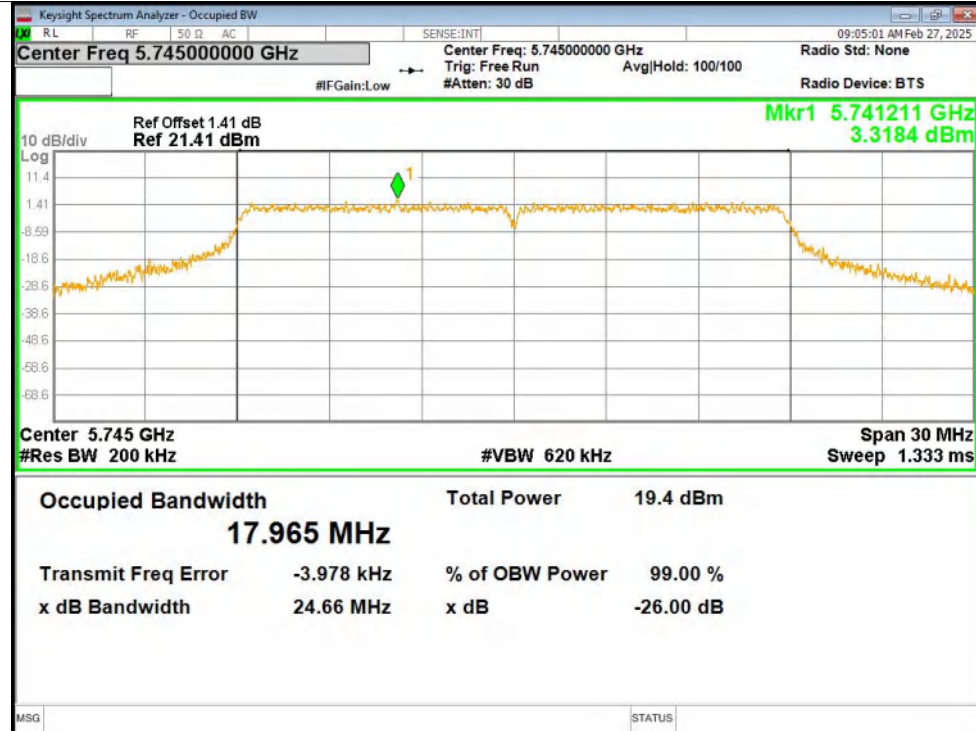
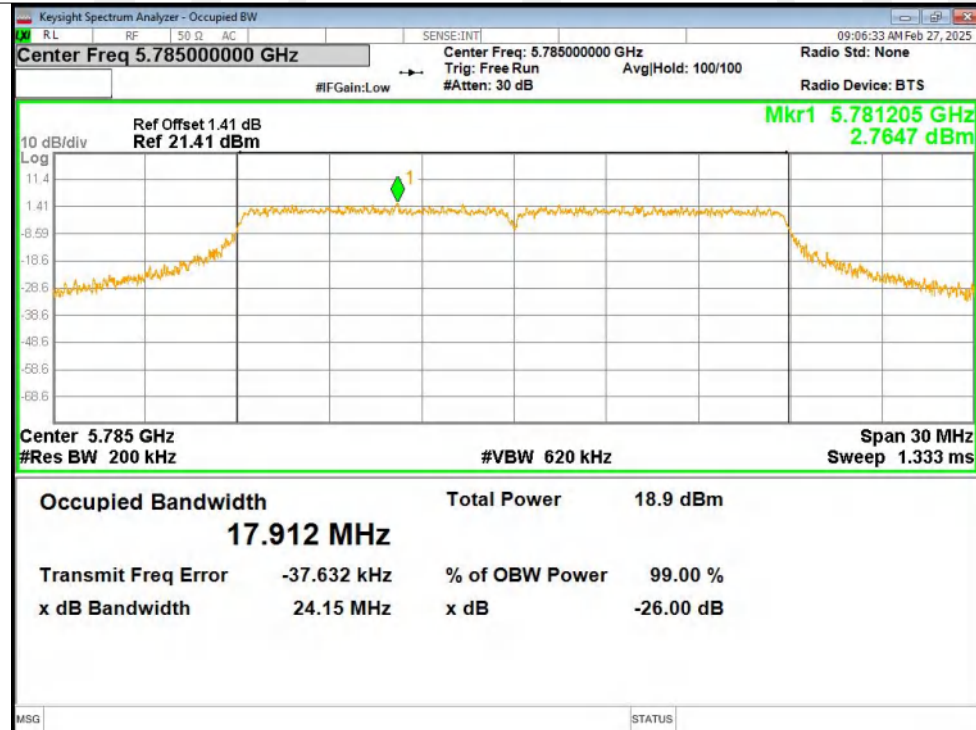


