

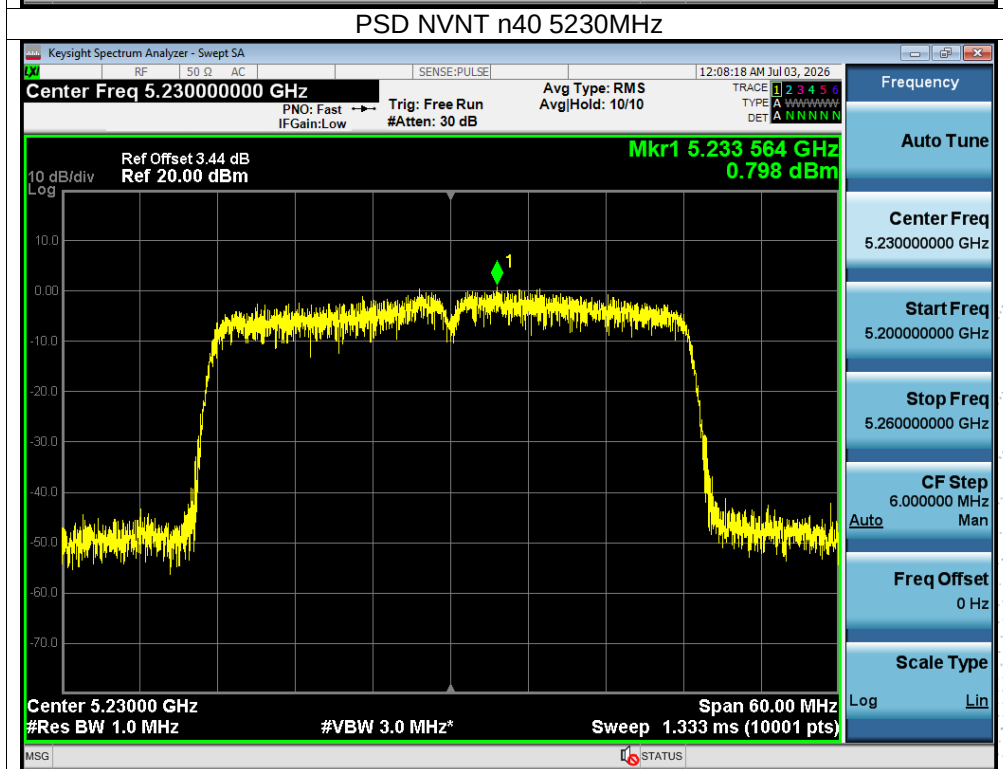
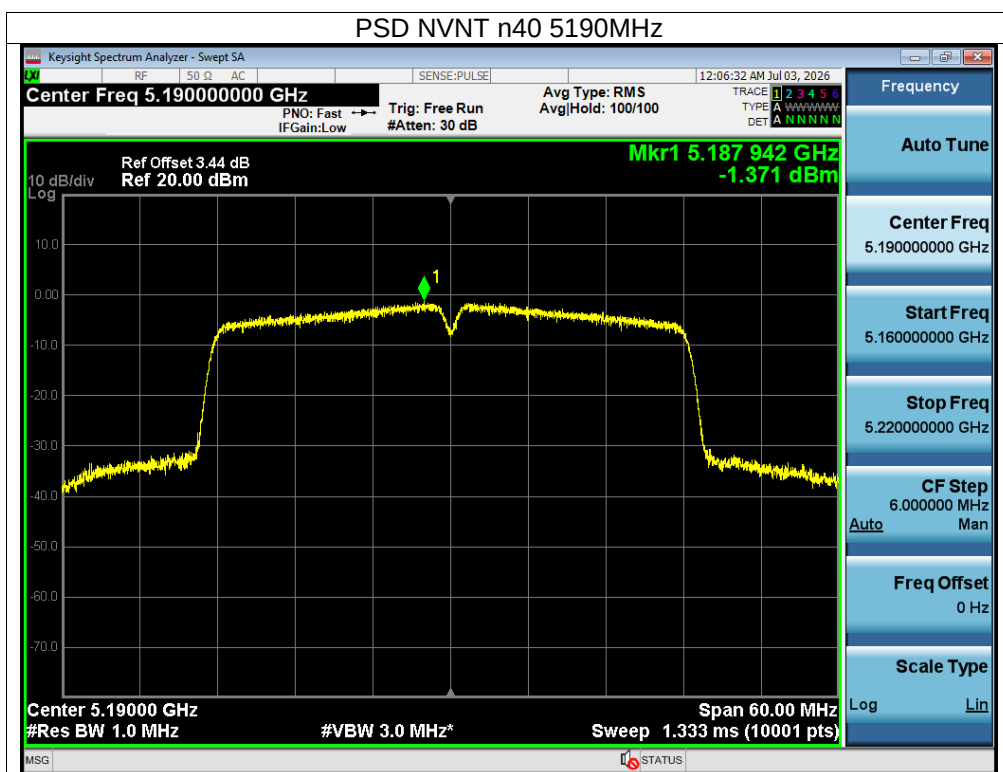
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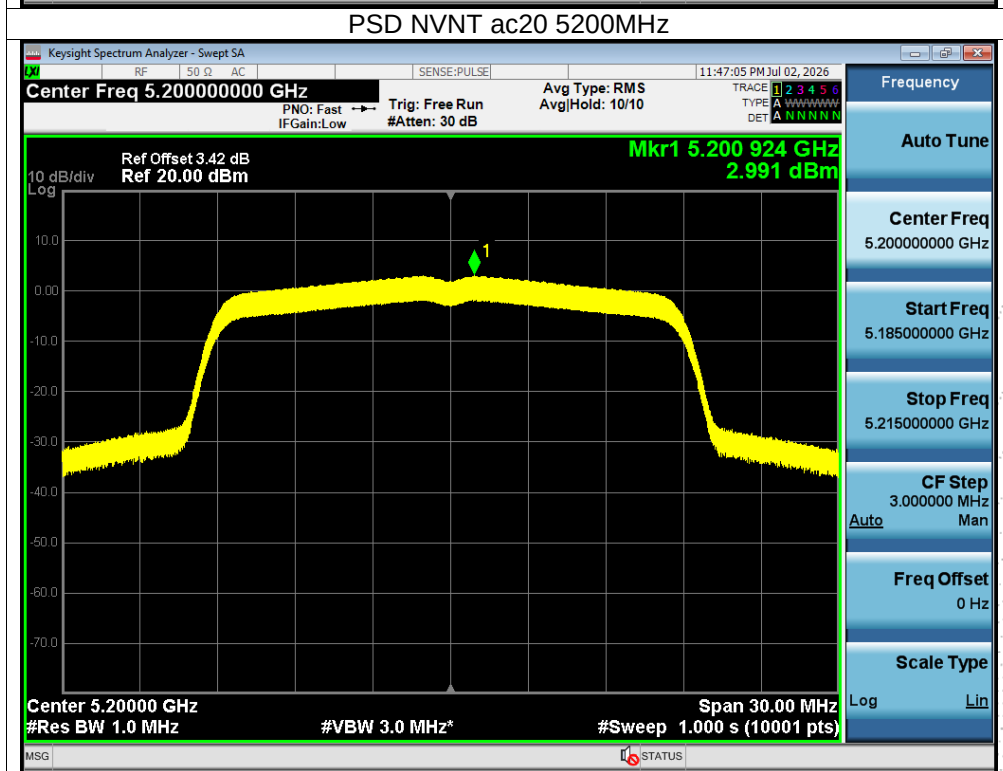
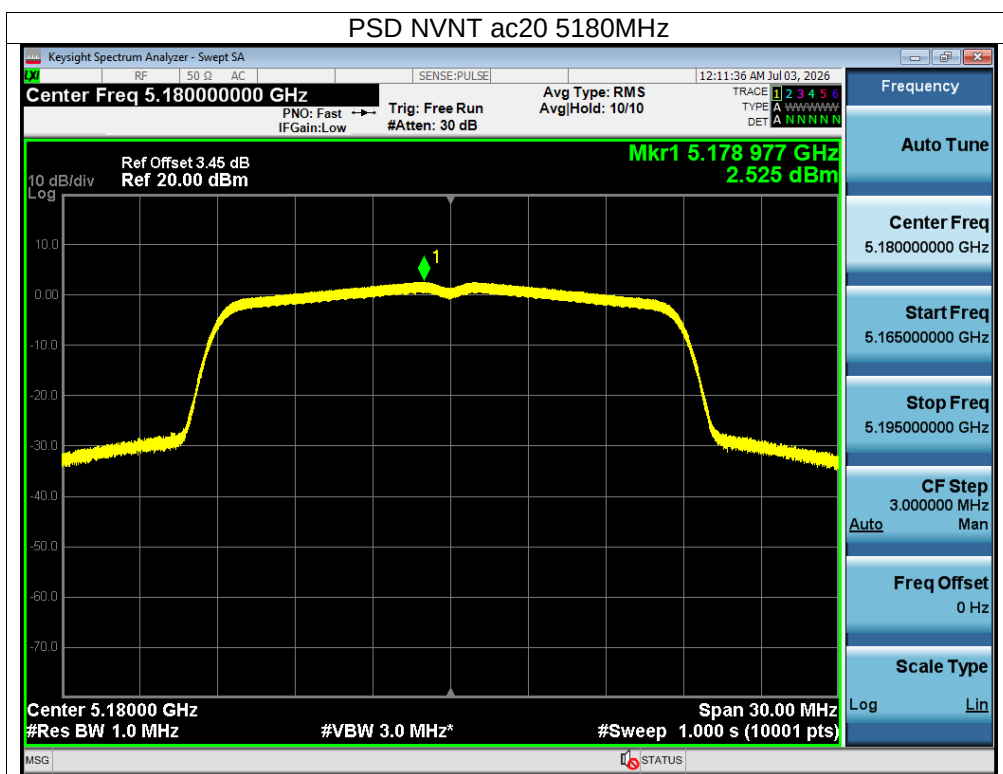
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

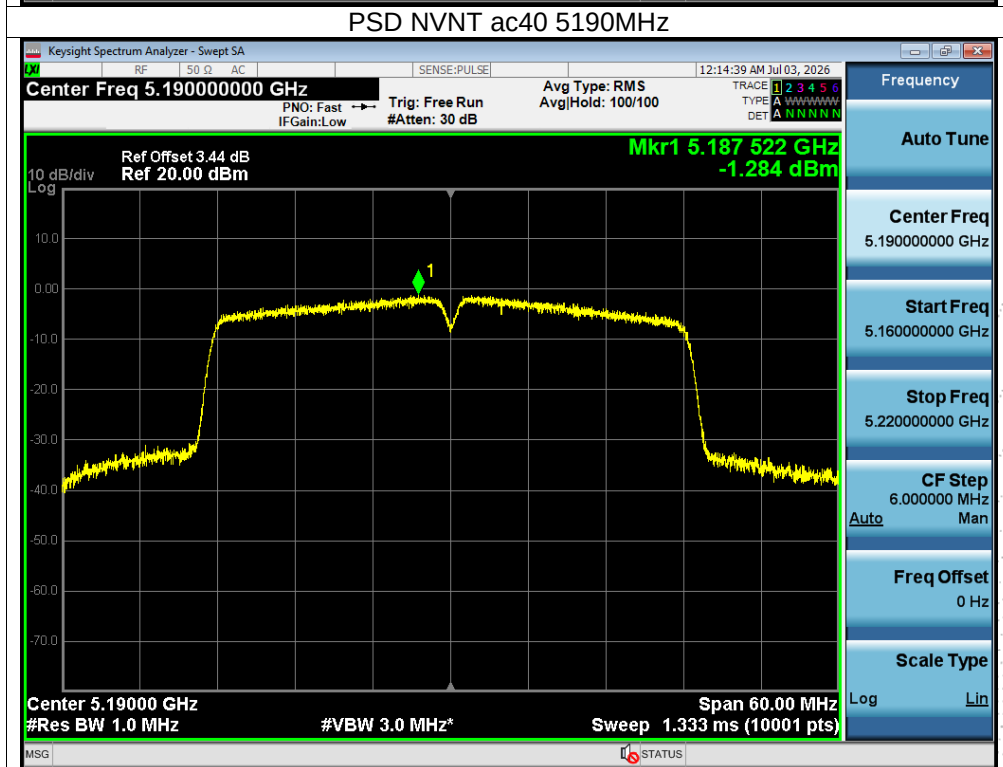
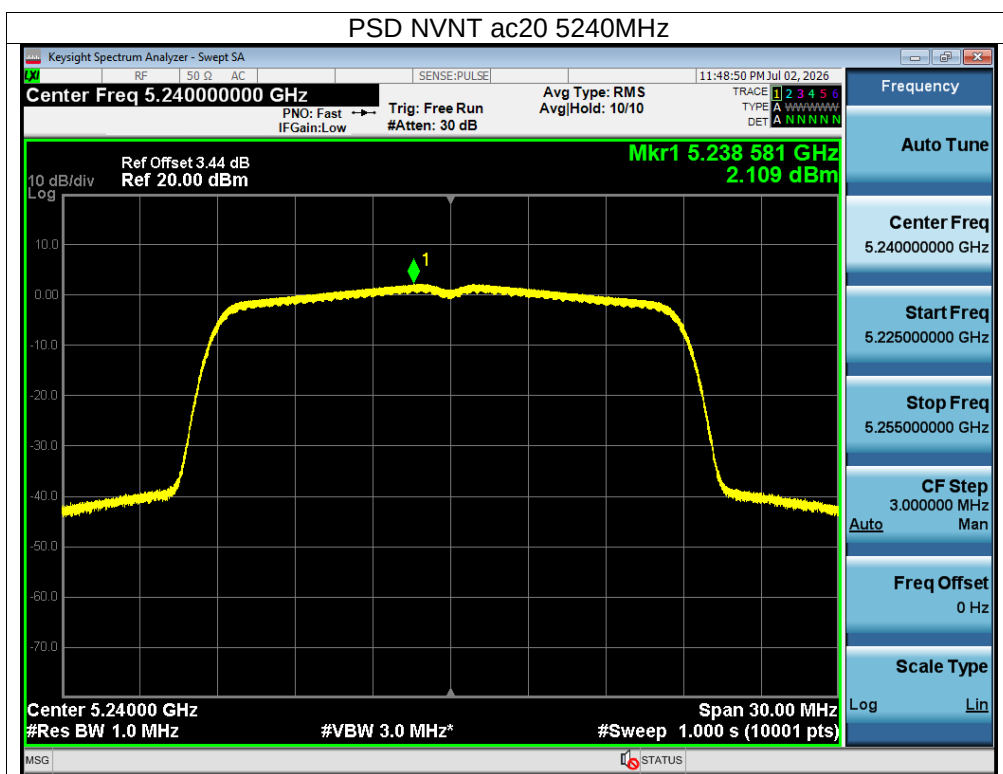


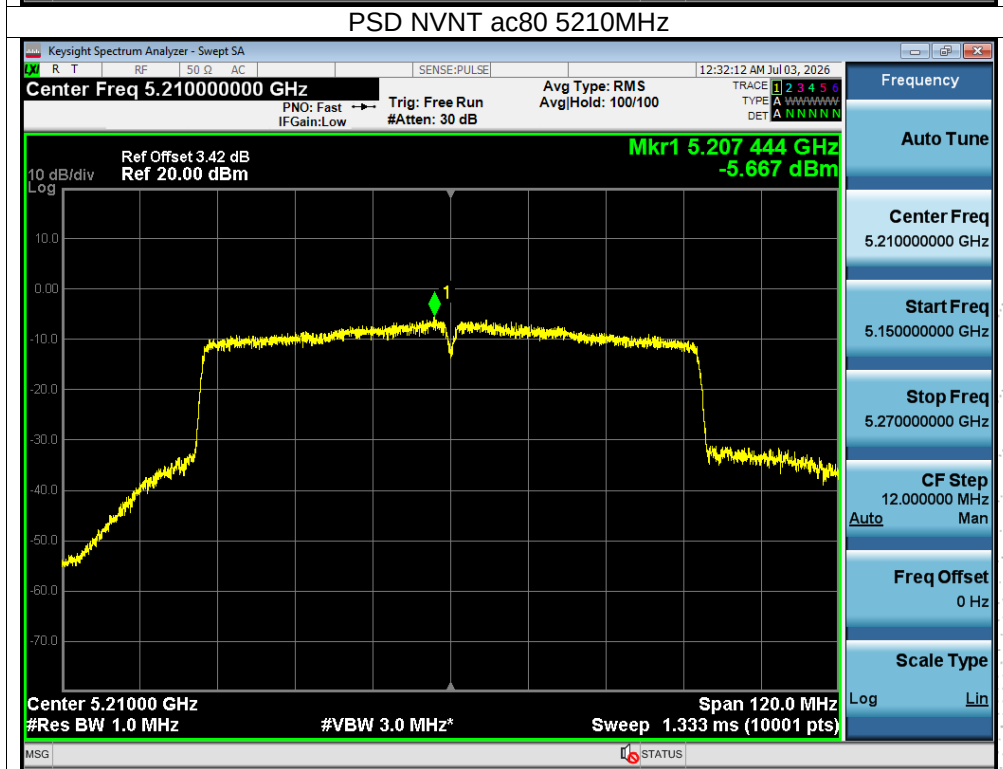
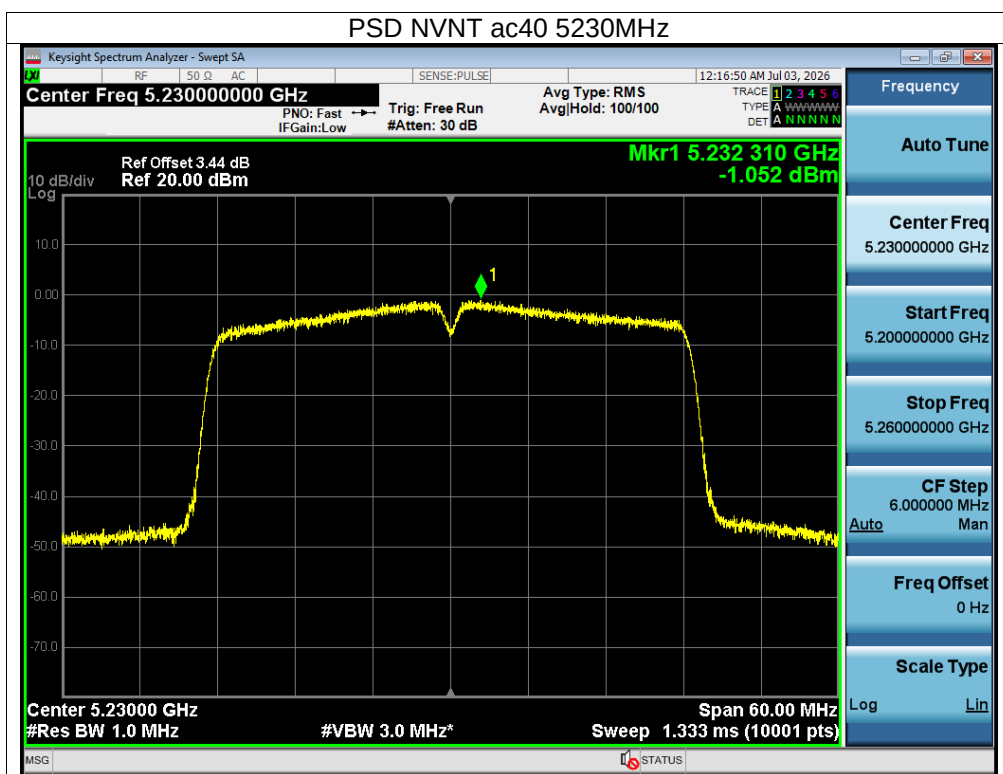


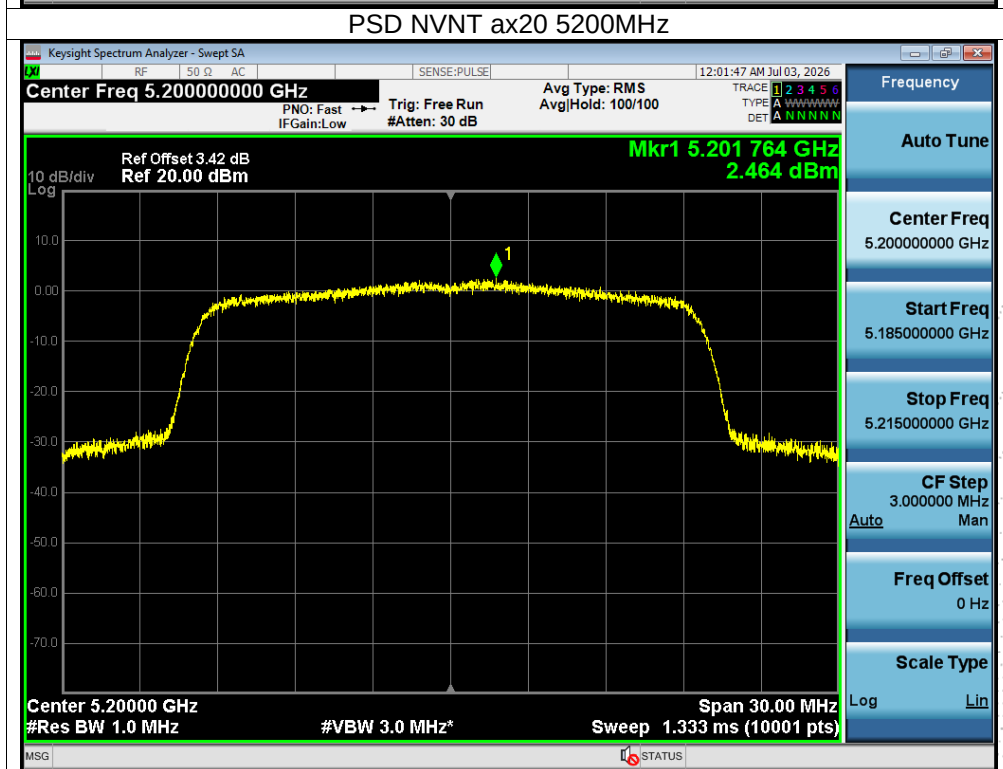
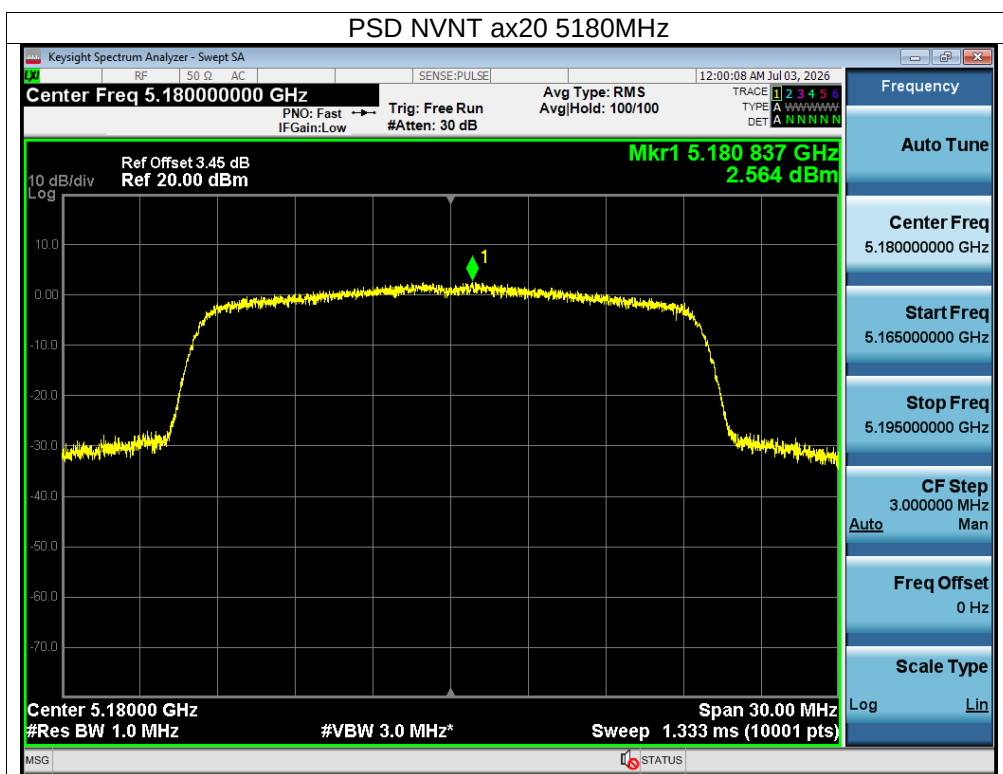