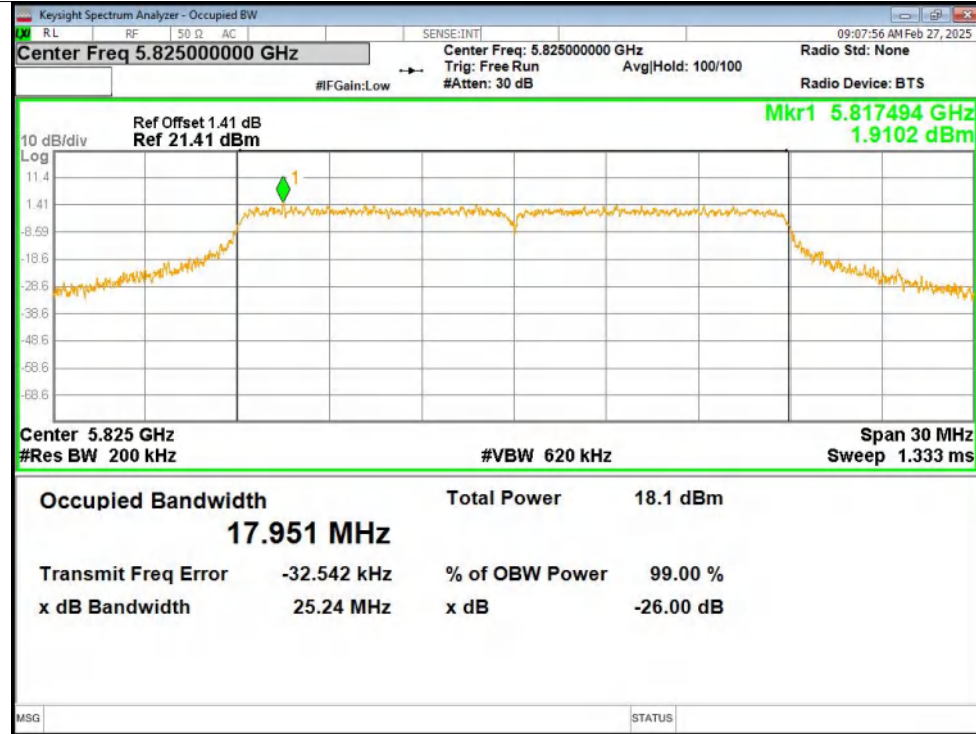
OBW NVNT ac20 5745MHz Ant1



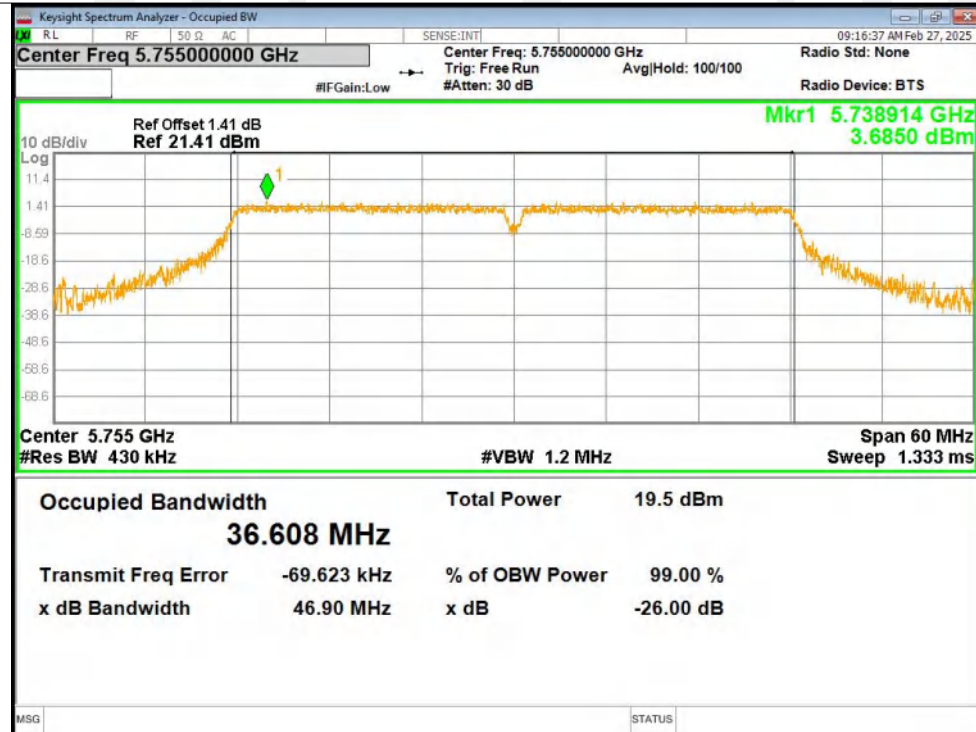
OBW NVNT ac20 5785MHz Ant1



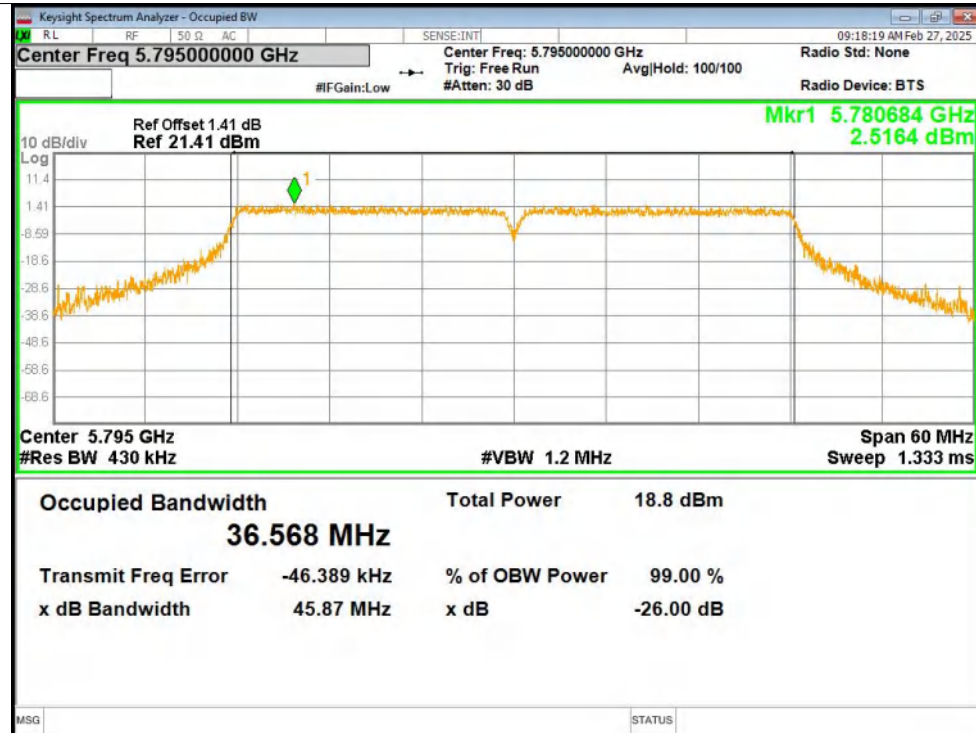
OBW NVNT ac20 5825MHz Ant1



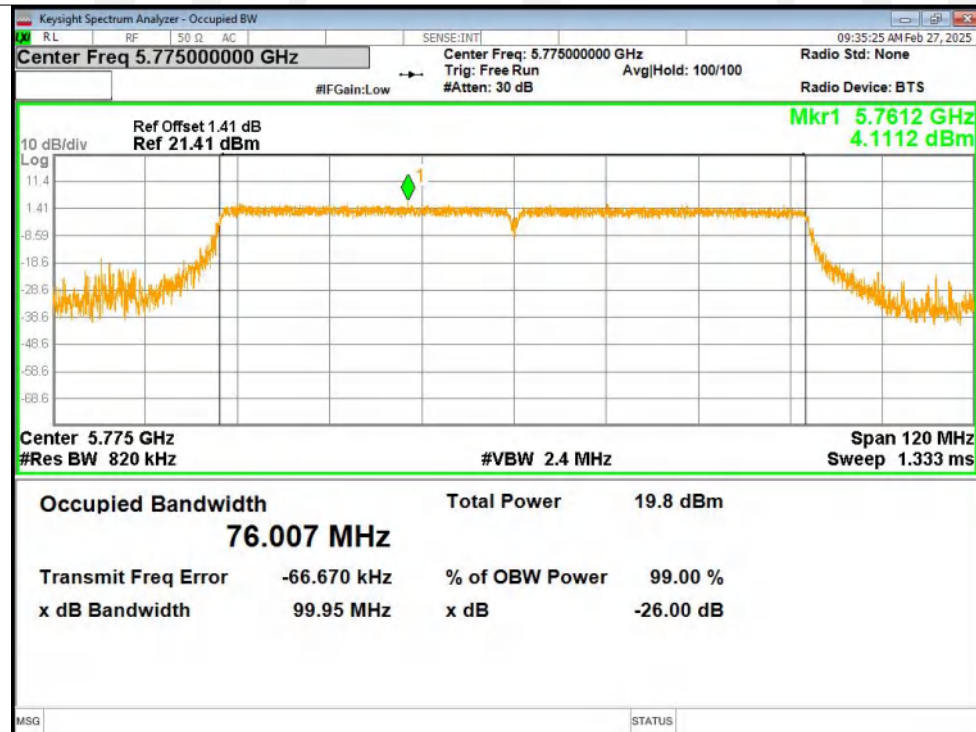
OBW NVNT ac40 5755MHz Ant1



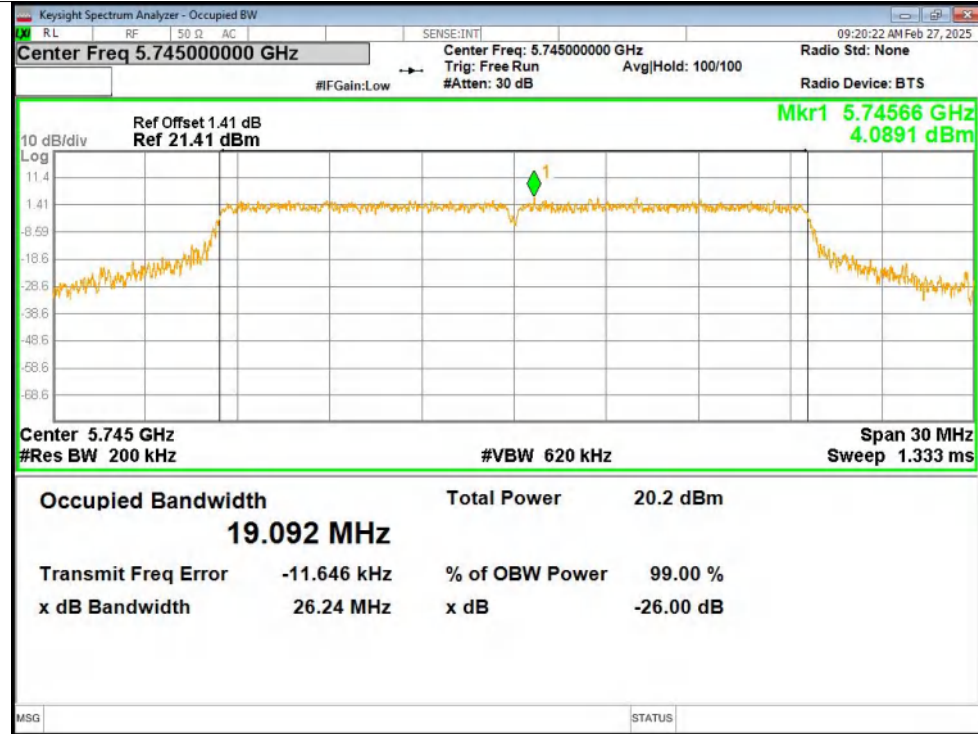
OBW NVNT ac40 5795MHz Ant1



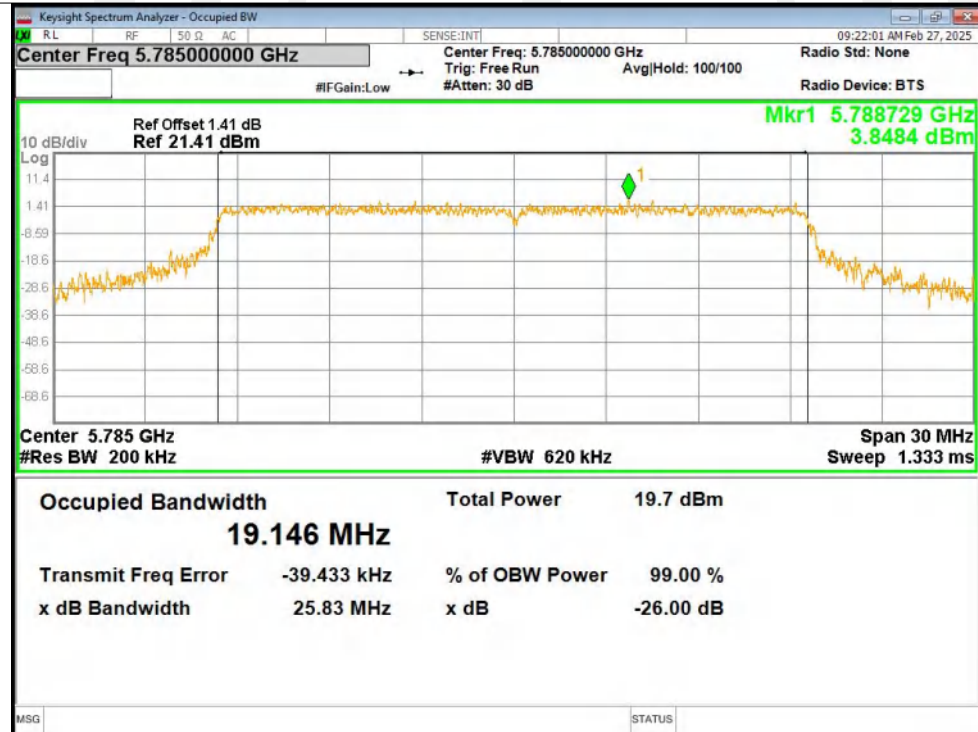
OBW NVNT ac80 5775MHz Ant1