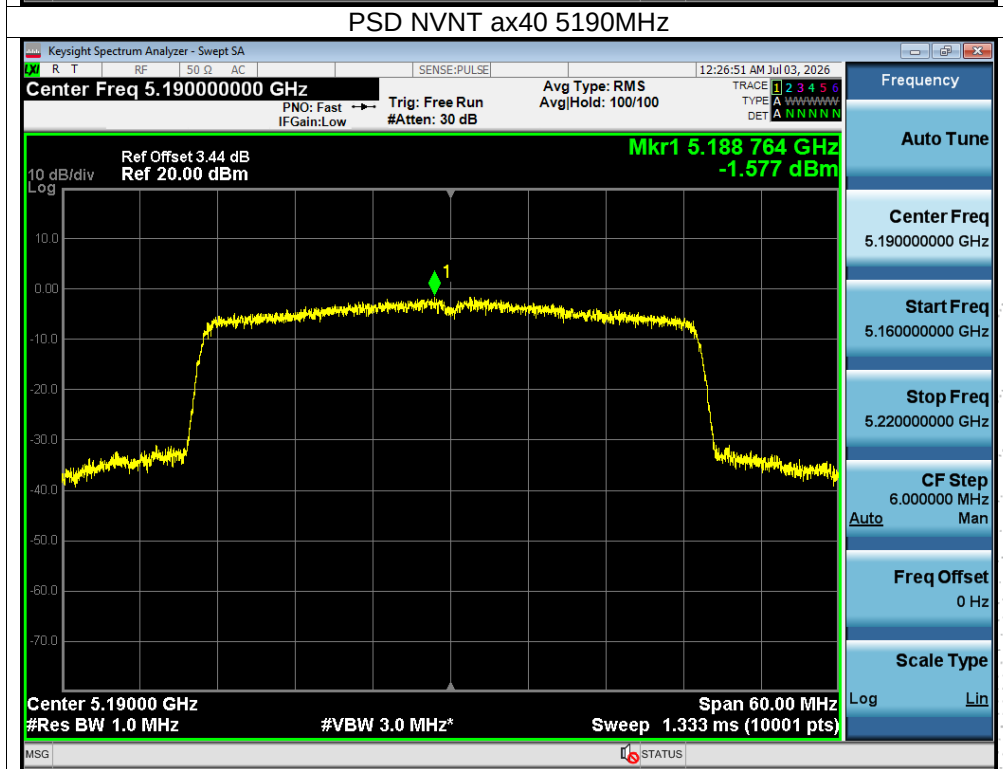
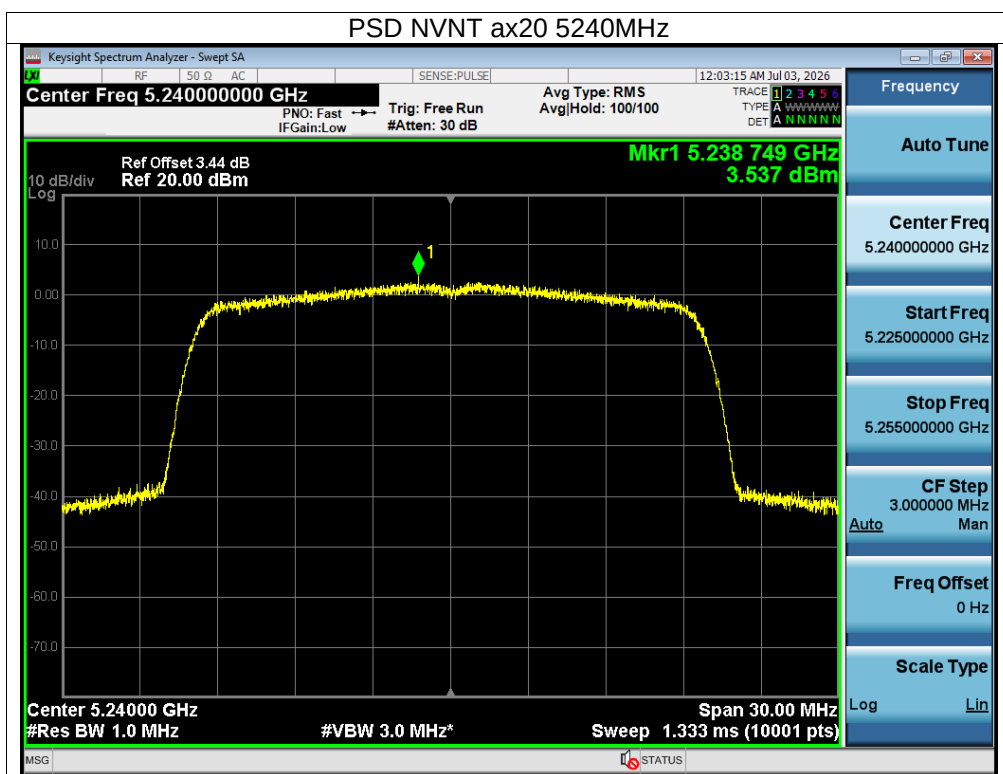


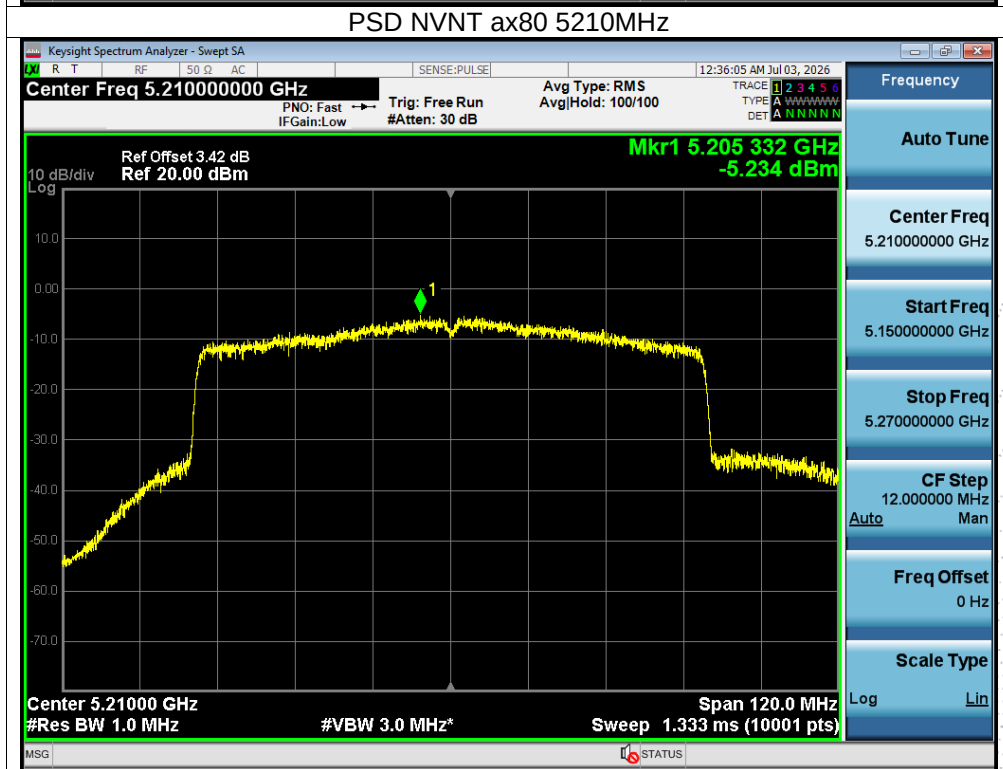
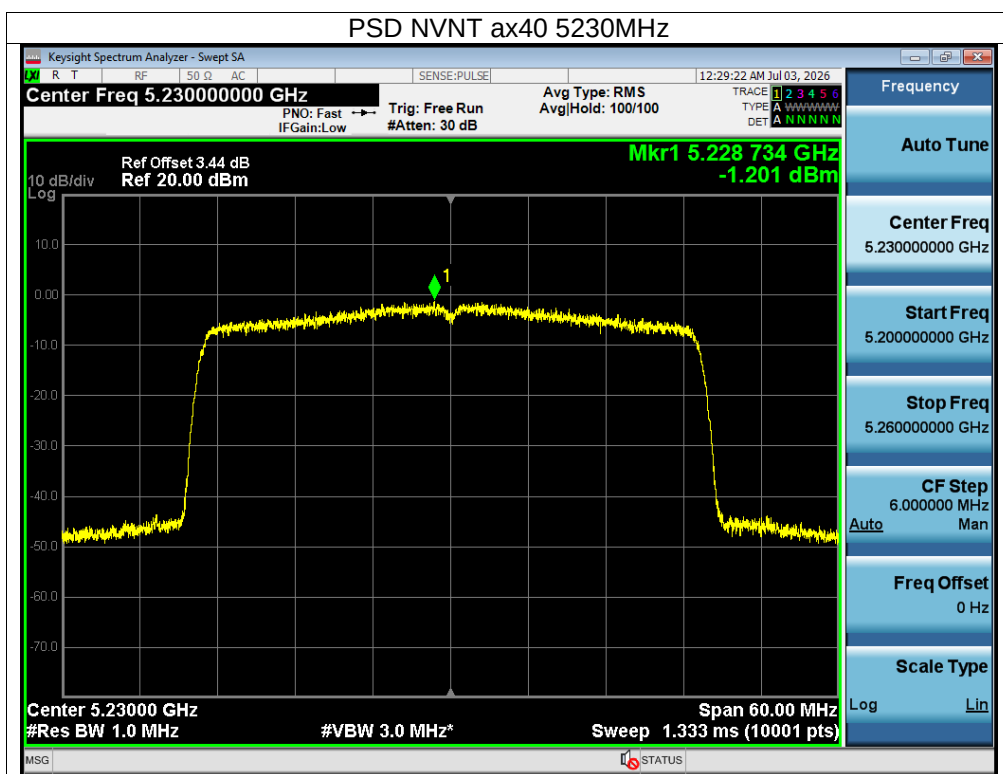


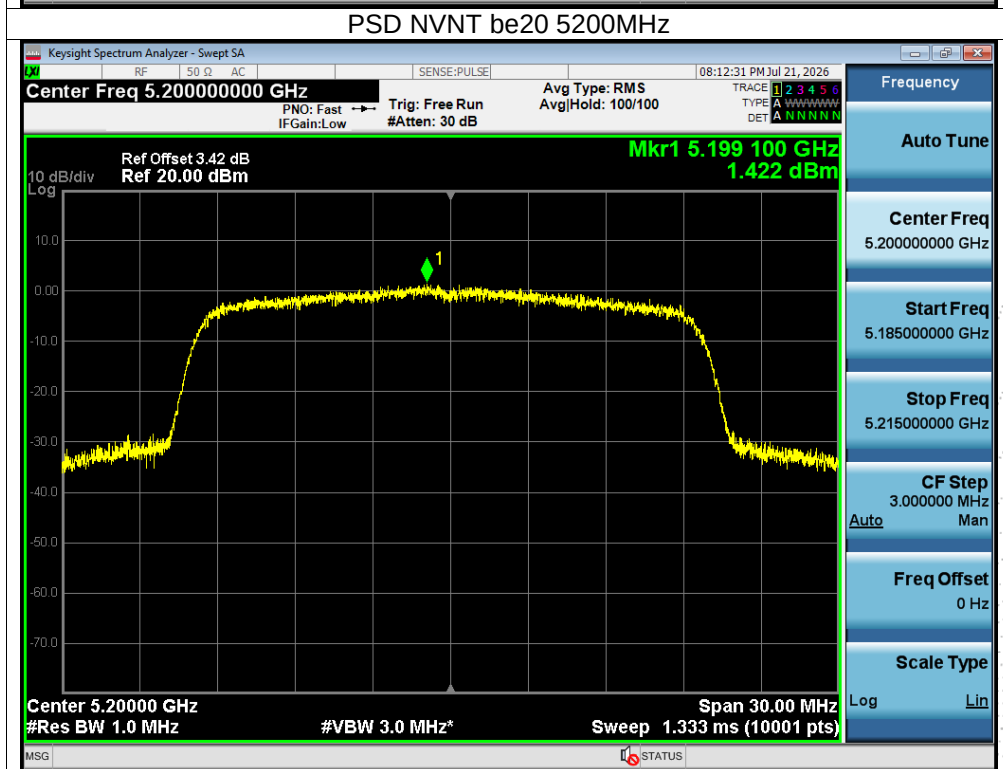
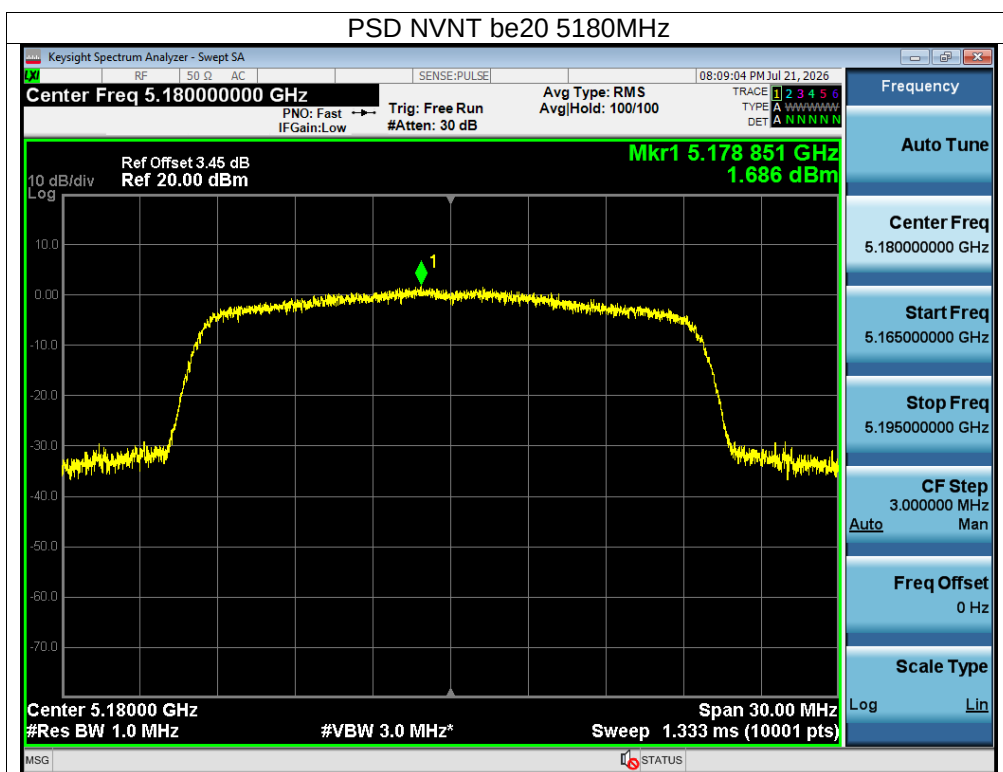


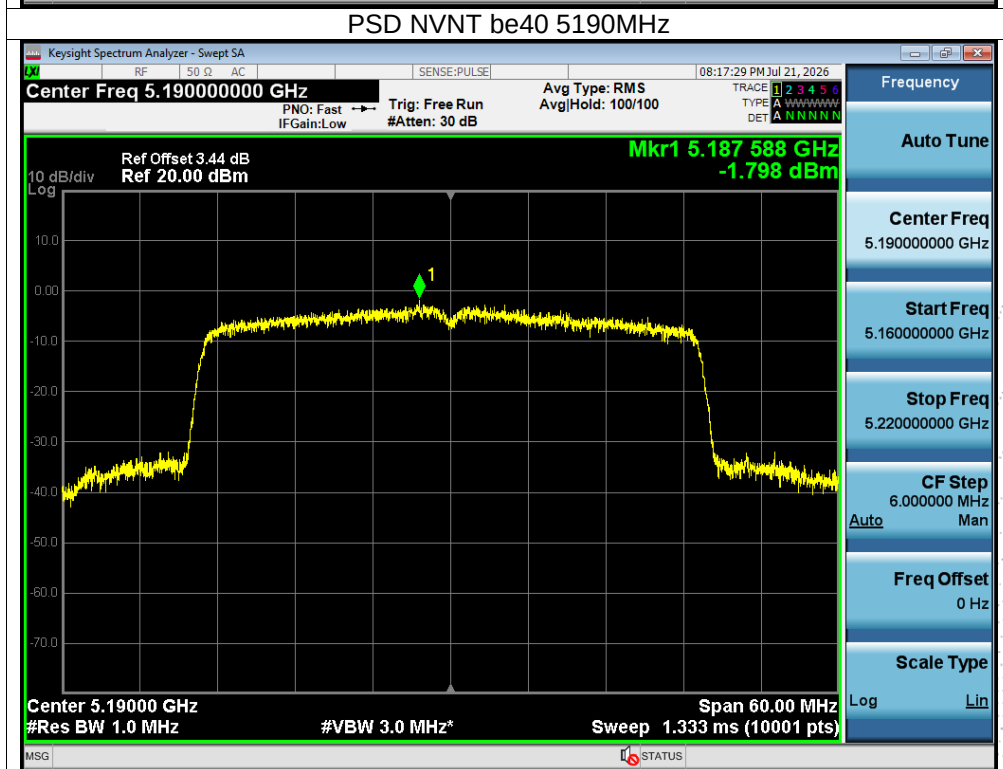
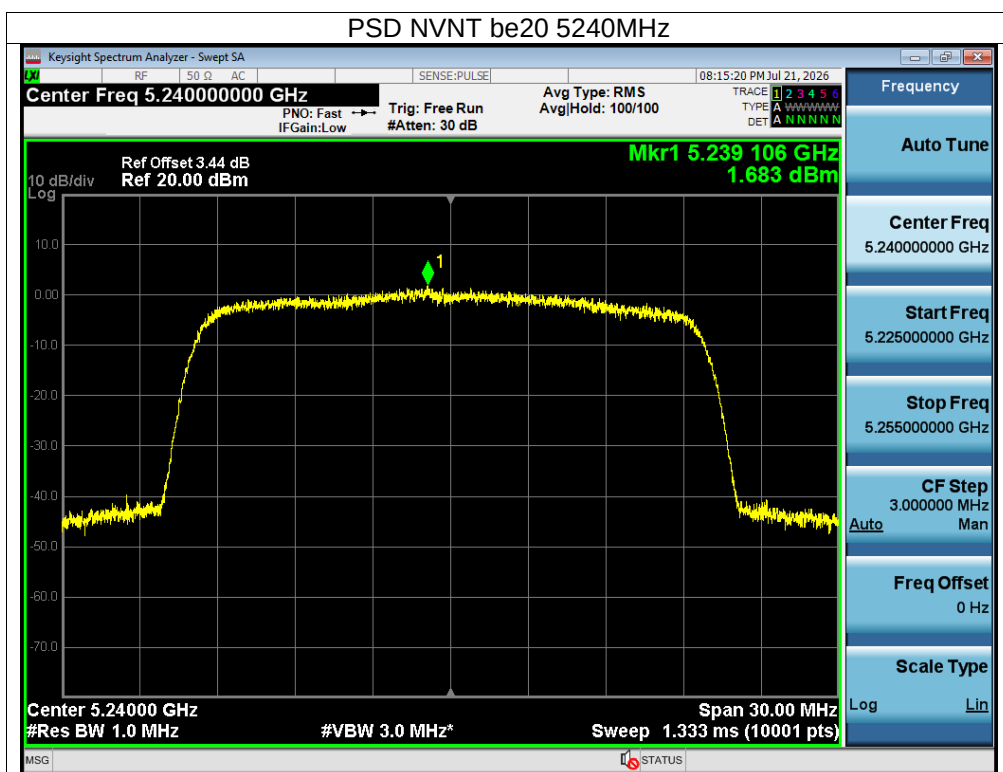


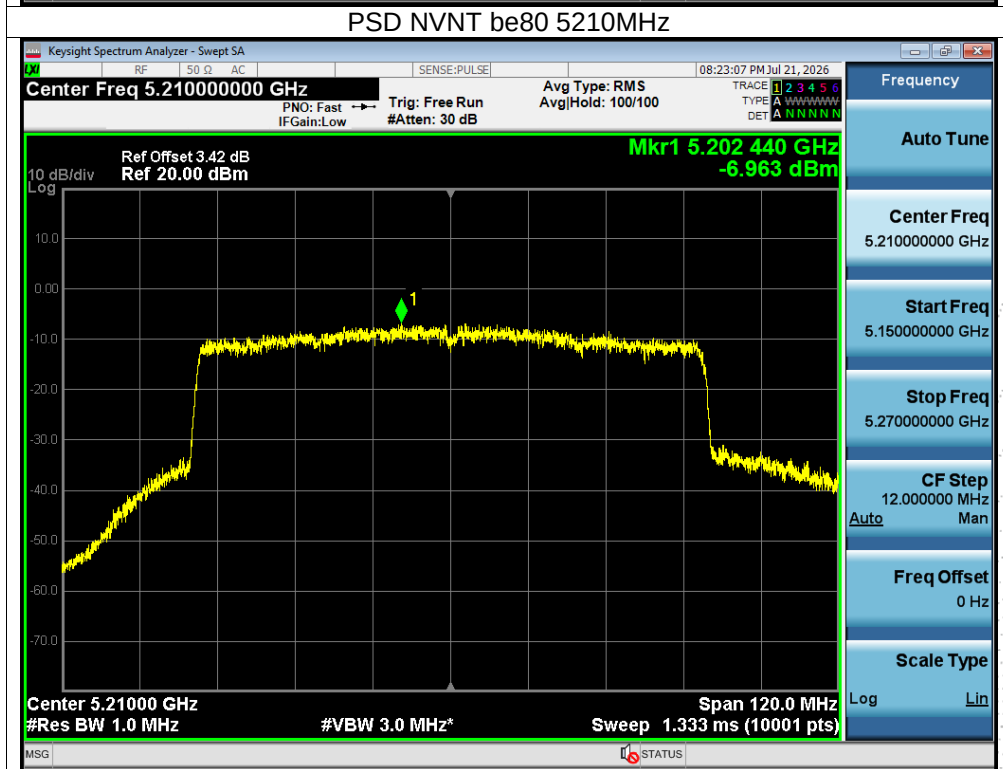
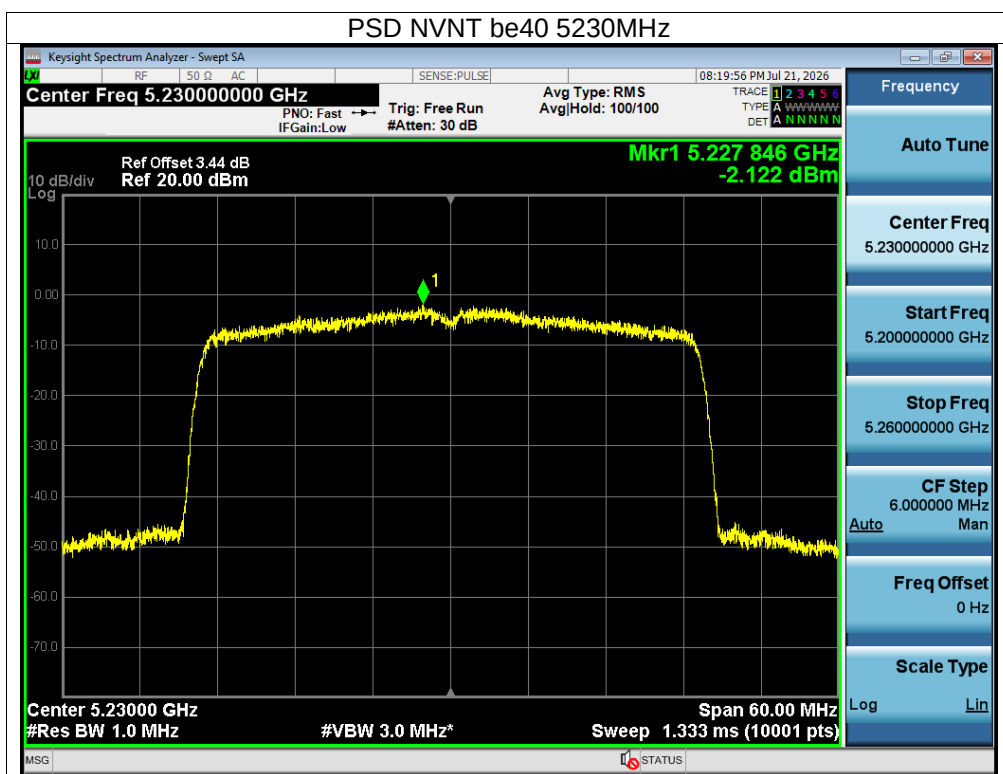












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5260-5320MHz)		

Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant A	Ant B	Total		
NVNT	a	5260	3.04	3.26	/	11	Pass
NVNT	a	5280	2.29	2.93	/	11	Pass
NVNT	a	5320	2.59	2.51	/	11	Pass
NVNT	n20	5260	1.86	1.67	4.78	11	Pass
NVNT	n20	5280	1.13	1.42	4.29	11	Pass
NVNT	n20	5320	1.27	1.09	4.19	11	Pass
NVNT	n40	5270	-2.49	-2.44	0.55	11	Pass
NVNT	n40	5310	-2.51	-2.7	0.41	11	Pass
NVNT	ac20	5260	1.41	1.67	4.55	11	Pass
NVNT	ac20	5280	0.96	1.13	4.06	11	Pass
NVNT	ac20	5320	0.61	1.3	3.98	11	Pass
NVNT	ac40	5270	-2.7	-2.89	0.22	11	Pass
NVNT	ac40	5310	-2.98	-2.96	0.04	11	Pass
NVNT	ac80	5290	-7.13	-6.84	-3.97	11	Pass
NVNT	ax20	5260	1.35	1.15	4.26	11	Pass
NVNT	ax20	5280	1.07	1.09	4.09	11	Pass
NVNT	ax20	5320	0.7	1.53	4.15	11	Pass
NVNT	ax40	5270	-2.94	-2.84	0.12	11	Pass
NVNT	ax40	5310	-2.74	-2.82	0.23	11	Pass
NVNT	ax80	5290	-6.64	-6.3	-3.46	11	Pass
NVNT	be20	5260	1.58	1.25	4.43	11	Pass
NVNT	be20	5280	1.06	1.29	4.19	11	Pass
NVNT	be20	5320	1.51	1.57	4.55	11	Pass
NVNT	be40	5270	-3.4	-2.85	-0.11	11	Pass
NVNT	be40	5310	-2.91	-2.3	0.42	11	Pass
NVNT	be80	5290	-6.1	-6.65	-3.36	11	Pass

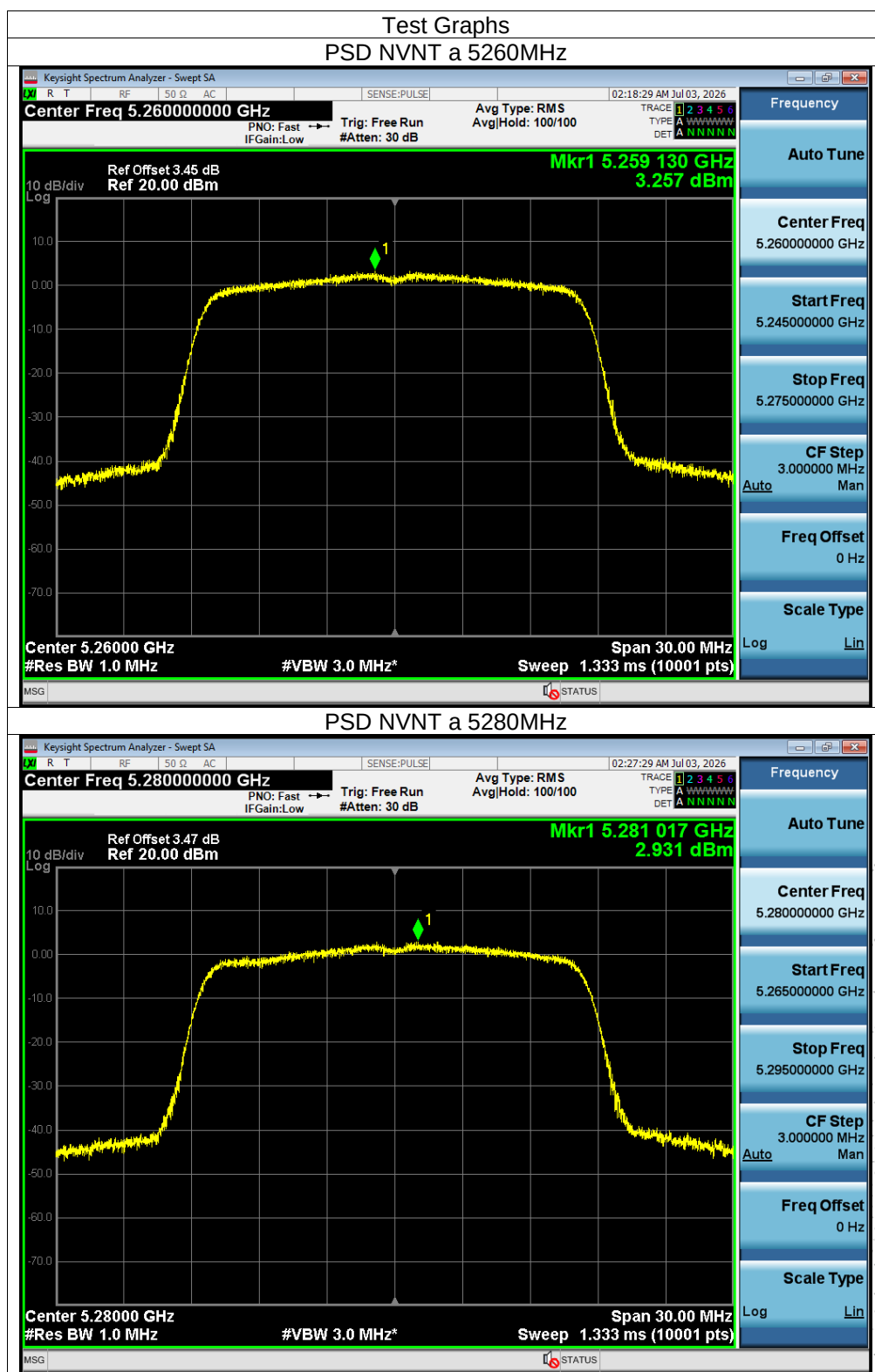
The test results have been incorporated into Factor.

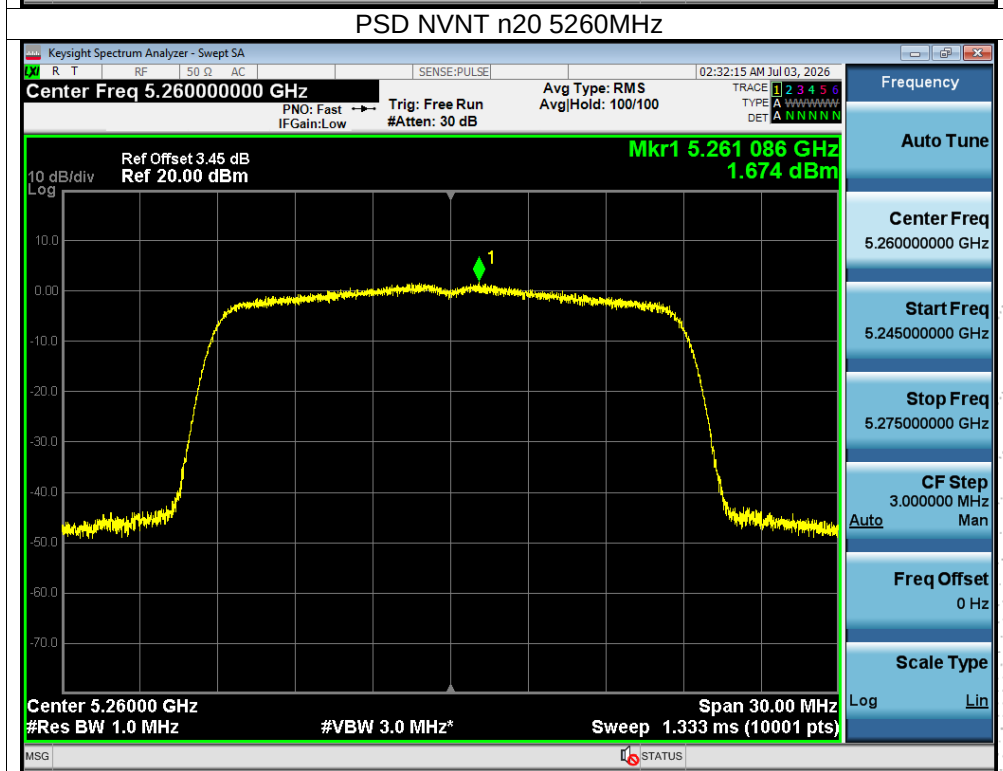
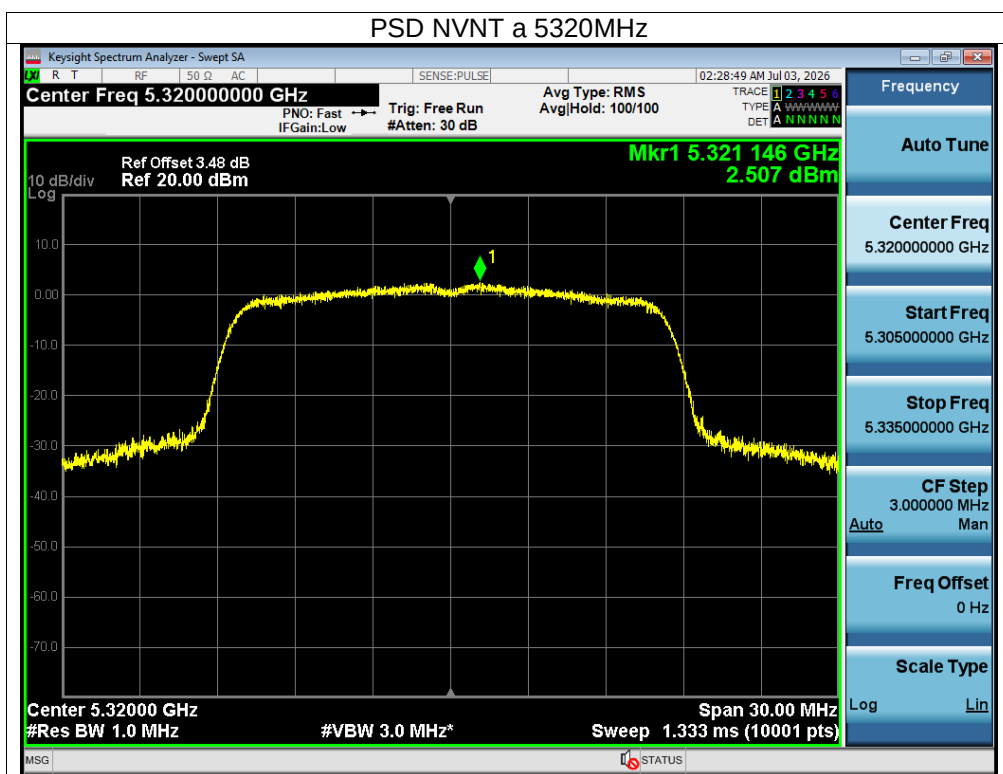
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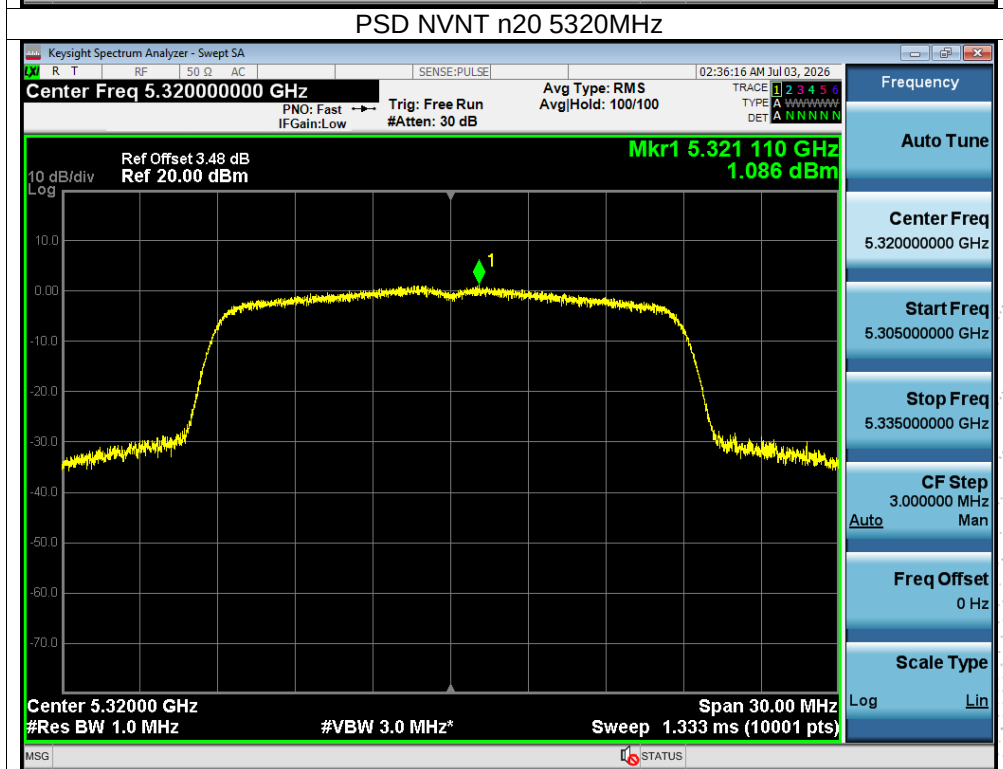
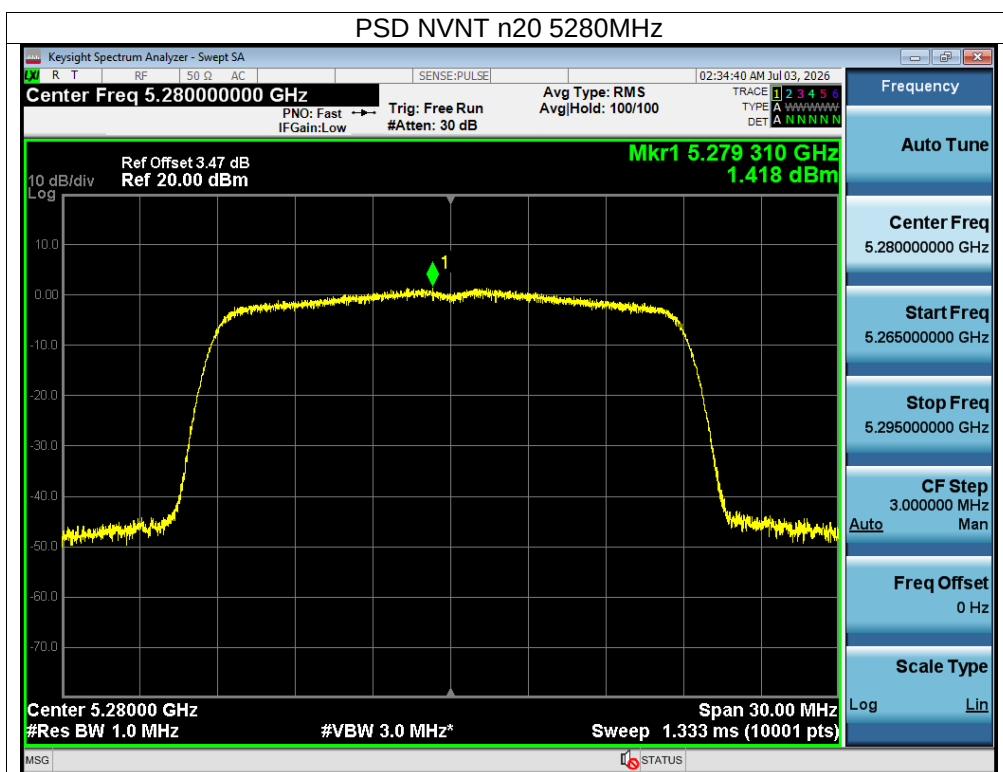
Antenna A gain: 1.95 dBi, Antenna B gain: 1.95 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]
=4.96 dBi<6dBi

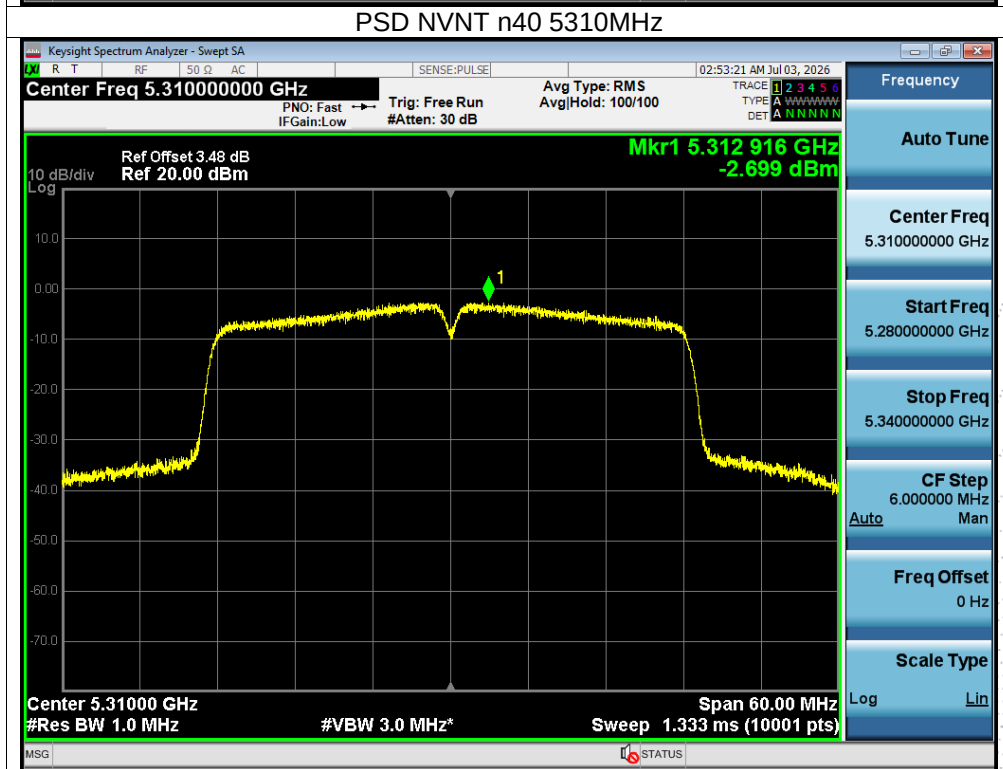
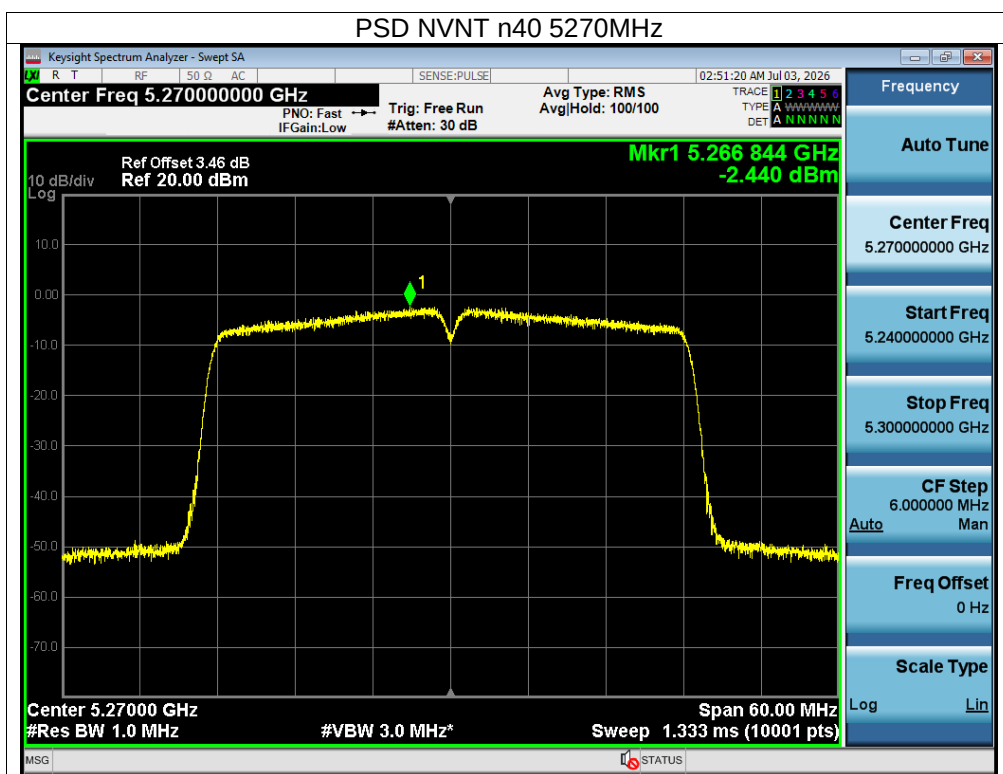
Limit=11 dBi