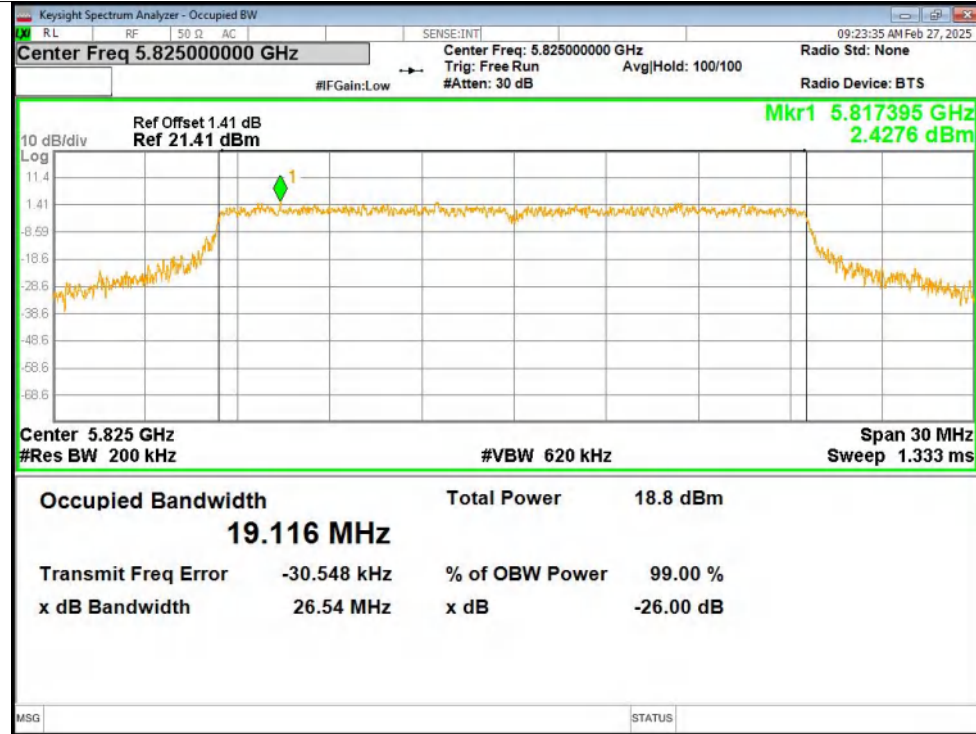
OBW NVNT ax20 5745MHz Ant1



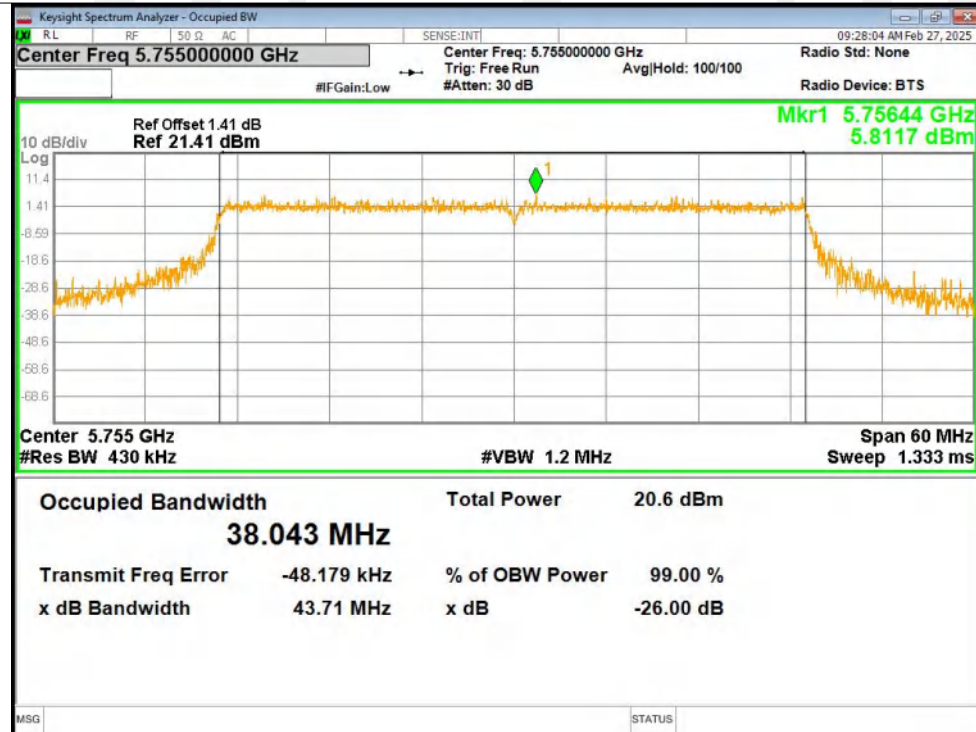
OBW NVNT ax20 5785MHz Ant1



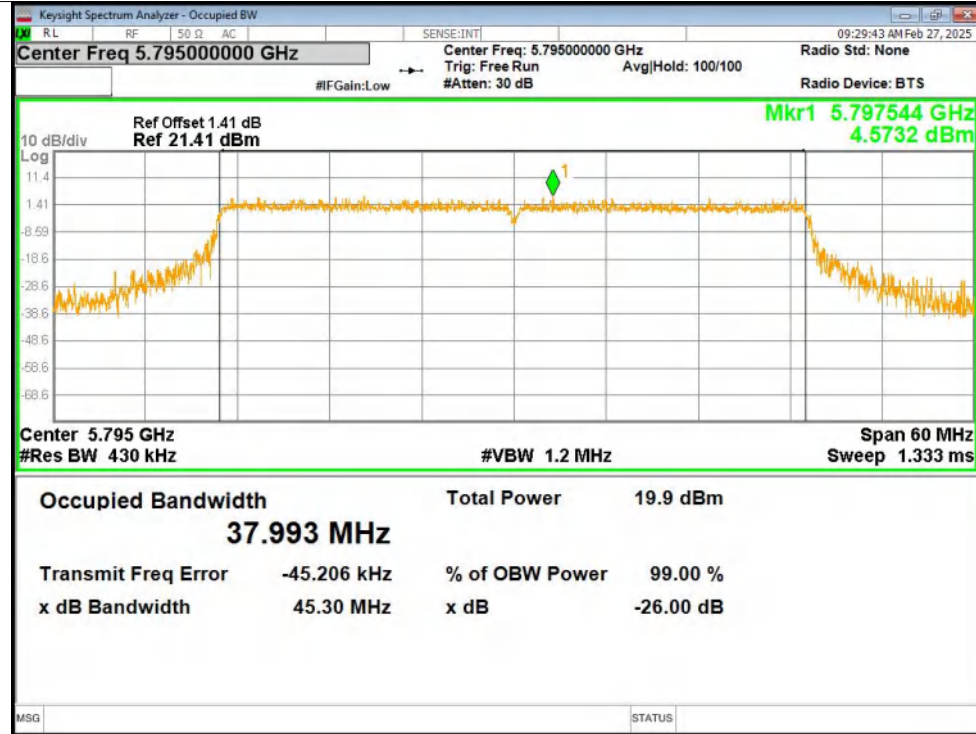
OBW NVNT ax20 5825MHz Ant1



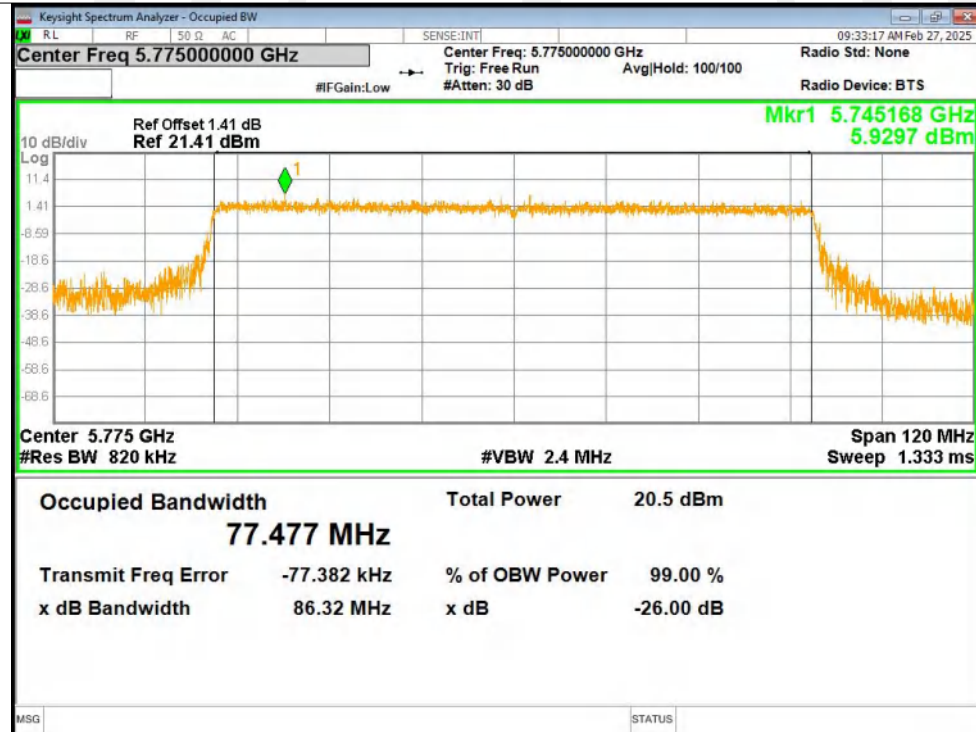
OBW NVNT ax40 5755MHz Ant1



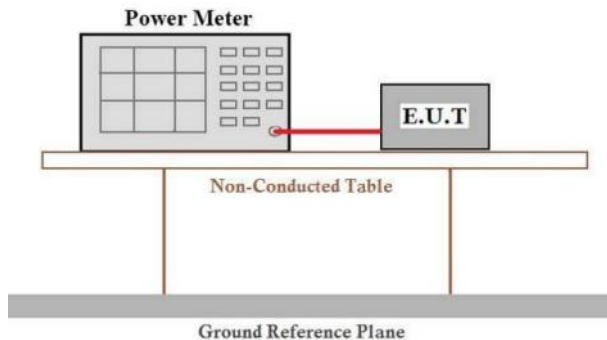
OBW NVNT ax40 5795MHz Ant1



OBW NVNT ax80 5775MHz Ant1