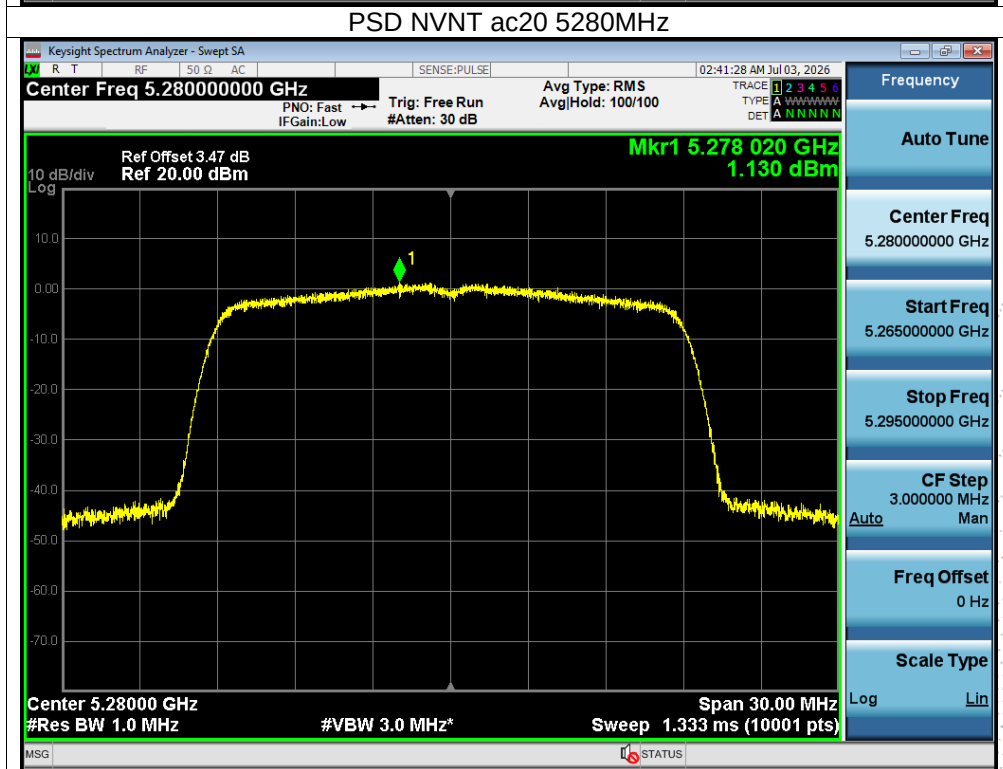
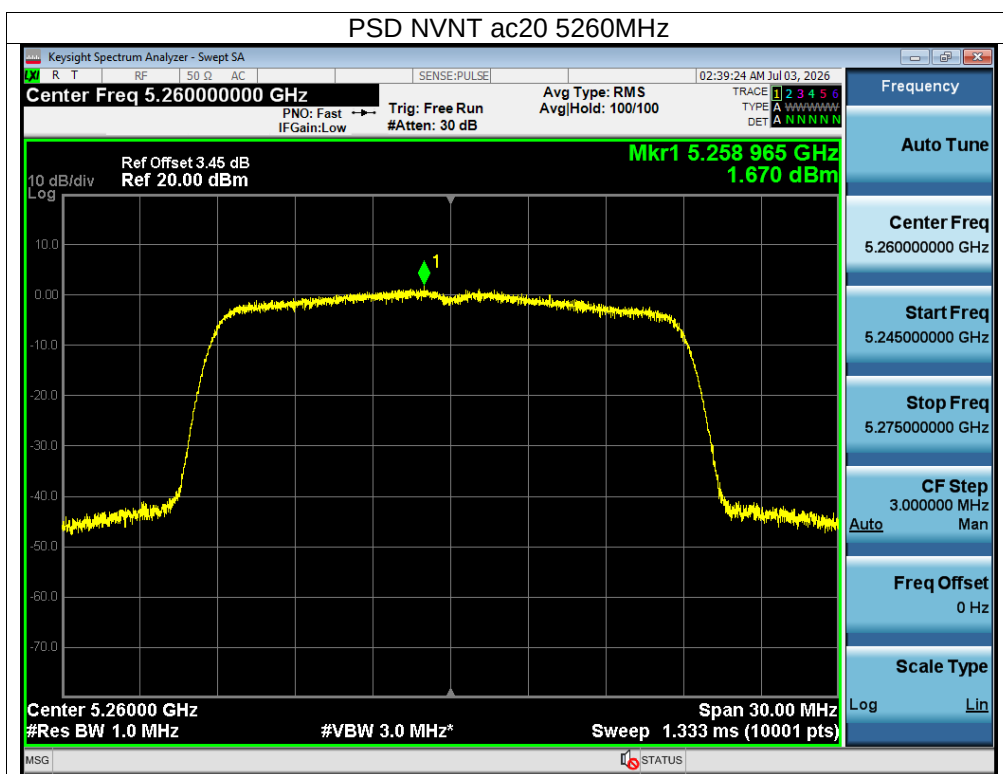
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

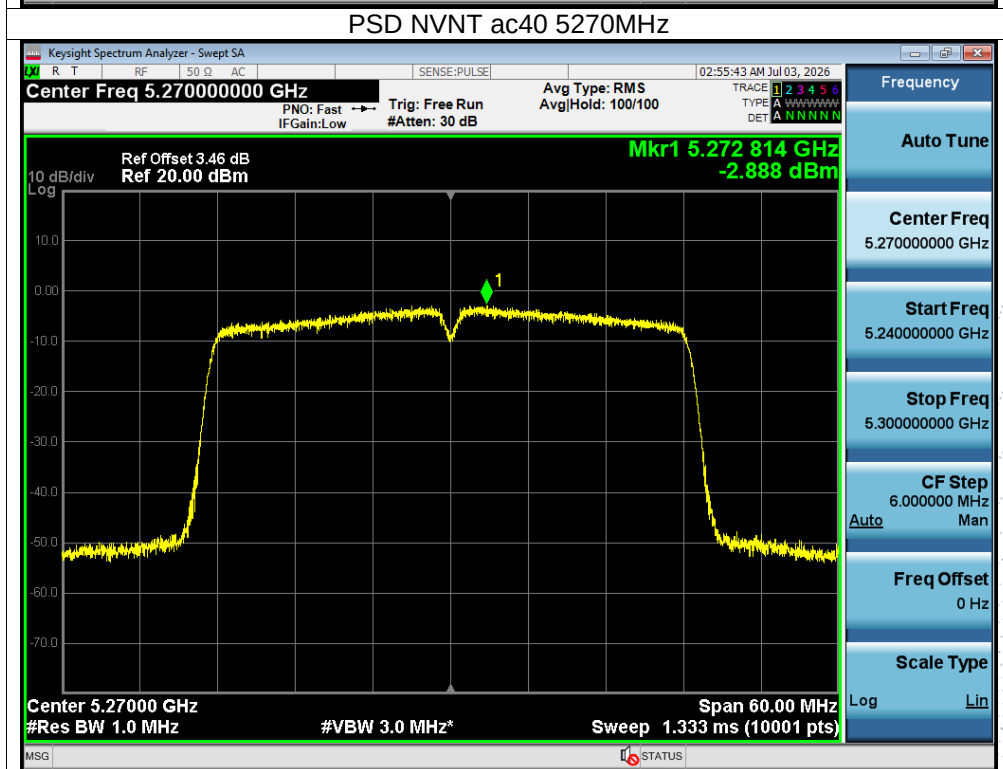
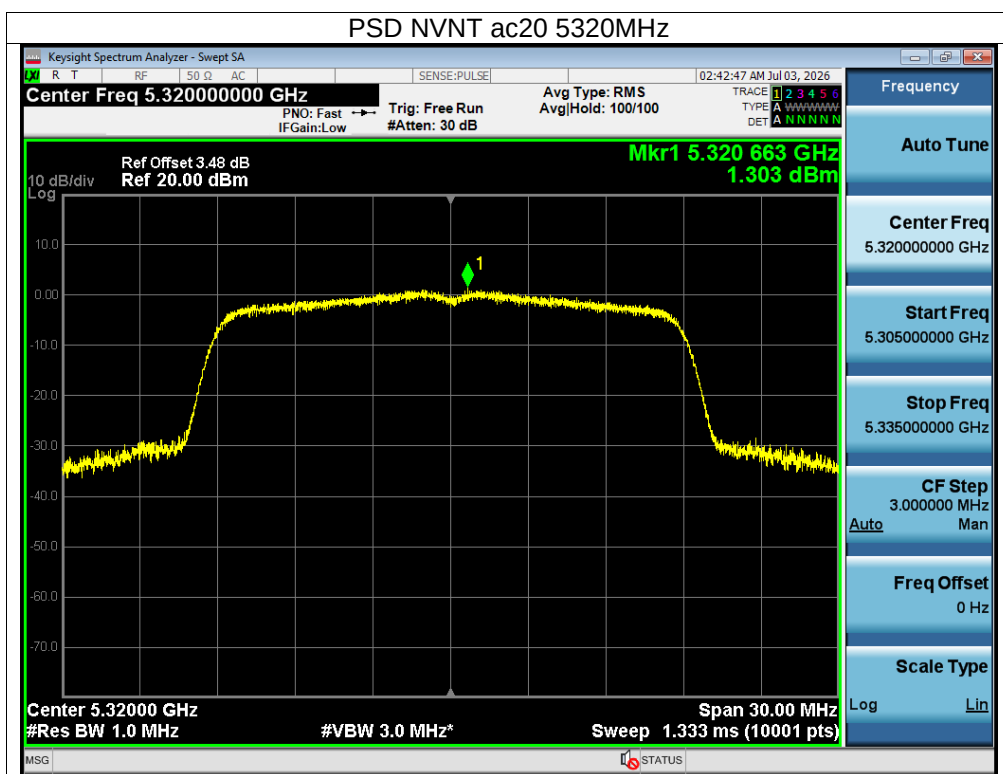


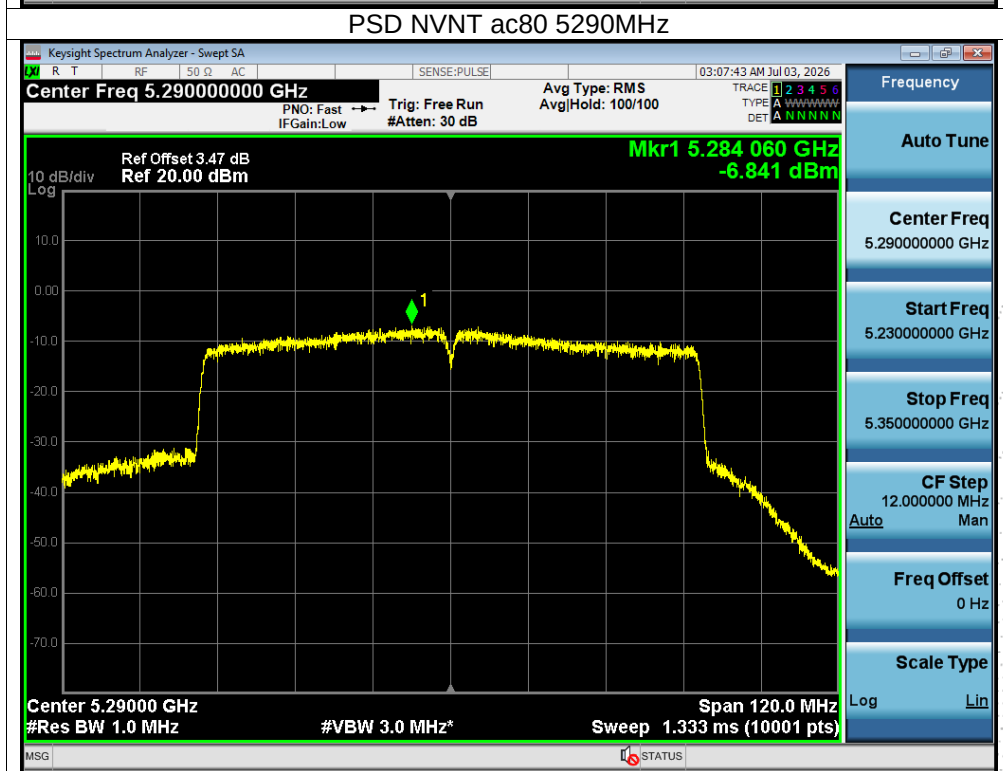
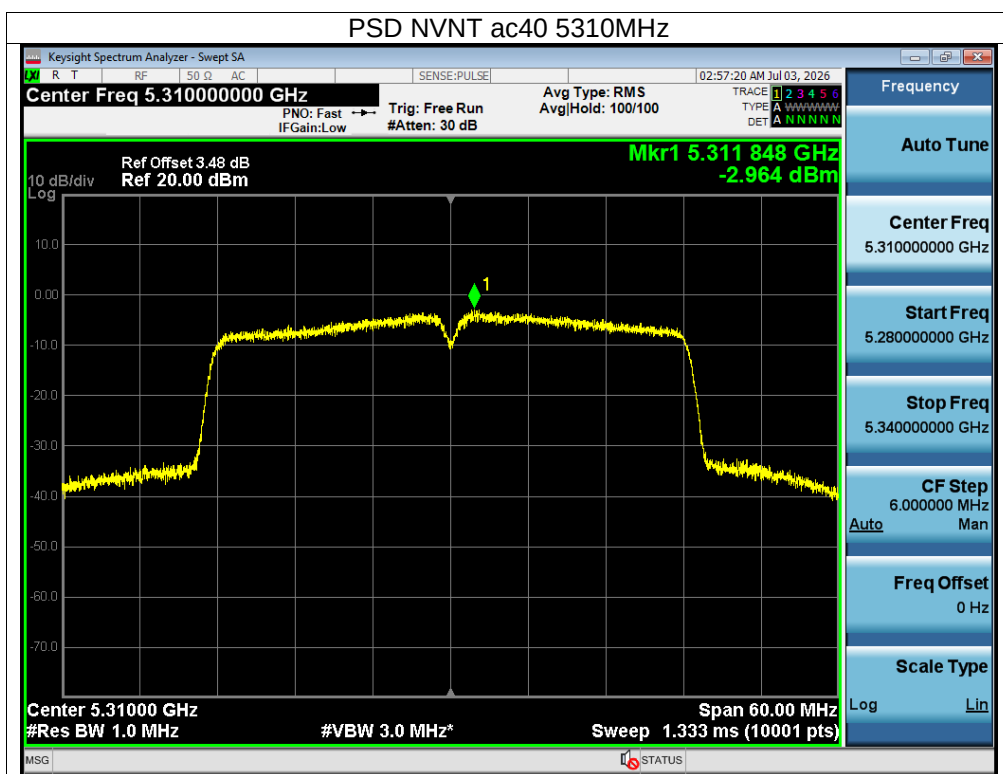


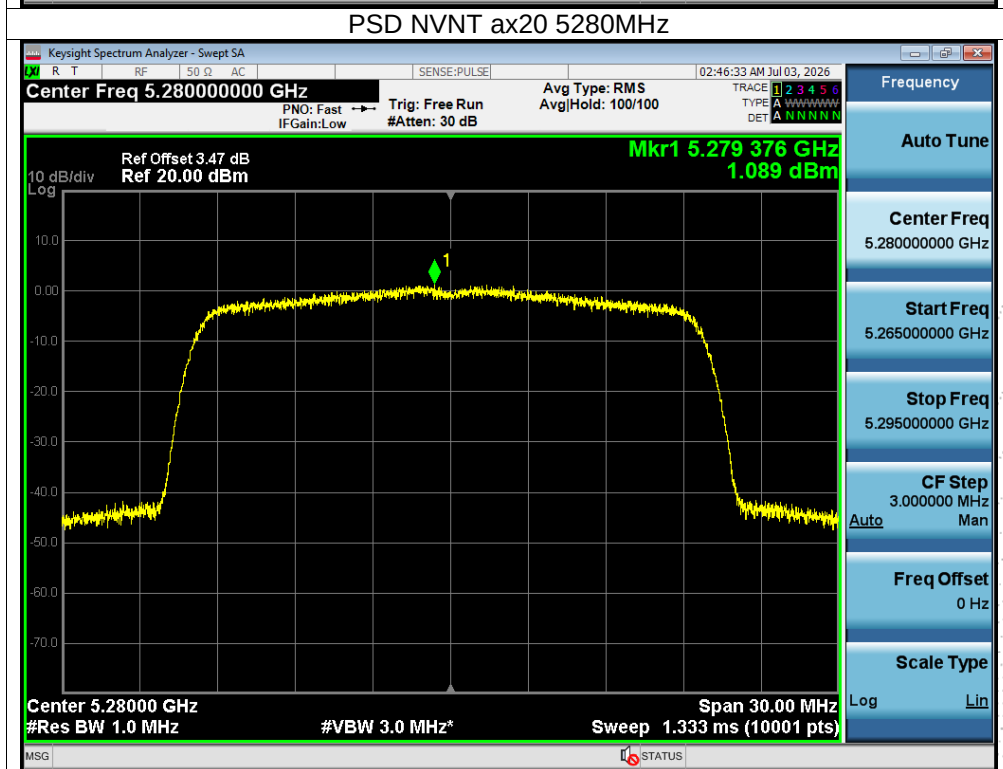
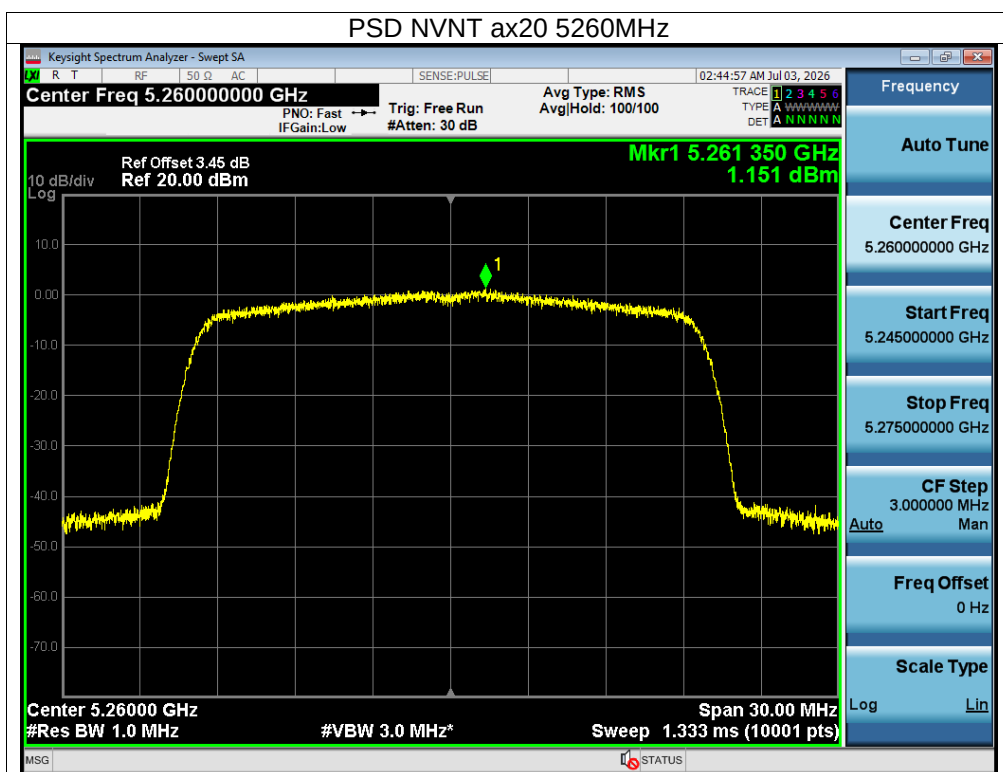


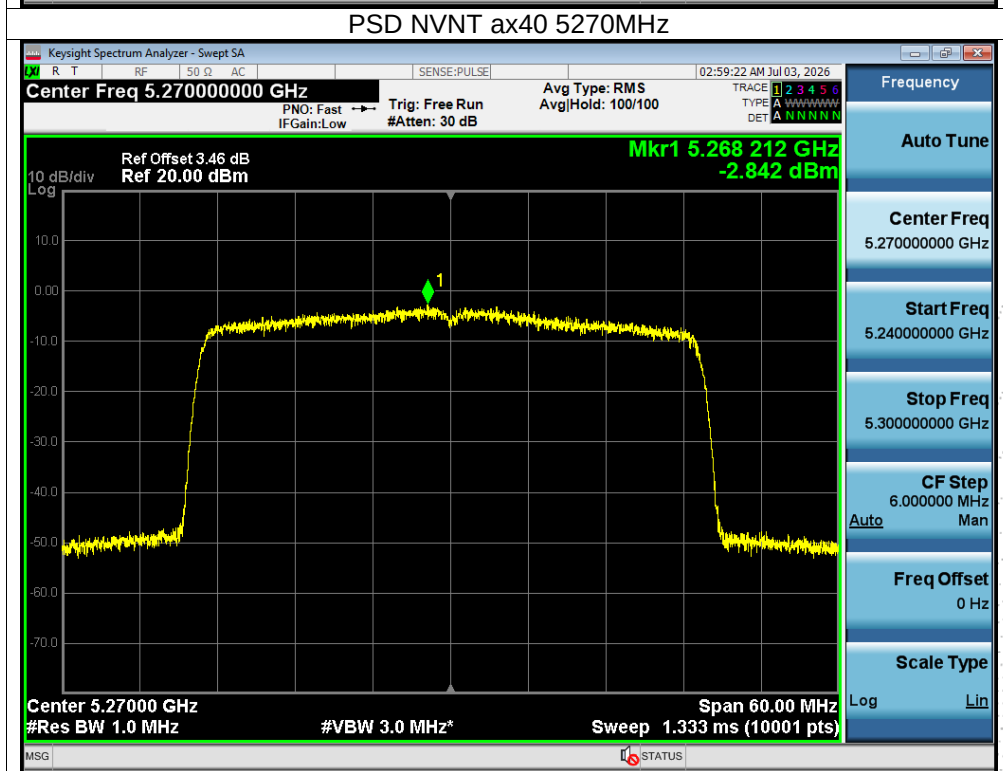
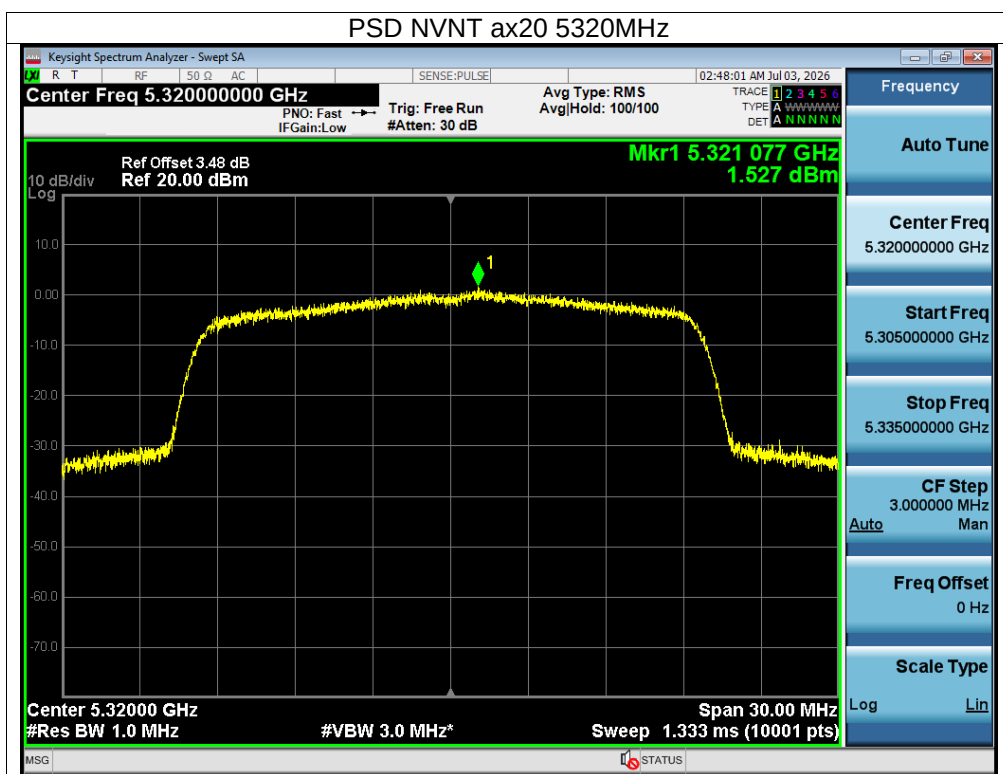


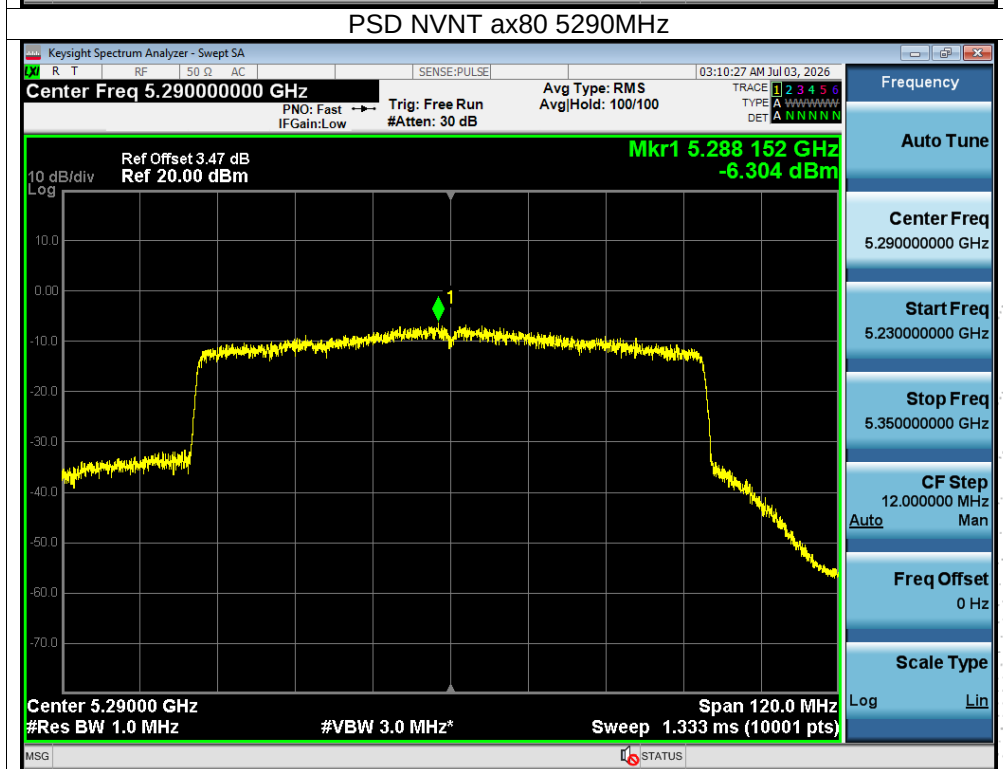
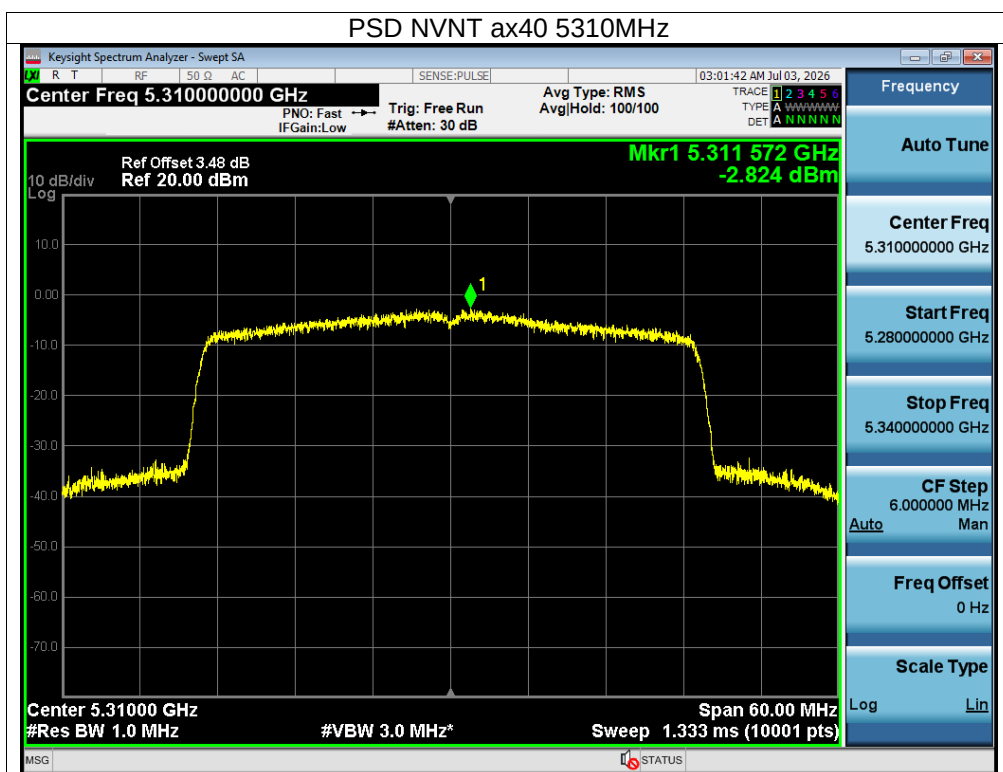


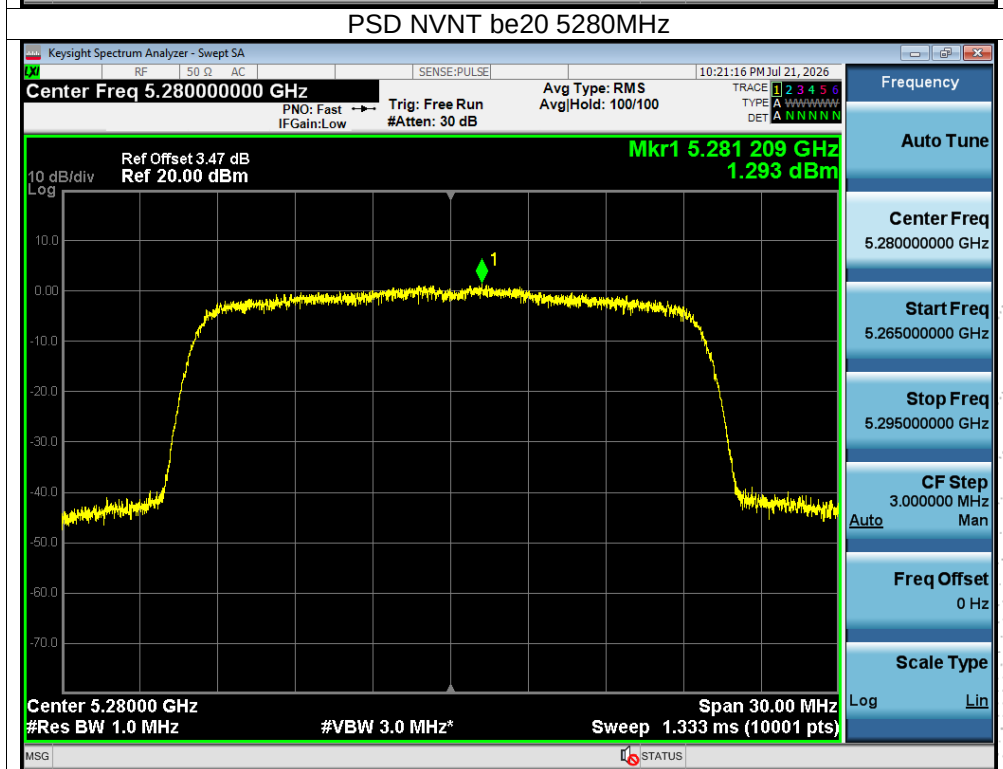
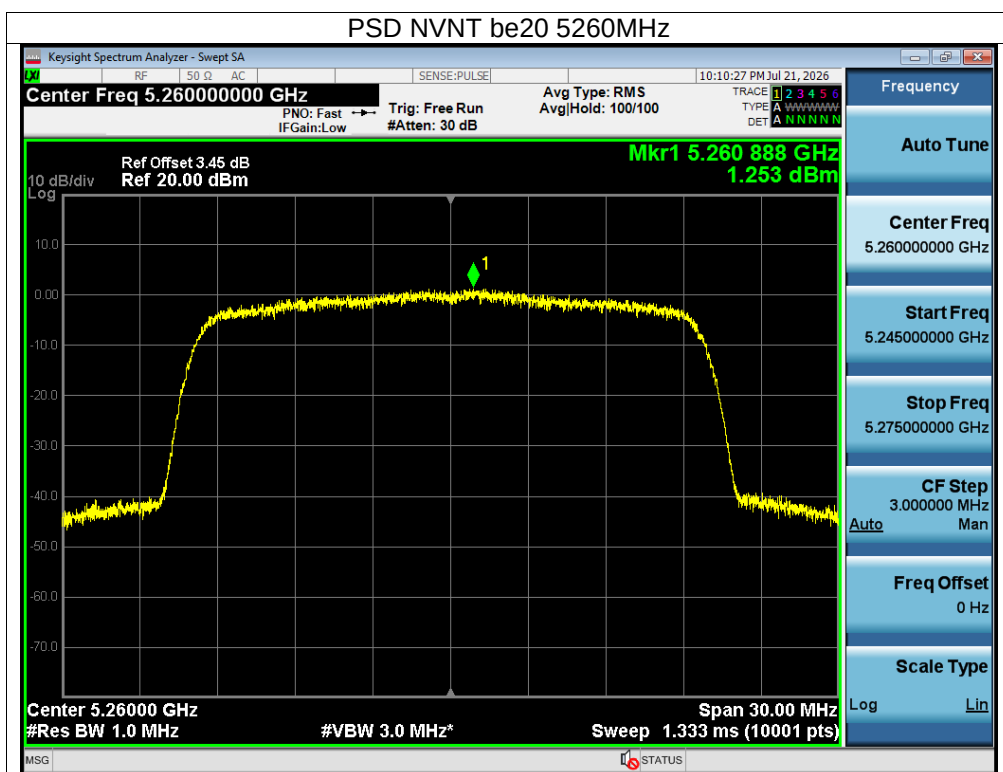


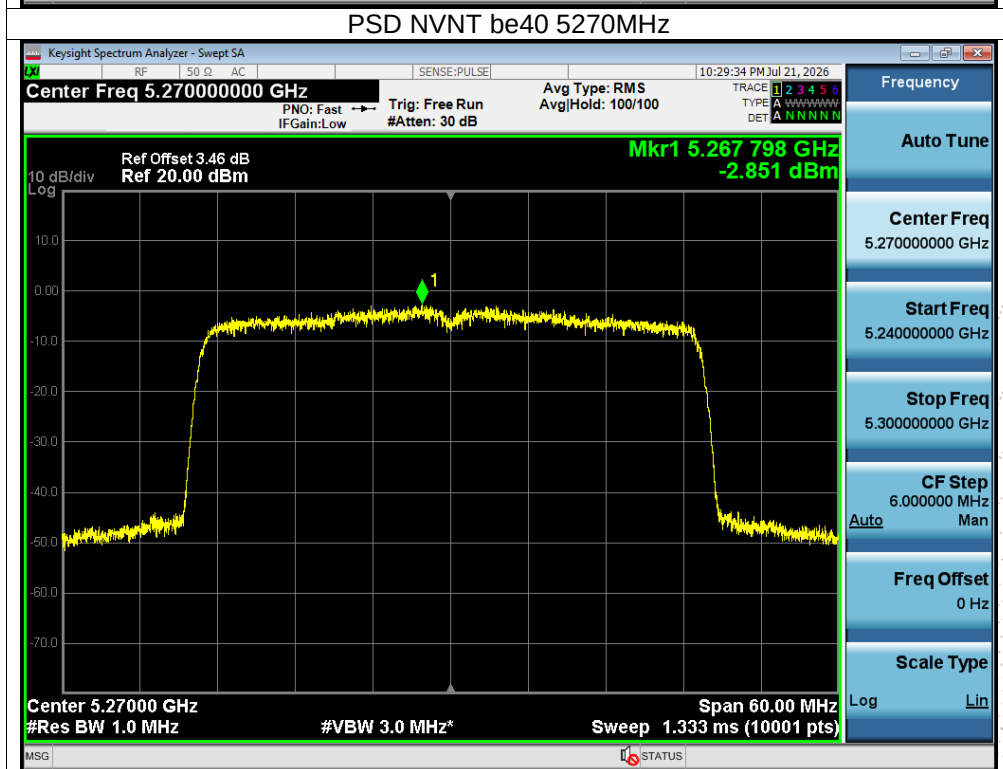
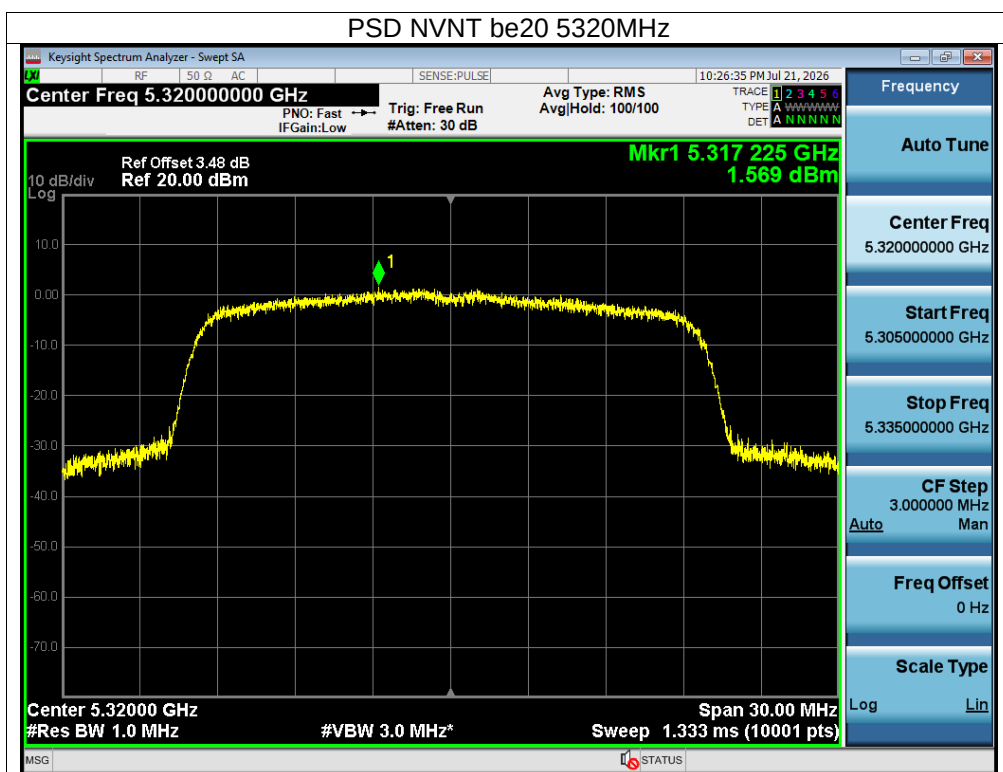


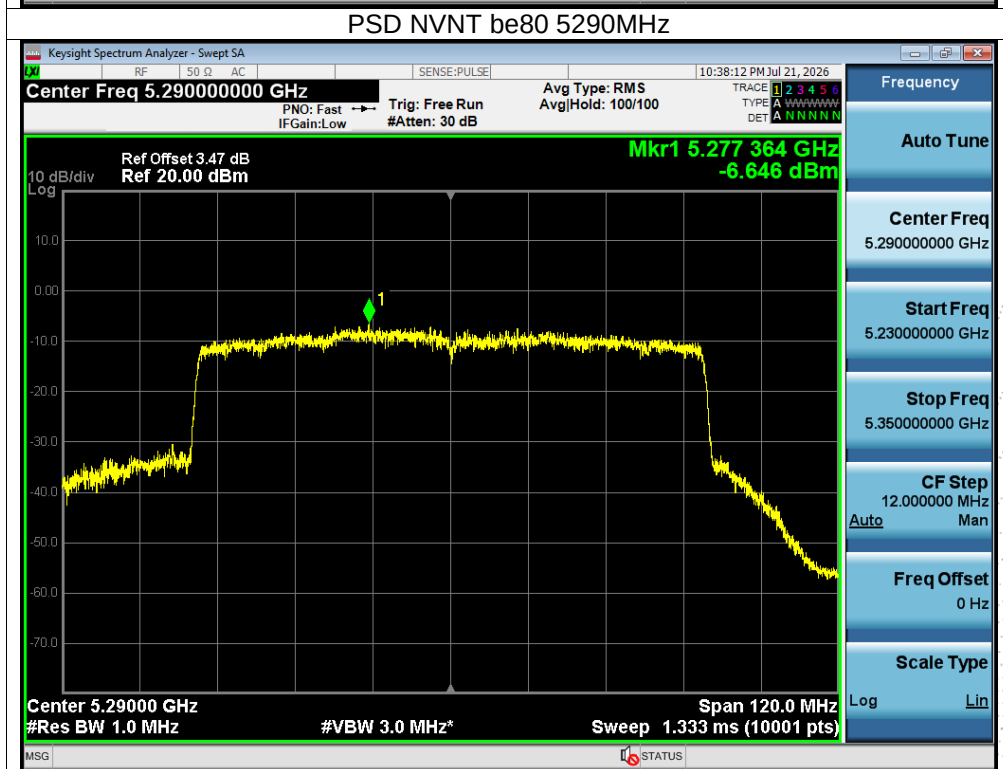
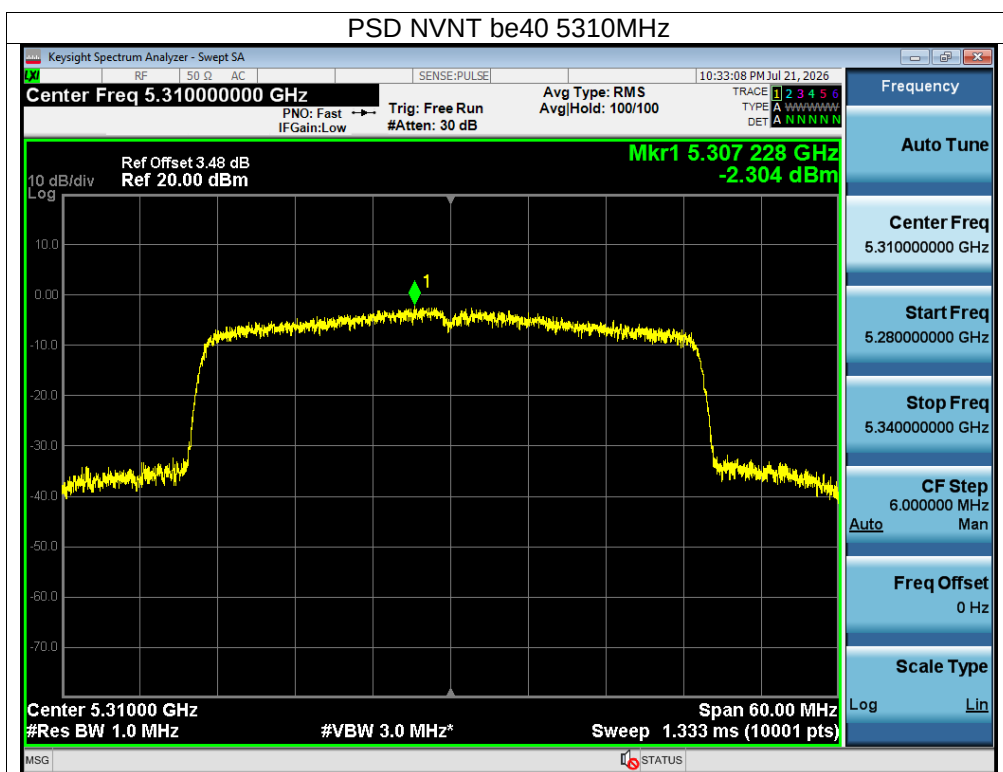












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5500-5700MHz)		

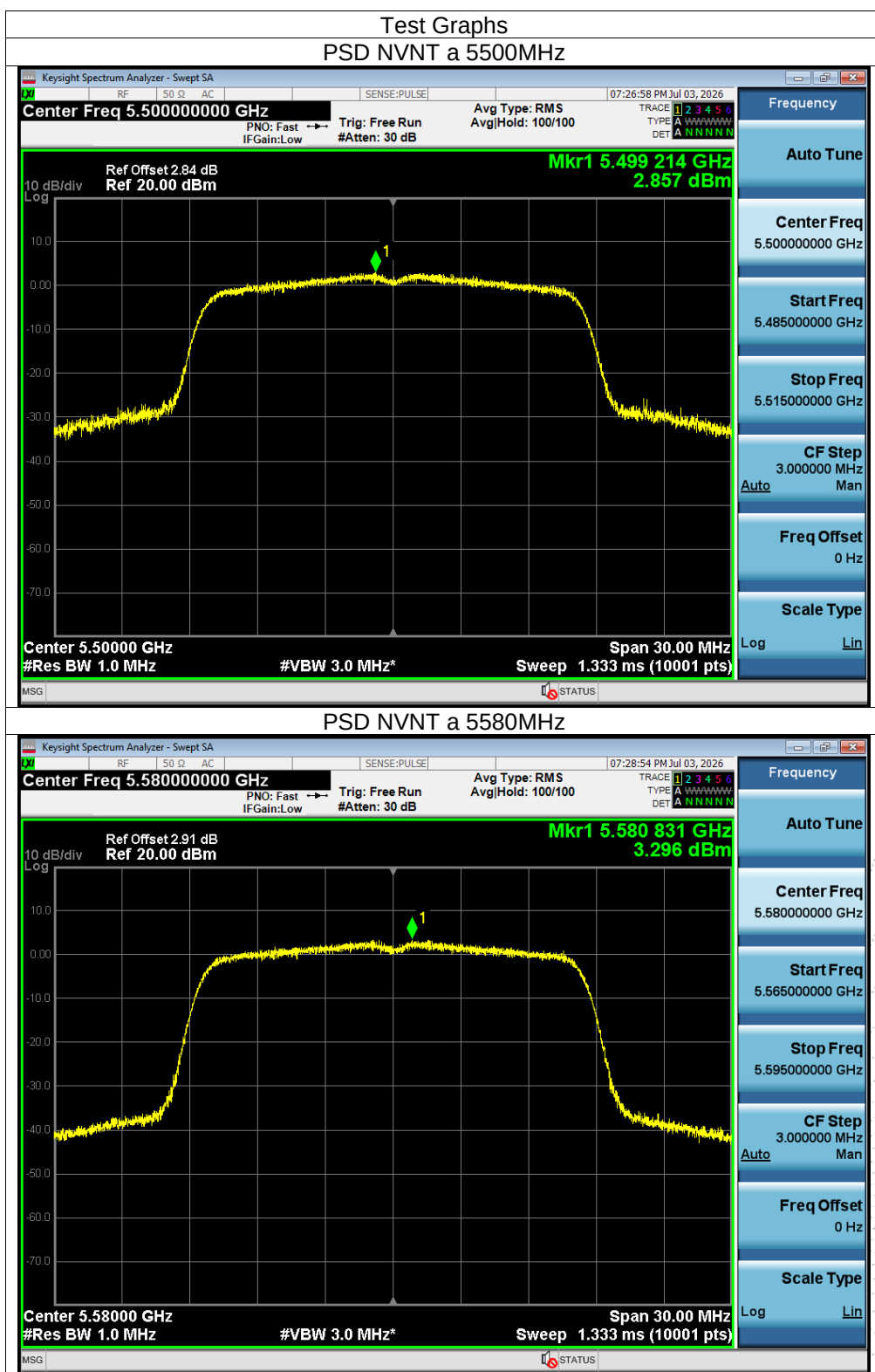
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant A	Ant B	Total		
NVNT	a	5500	2.86	2.53	/	11	Pass
NVNT	a	5580	3.3	2.5	/	11	Pass
NVNT	a	5700	1.73	0.35	/	11	Pass
NVNT	n20	5500	1.83	0.96	4.43	11	Pass
NVNT	n20	5580	1.97	1.01	4.53	11	Pass
NVNT	n20	5700	0.4	-1.41	2.60	11	Pass
NVNT	n40	5510	-2.67	-3.23	0.07	11	Pass
NVNT	n40	5550	-3	-2.73	0.15	11	Pass
NVNT	n40	5670	-3.44	-4.43	-0.90	11	Pass
NVNT	ac20	5500	1.3	0.77	4.05	11	Pass
NVNT	ac20	5580	1.22	0.98	4.11	11	Pass
NVNT	ac20	5700	0.19	-0.99	2.65	11	Pass
NVNT	ac40	5510	-3.51	-4.19	-0.83	11	Pass
NVNT	ac40	5550	-3.68	-3.08	-0.36	11	Pass
NVNT	ac40	5670	-4.08	-5.57	-1.75	11	Pass
NVNT	ac80	5530	-7.15	-7.69	-4.40	11	Pass
NVNT	ax20	5500	0.78	0.9	3.85	11	Pass
NVNT	ax20	5580	1.82	0.92	4.40	11	Pass
NVNT	ax20	5700	0.22	-1.57	2.43	11	Pass
NVNT	ax40	5510	-3.35	-3.57	-0.45	11	Pass
NVNT	ax40	5550	-3.09	-3.54	-0.30	11	Pass
NVNT	ax40	5670	-3.62	-5.13	-1.30	11	Pass
NVNT	ax80	5530	-6.59	-7.32	-3.93	11	Pass
NVNT	be20	5500	2.18	1.33	4.79	11	Pass
NVNT	be20	5580	1.86	1	4.46	11	Pass
NVNT	be20	5700	1.23	-0.29	3.55	11	Pass
NVNT	be40	5510	-2.37	-1.95	0.86	11	Pass
NVNT	be40	5550	-2.57	-3.01	0.23	11	Pass
NVNT	be40	5670	-3.22	-4.04	-0.60	11	Pass
NVNT	be80	5530	-5.89	-7.04	-3.42	11	Pass

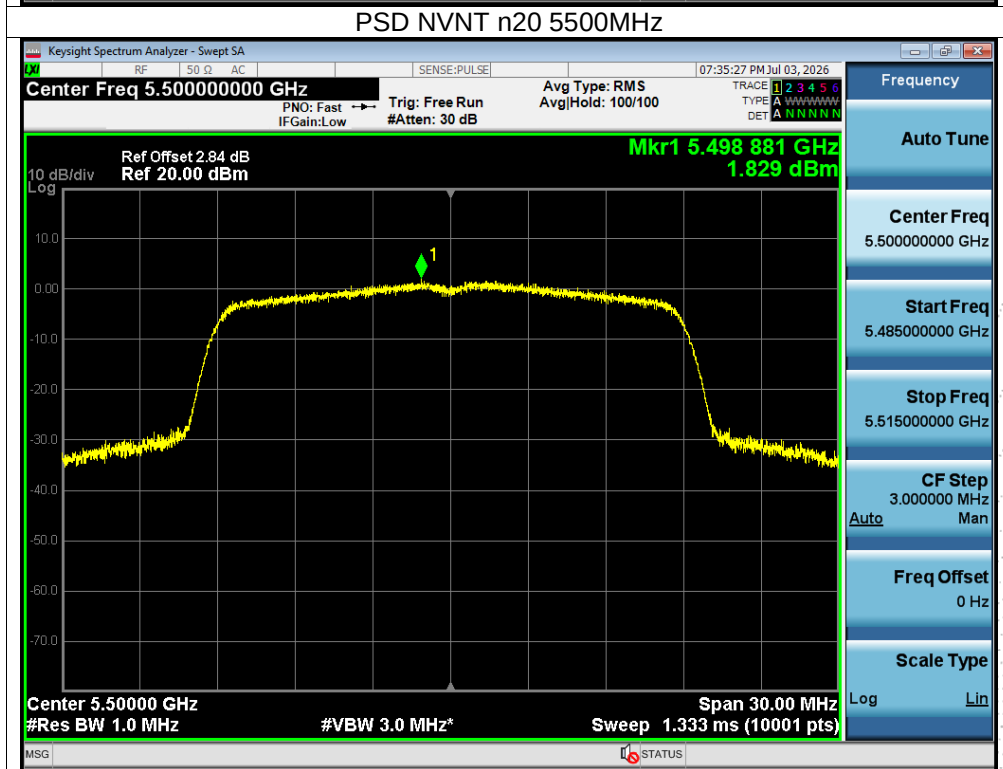
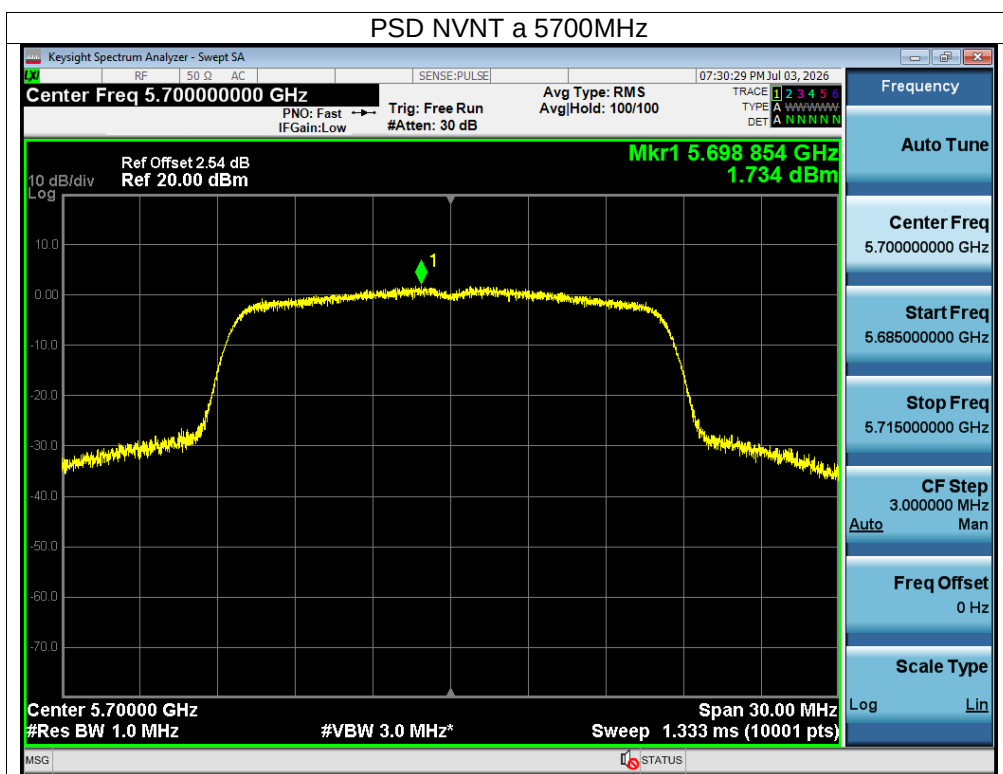
The test results have been incorporated into Factor.

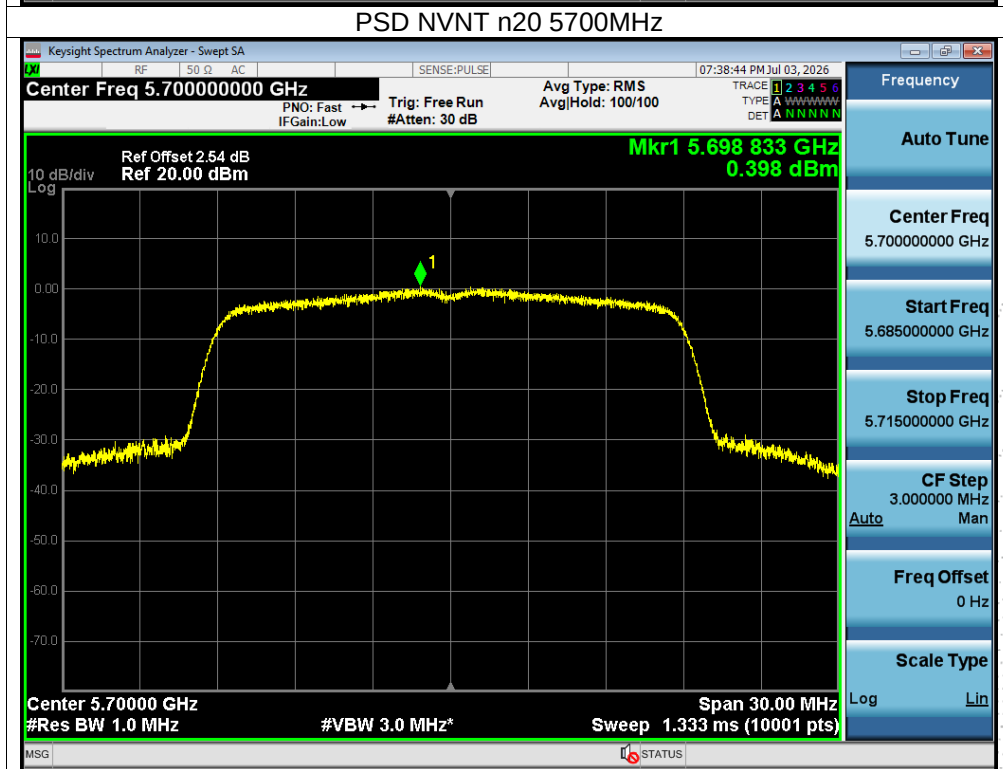
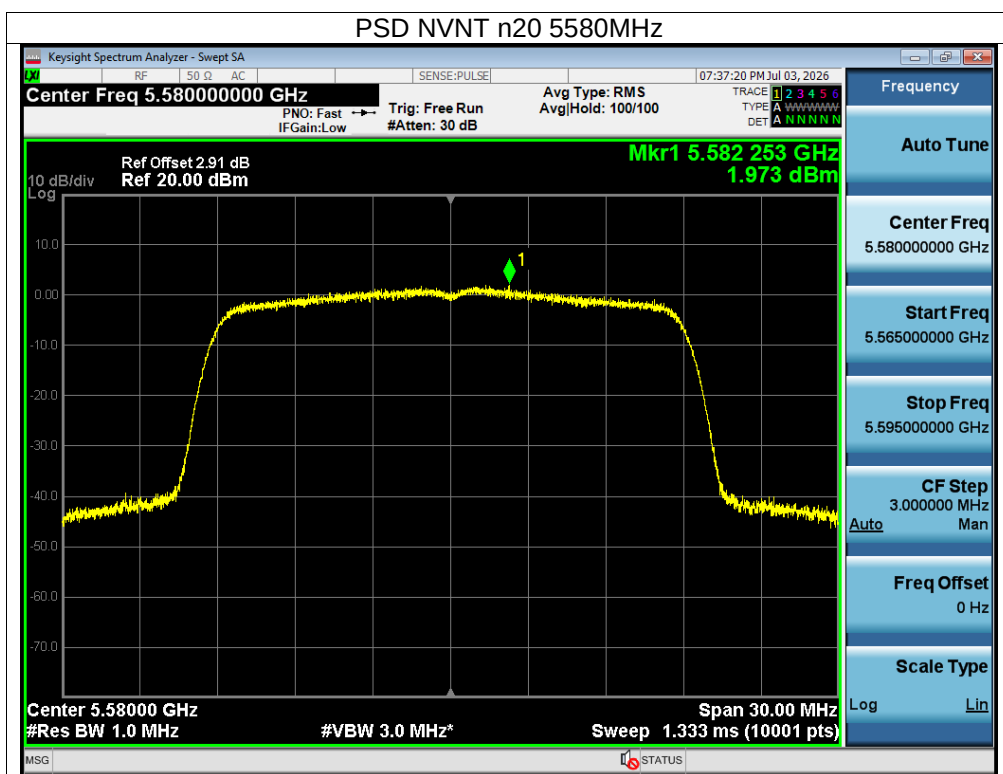
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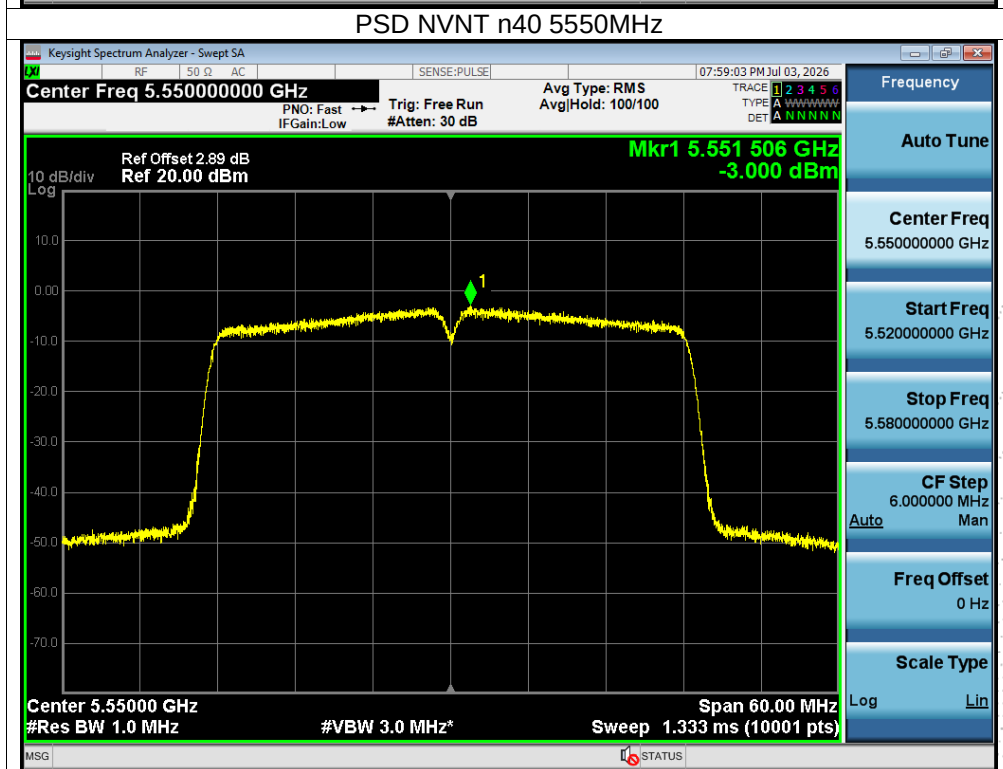
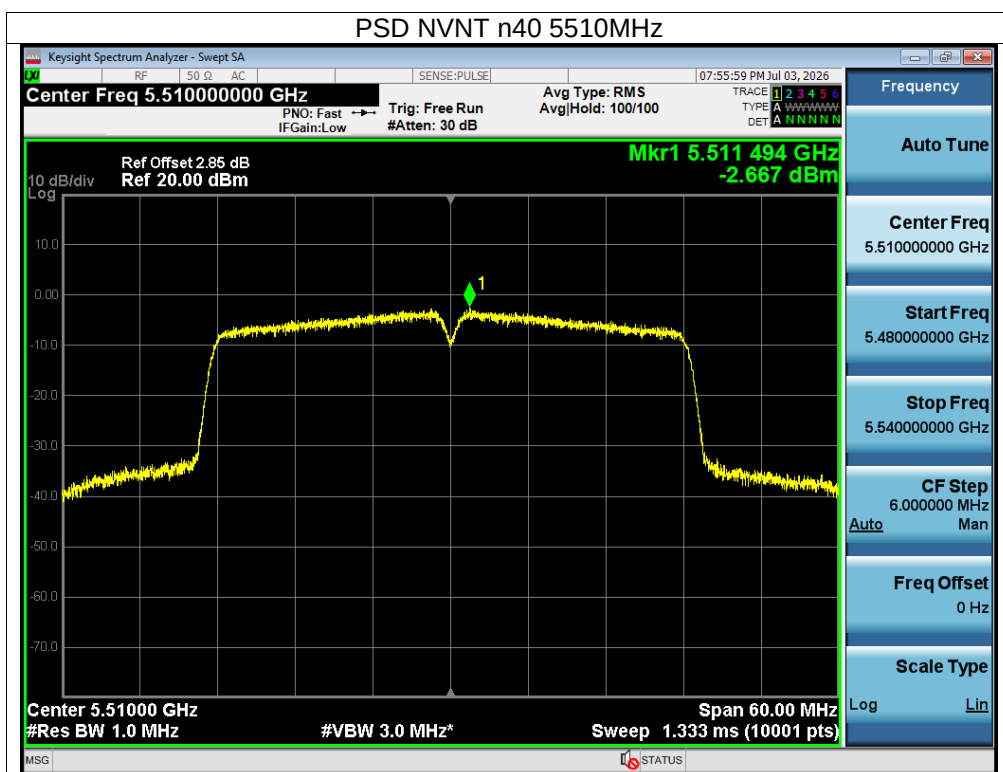
Antenna A gain: 1.95 dBi, Antenna B gain: 1.95 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]
=4.96 dBi<6dBi
Limit=11 dBi

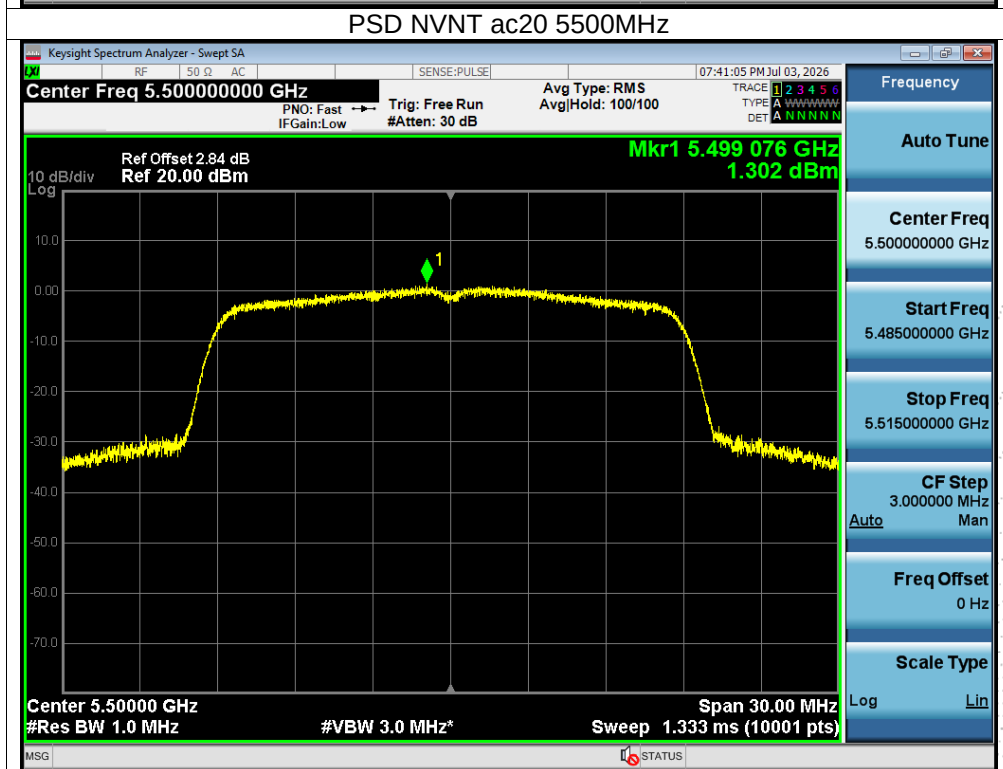
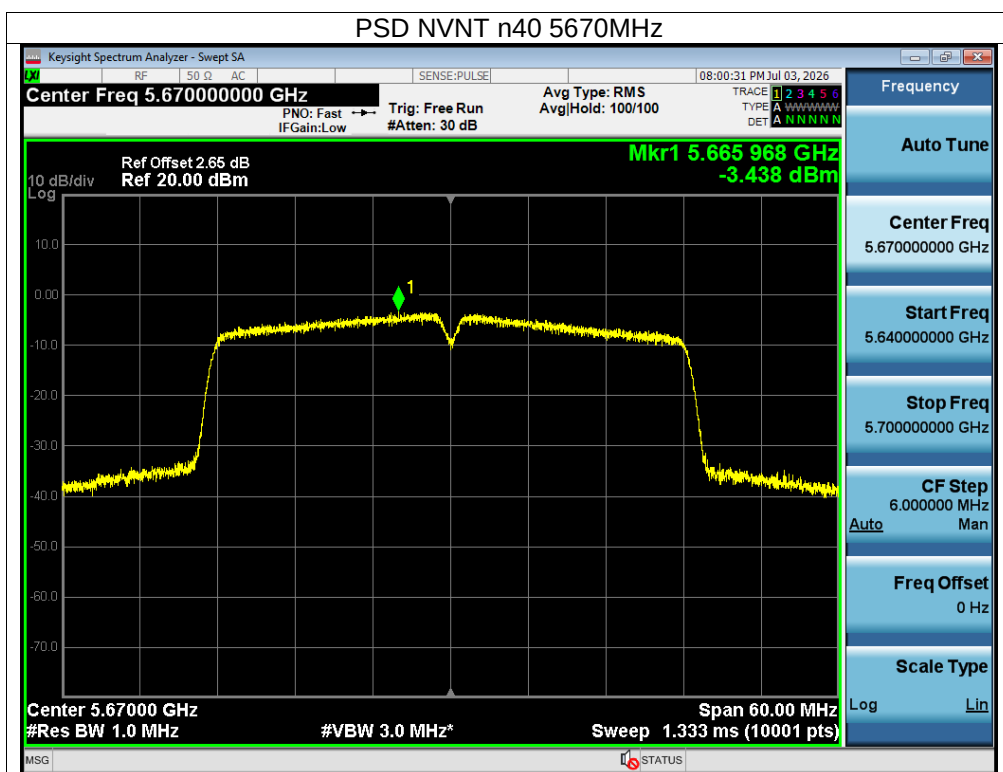
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

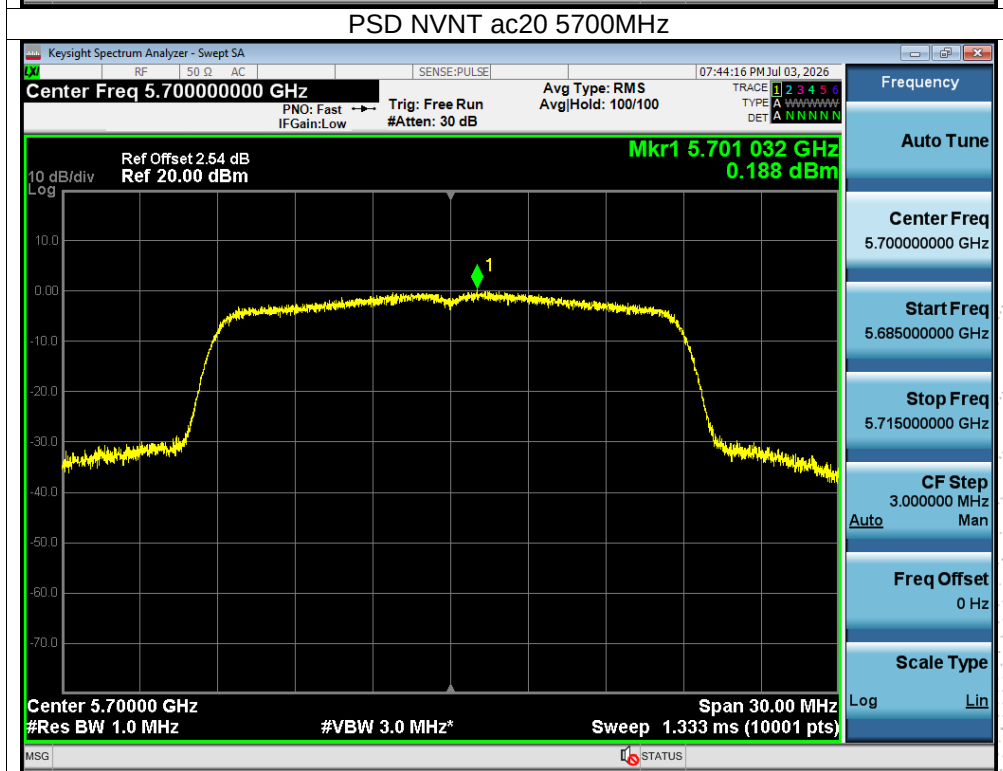
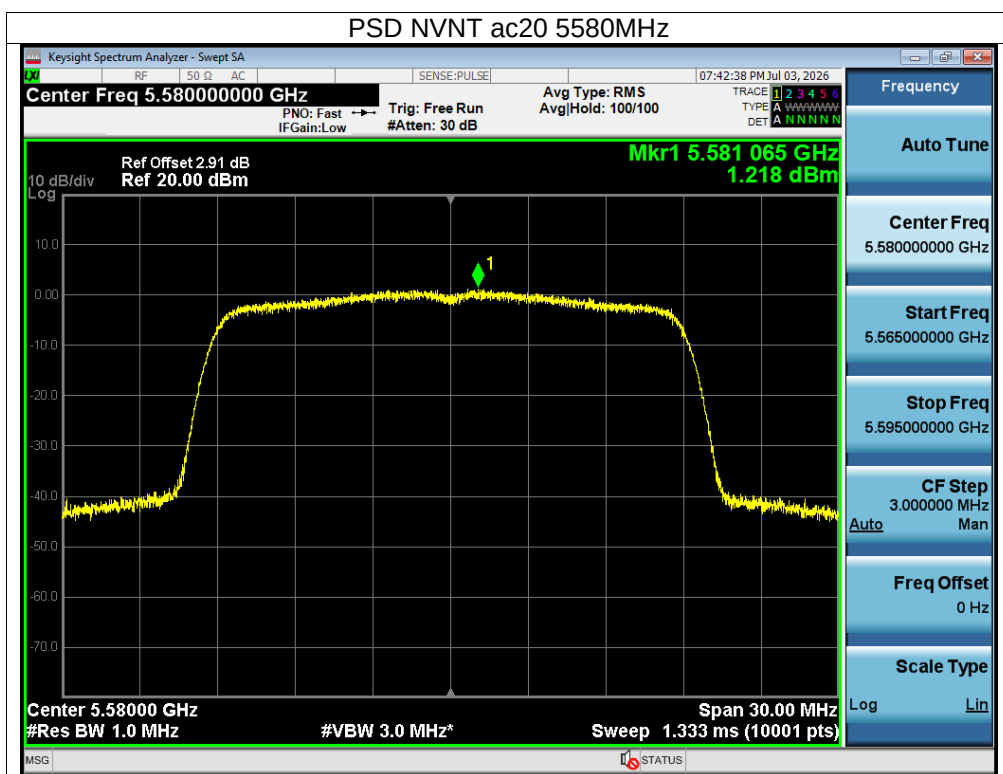


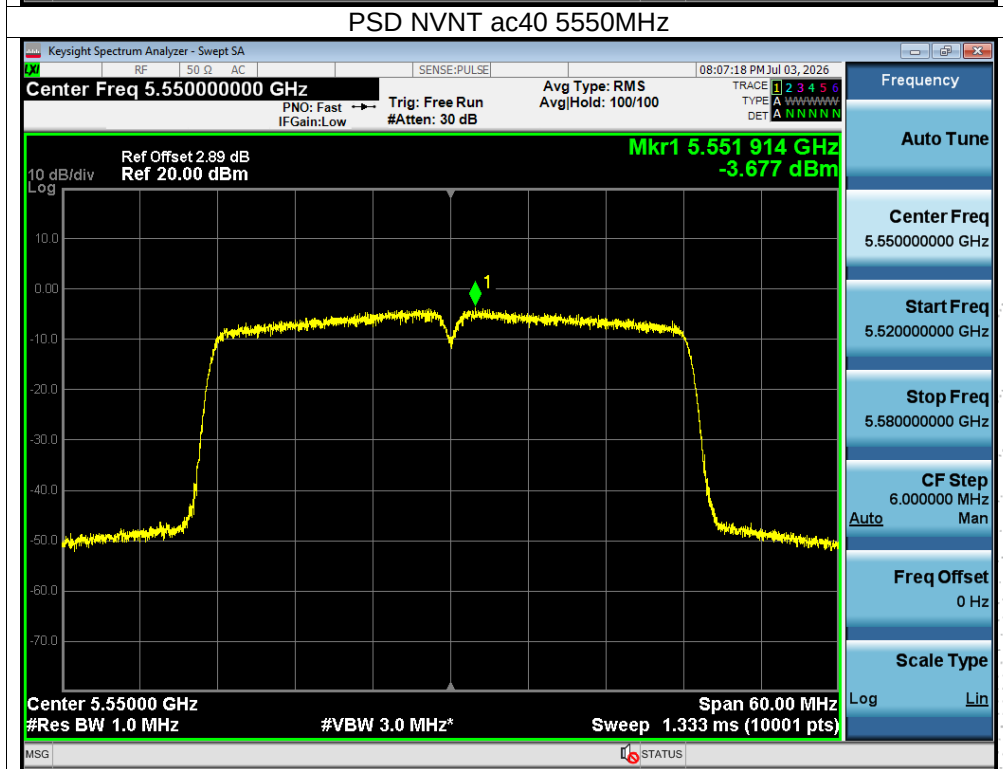
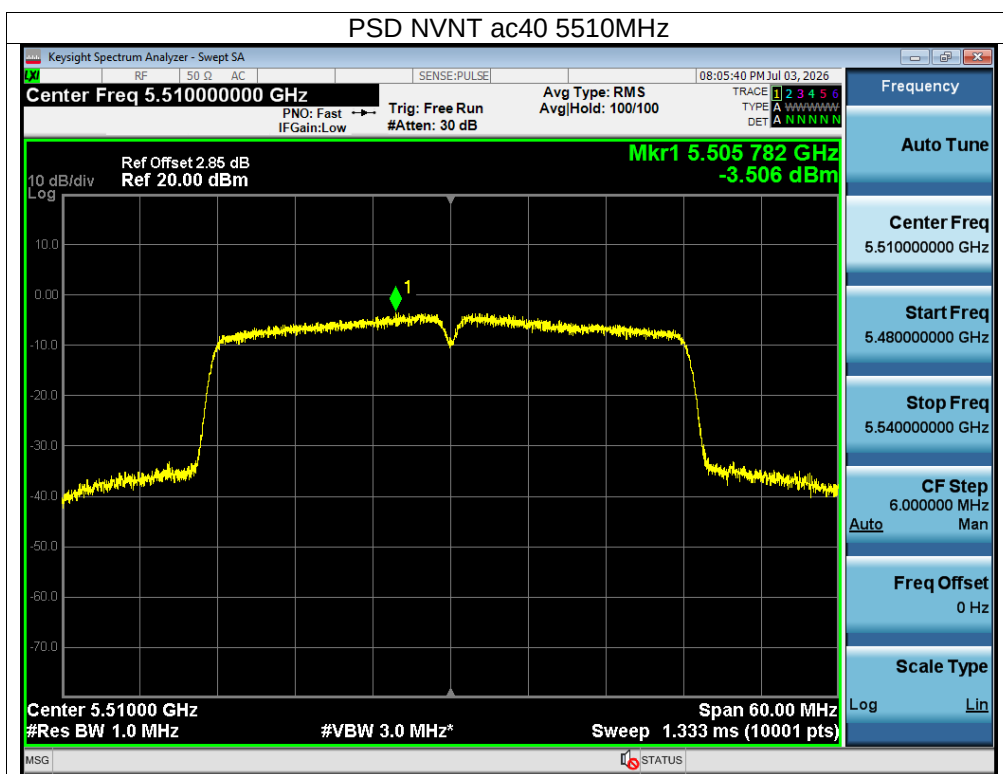


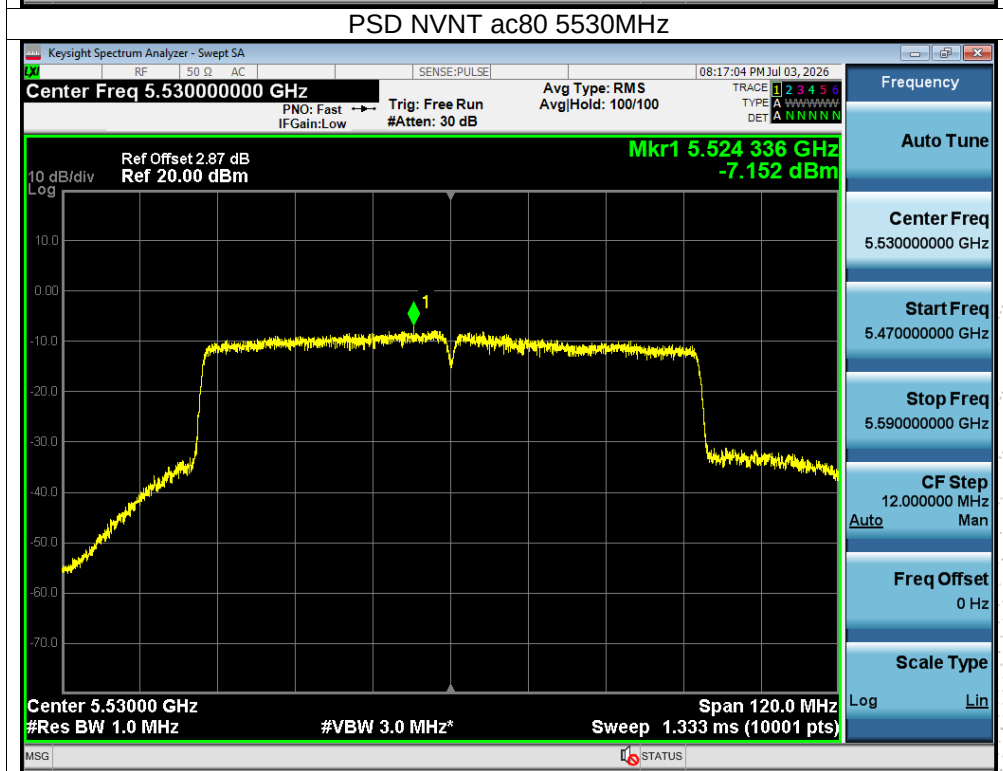
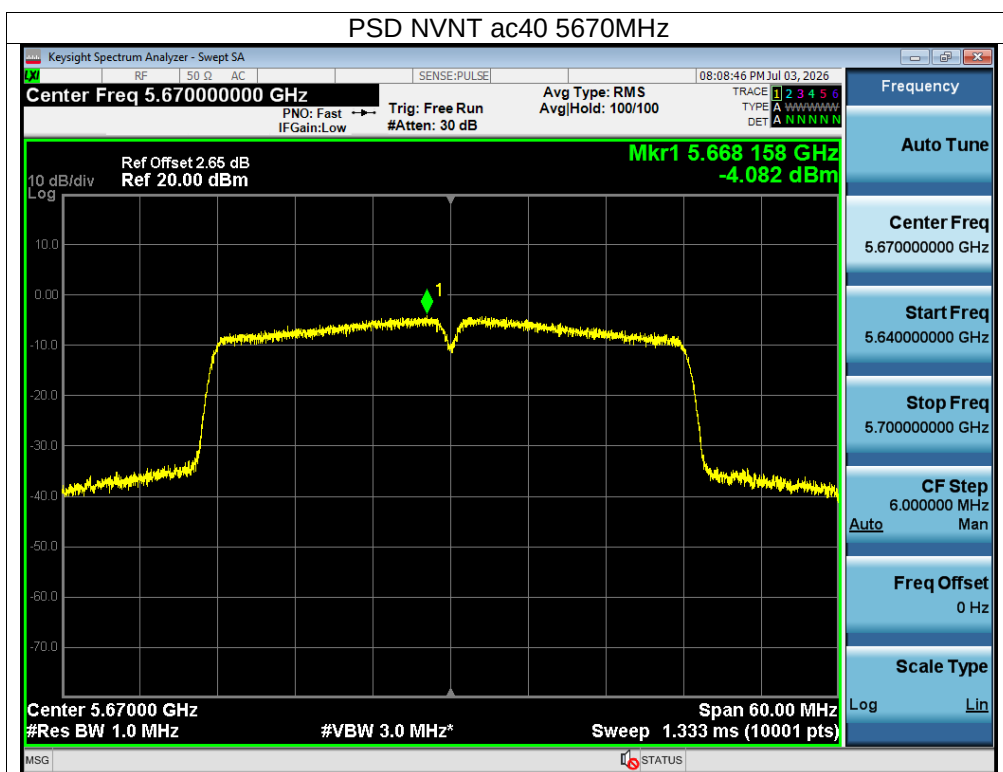


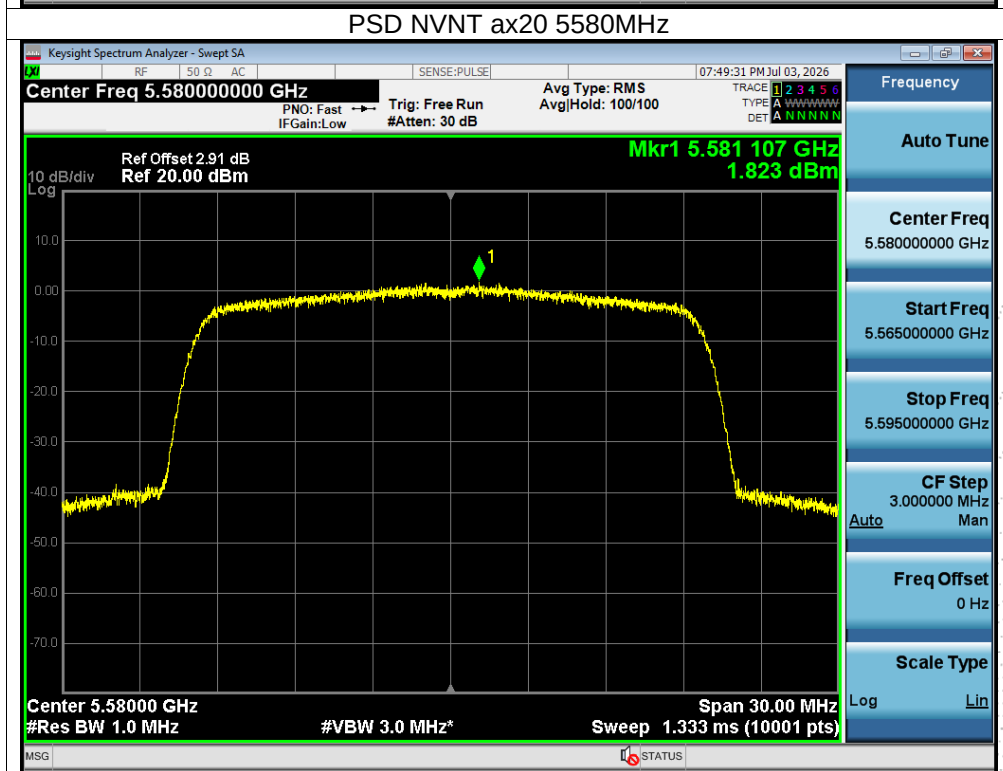
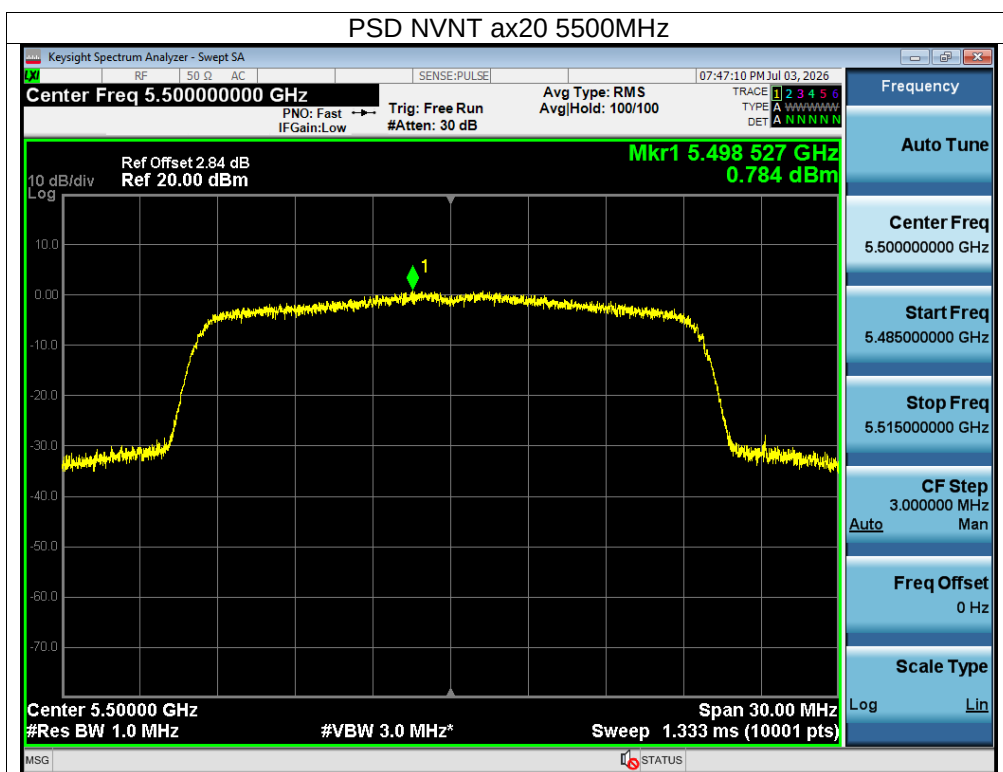


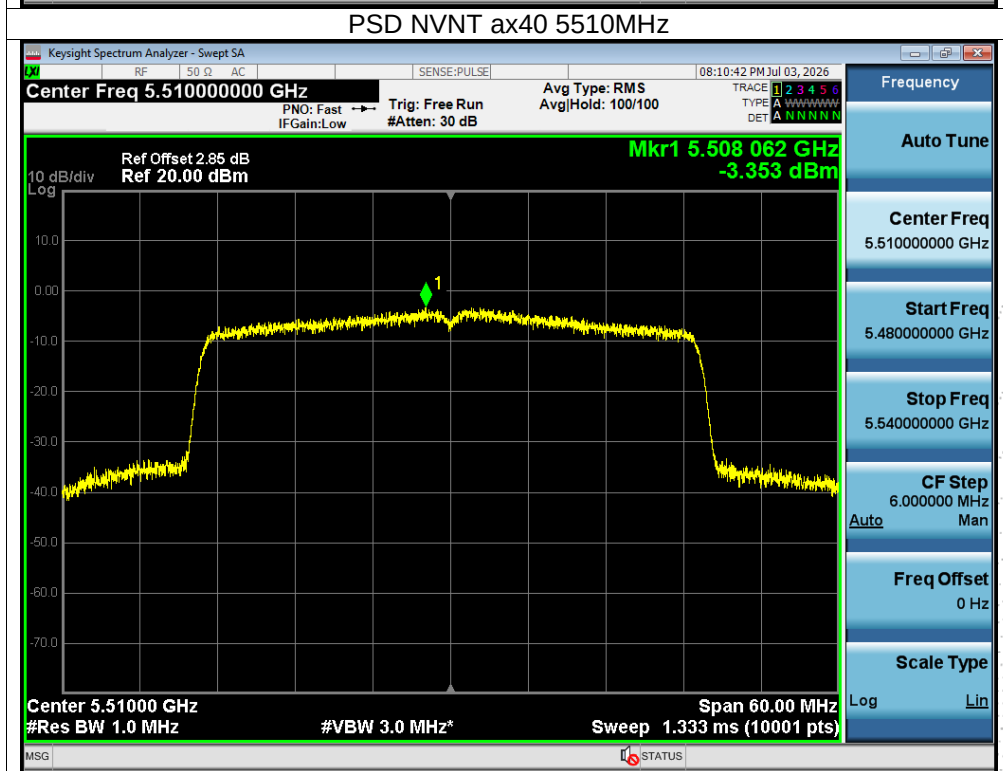
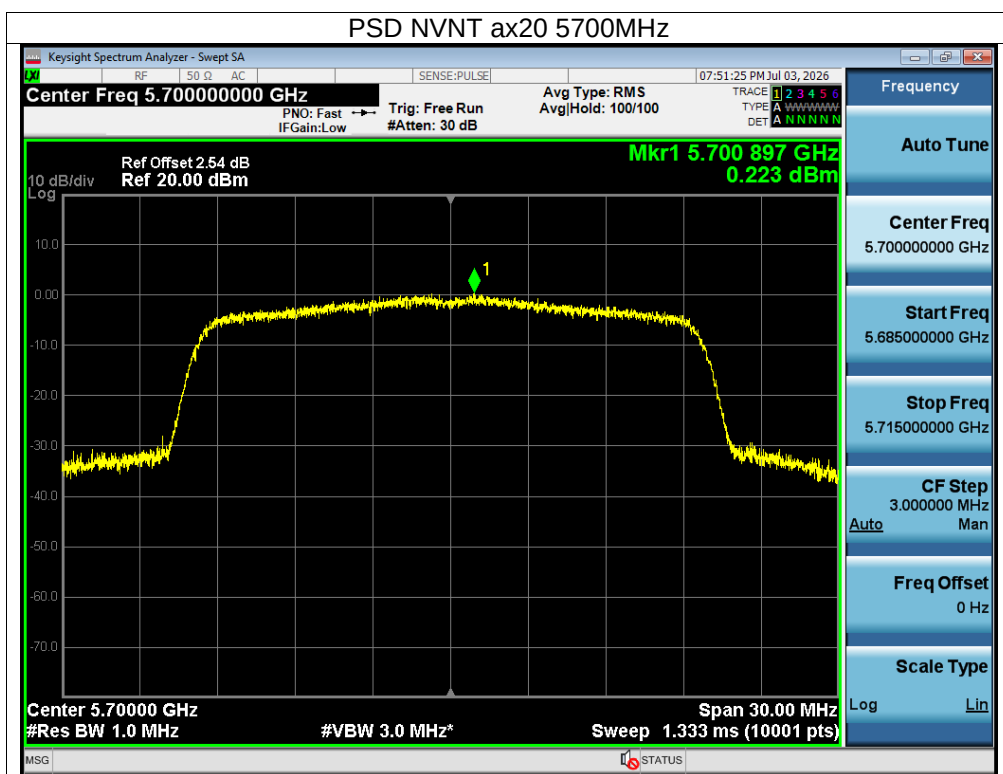


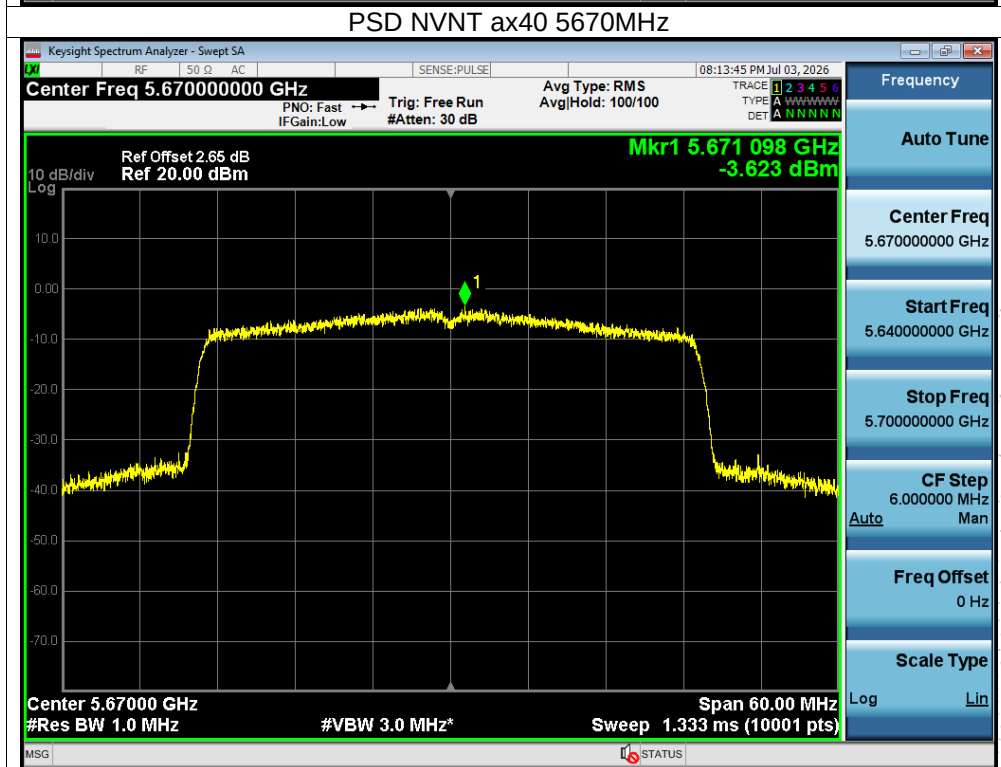
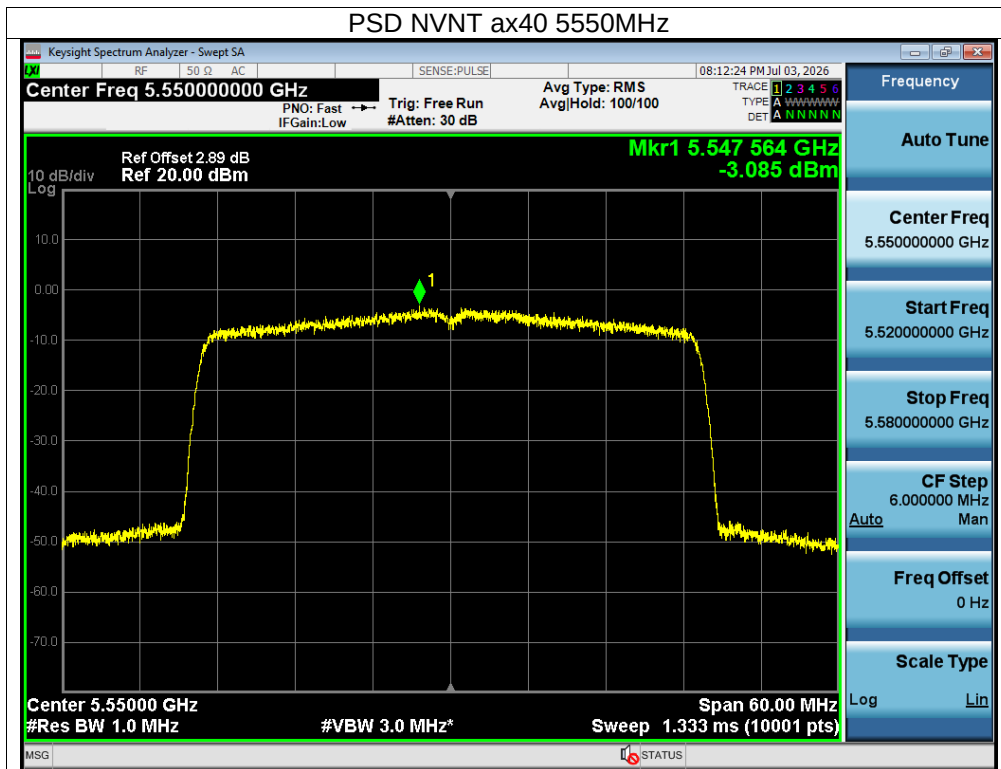


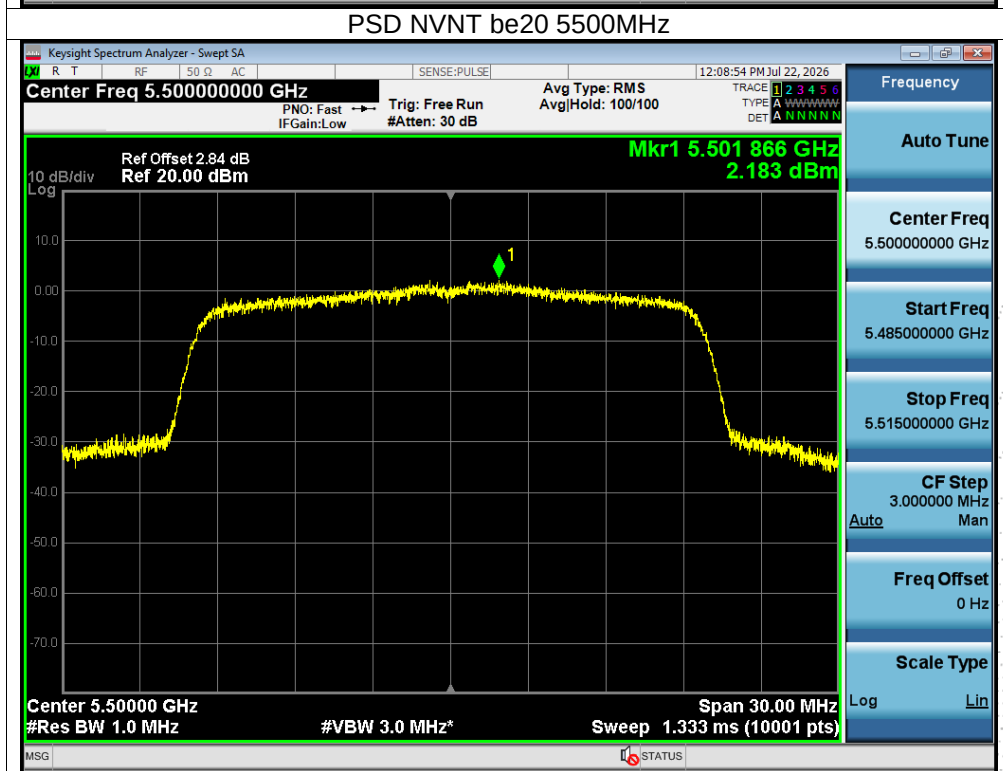
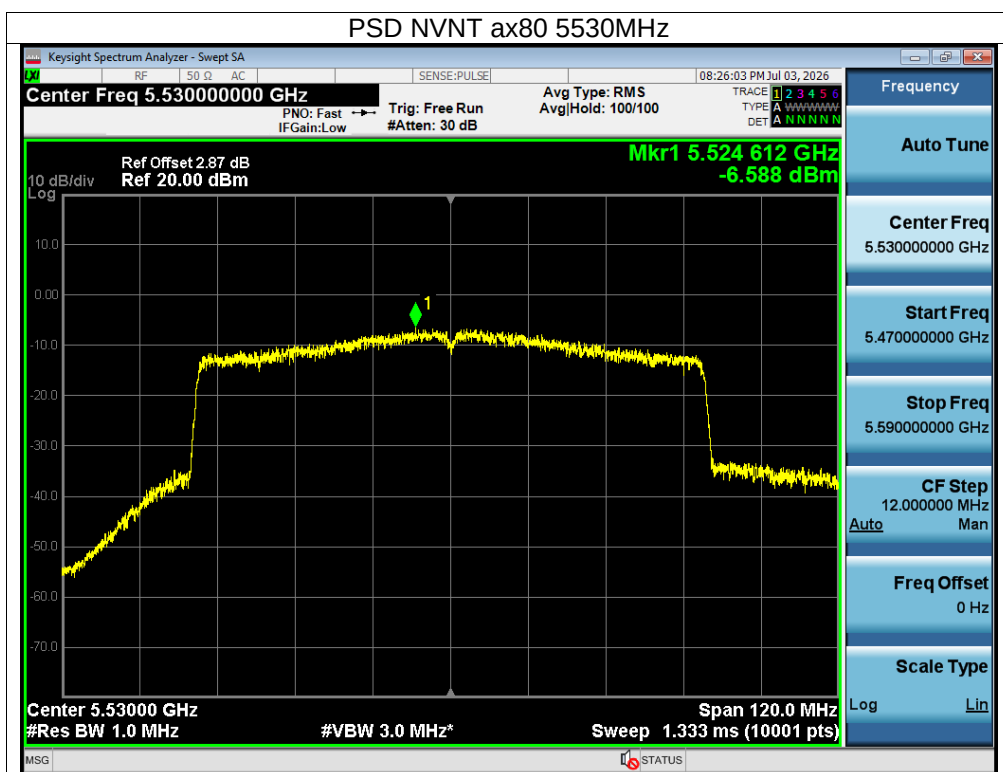


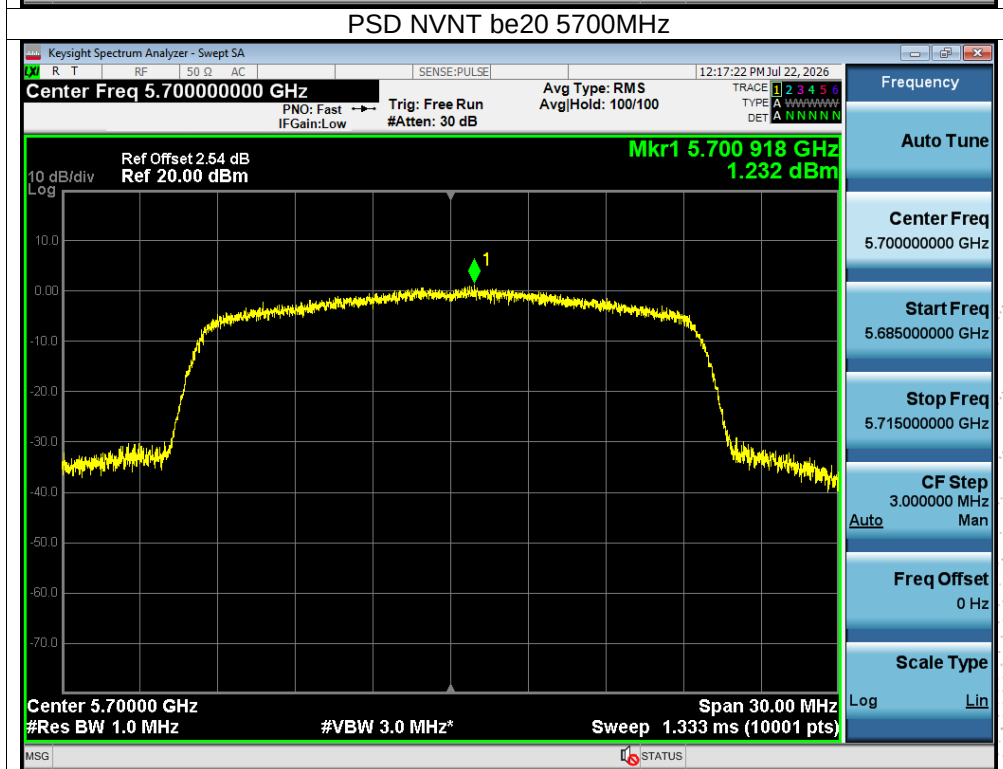
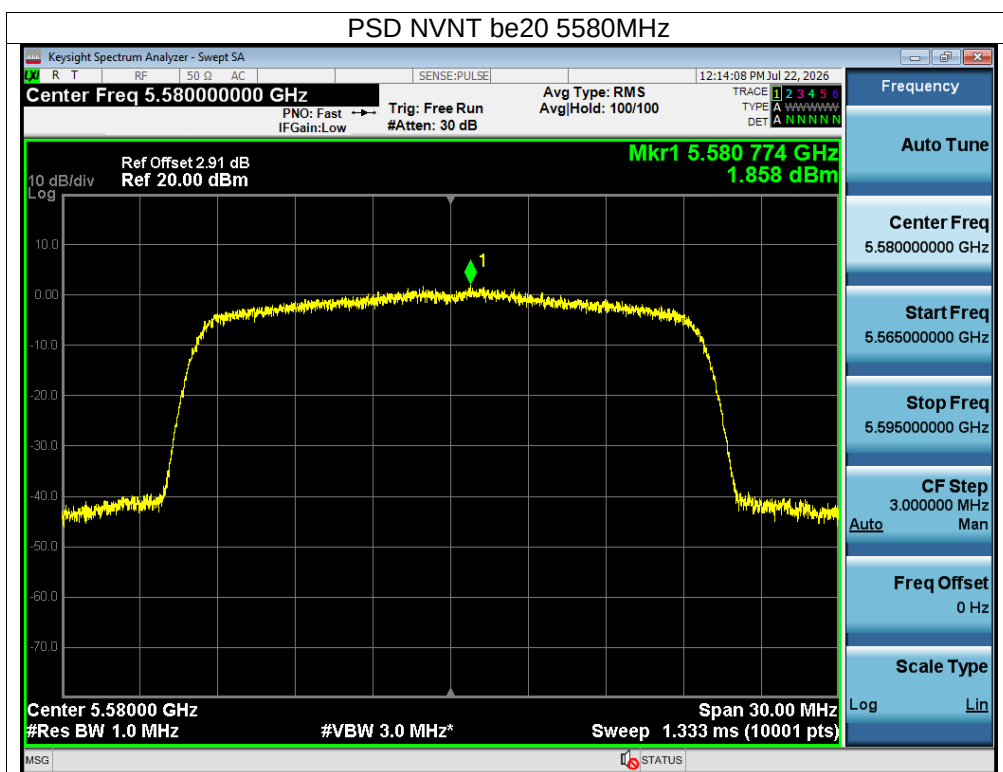


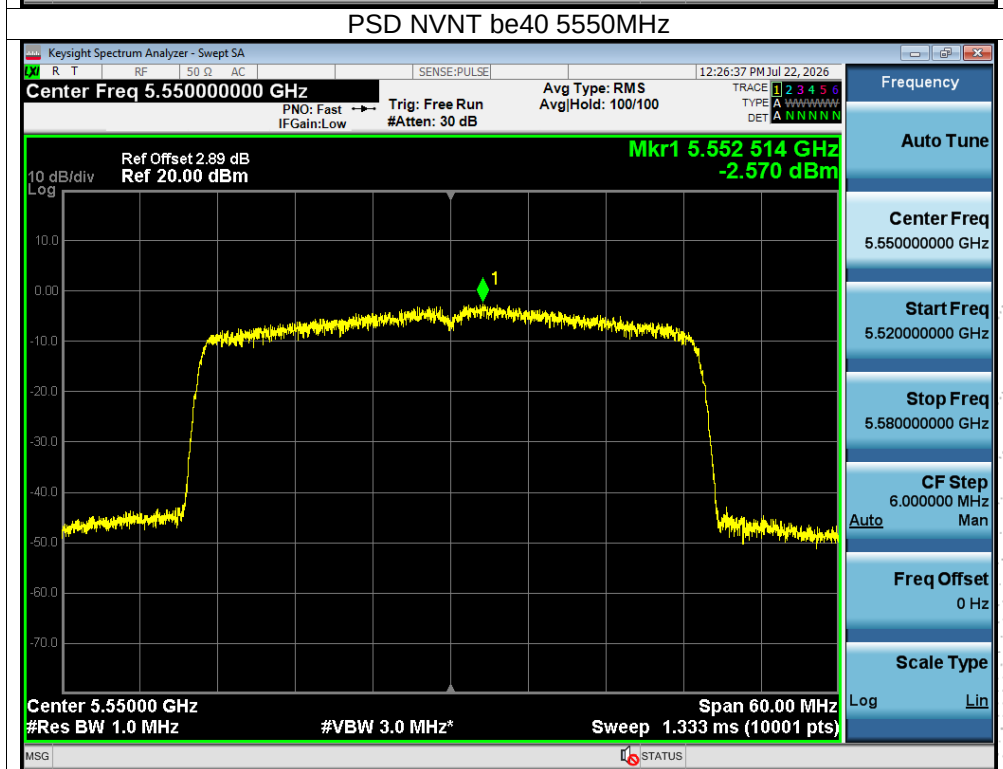
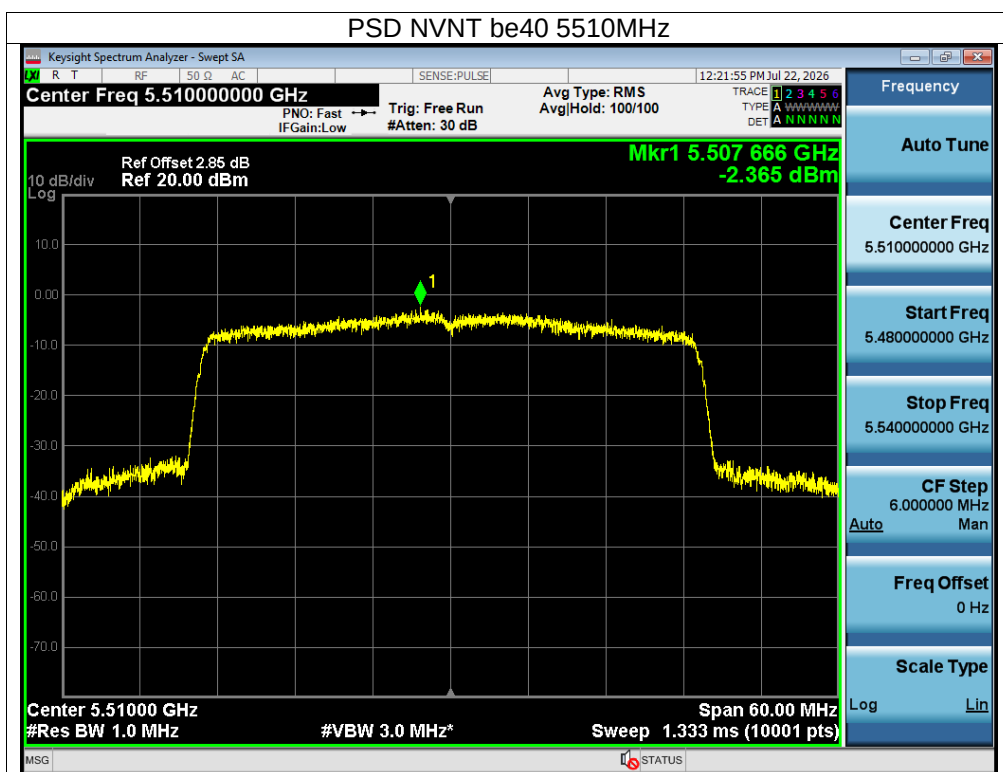


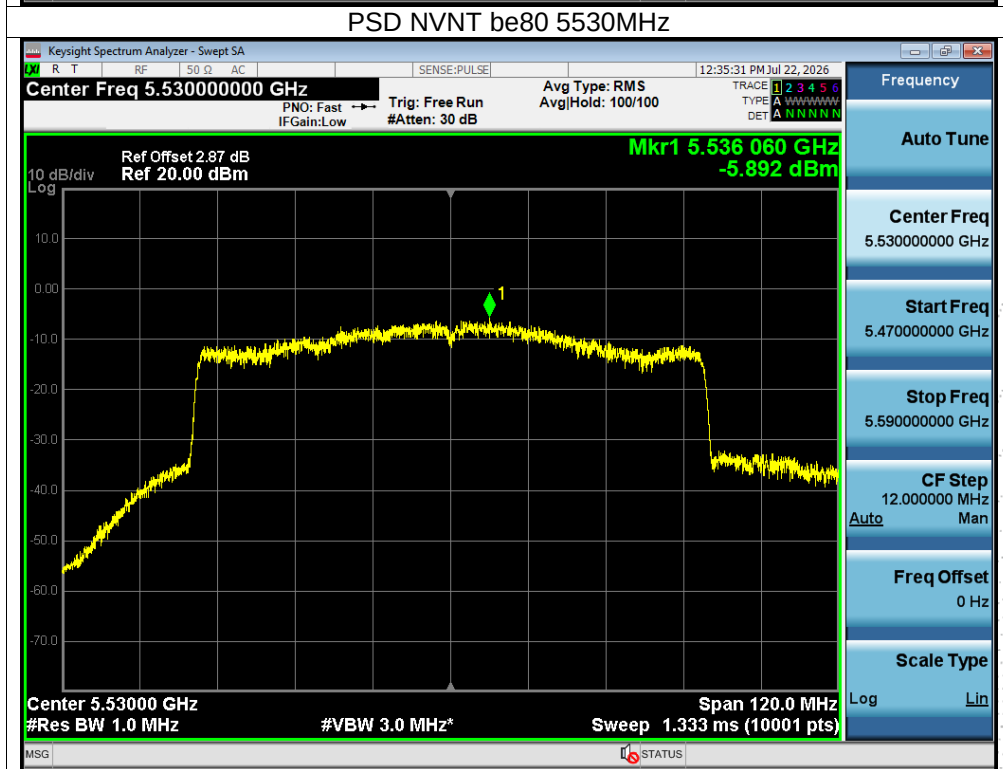
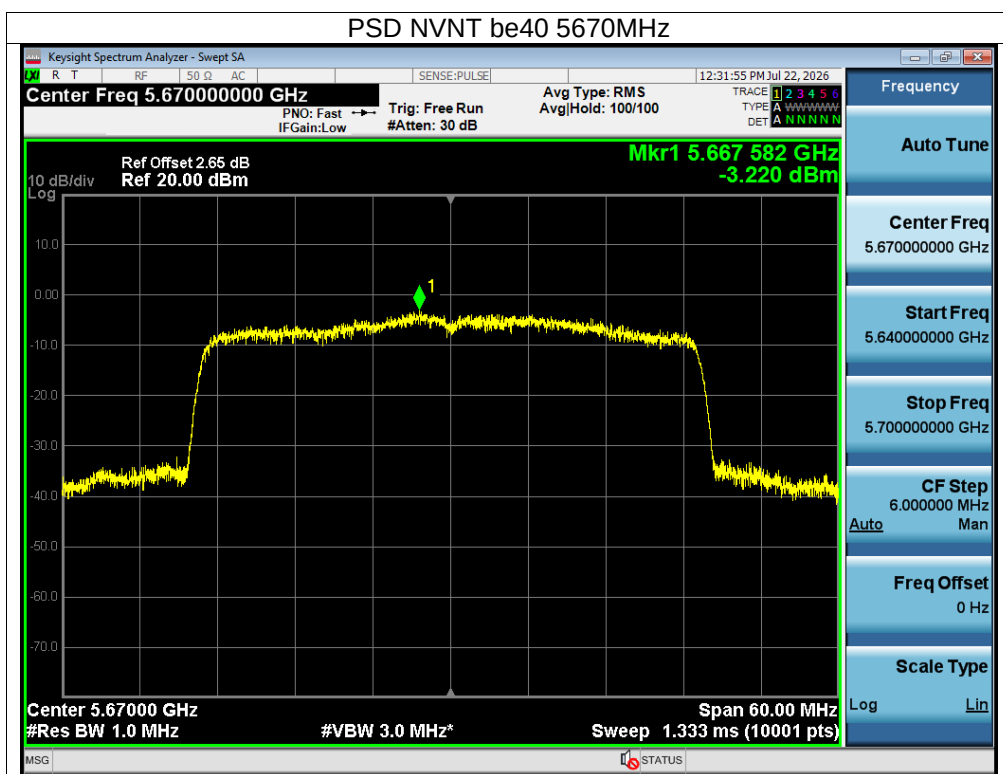












Temperature:	26 °C	Relative Humidity:	54%
Pressure:	101KPa	Test Voltage:	AC 120V/60Hz
Test Mode:	(5745-5825MHz)		

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	1.08	-0.17	0.994	-0.256	/	30	Pass
NVNT	a	5785	0.64	-0.5	0.554	-0.586	/	30	Pass
NVNT	a	5825	0.13	-0.43	0.044	-0.516	/	30	Pass
NVNT	n20	5745	-0.26	-1.4	-0.346	-1.486	2.84	30	Pass
NVNT	n20	5785	-0.56	-1.7	-0.646	-1.786	2.70	30	Pass
NVNT	n20	5825	-1.14	-1.76	-1.226	-1.846	2.44	30	Pass
NVNT	n40	5755	-4.41	-5.63	-4.496	-5.716	1.32	30	Pass
NVNT	n40	5795	-4.94	-5.73	-5.026	-5.816	1.19	30	Pass
NVNT	ac20	5745	0.49	-1.06	0.404	-1.146	3.22	30	Pass
NVNT	ac20	5785	-0.59	-1.55	-0.676	-1.636	2.69	30	Pass
NVNT	ac20	5825	-1.27	-1.69	-1.356	-1.776	2.39	30	Pass
NVNT	ac40	5755	-3.67	-3.41	-3.756	-3.496	1.53	30	Pass
NVNT	ac40	5795	-5.44	-6.05	-5.526	-6.136	1.07	30	Pass
NVNT	ac80	5775	-10.3	-10.64	-10.386	-10.726	0.38	30	Pass
NVNT	ax20	5745	-0.12	-1.16	-0.206	-1.246	2.91	30	Pass
NVNT	ax20	5785	-0.53	-1.62	-0.616	-1.706	2.71	30	Pass
NVNT	ax20	5825	-1.33	-1.81	-1.416	-1.896	2.36	30	Pass
NVNT	ax40	5755	-4.89	-6.32	-4.976	-6.406	1.20	30	Pass
NVNT	ax40	5795	-5.43	-6.39	-5.516	-6.476	1.07	30	Pass
NVNT	ax80	5775	-9.6	-10.78	-9.686	-10.866	0.44	30	Pass
NVNT	be20	5745	-1.71	-2.37	-1.796	-2.456	2.20	30	Pass
NVNT	be20	5785	-1.96	-1.82	-2.046	-1.906	2.11	30	Pass
NVNT	be20	5825	-3	-3.7	-3.086	-3.786	1.74	30	Pass
NVNT	be40	5755	-6.53	-7.34	-6.616	-7.426	0.86	30	Pass
NVNT	be40	5795	-5.27	-7.48	-5.356	-7.566	1.11	30	Pass
NVNT	be80	5775	-9.24	-10.86	-9.326	-10.946	0.48	30	Pass

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

The test results have been incorporated into Factor.

Note:

Antenna A gain: 1.95 dBi, Antenna B gain: 1.95 dBi, Directional gain=[GainANT + 10 log(NANT/NSS) dBi]
=4.96 dBi<6dBi
Limit=30 dBi

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