4.4 Maximum Conducted Output Power

Test Requirement:	FCC Part15 E Section 15.407, RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	For the band 5.15-5.25GHz, 5.25-5.35GHz, 5.47-5.725GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 250mW. For the band 5.725-5.85GHz, the maximum conducted output power over the frequency bands of operation shall not exceed 1W. IC: For the 5.15–5.25 GHz band, For other devices, the maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. For the 5.25–5.35 GHz band, Other than devices installed in vehicles, the maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. For the 5.47–5.6 GHz and 5.65–5.725 GHz band, the maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. For Straddle Channel, According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, If the power and PSD of the devices are uniform and comply with the lower limits specified for the U-NII-2 bands, a single measurement over the entire emission bandwidth can be performed to show compliance. If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
Test setup:	 The diagram illustrates the test setup. A 'Power Meter' is connected via a red cable to an 'E.U.T.' (Equipment Under Test). Both are placed on a 'Non-Conducted Table'. The table is supported by two vertical legs and sits on a 'Ground Reference Plane'.
Test procedure:	Measurement using an RF average power meter (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the

	conditions listed below are satisfied a) The EUT is configured to transmit continuously or to transmit with a constant duty cycle. b) At all times when the EUT is transmitting, it must be transmitting at its maximum power control level. c) The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five. (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section B). (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter. (iv) Adjust the measurement in dBm by adding $10 \log(1/x)$ where x is the duty cycle (e.g., $10 \log(1/0.25)$ if the duty cycle is 25 percent).
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

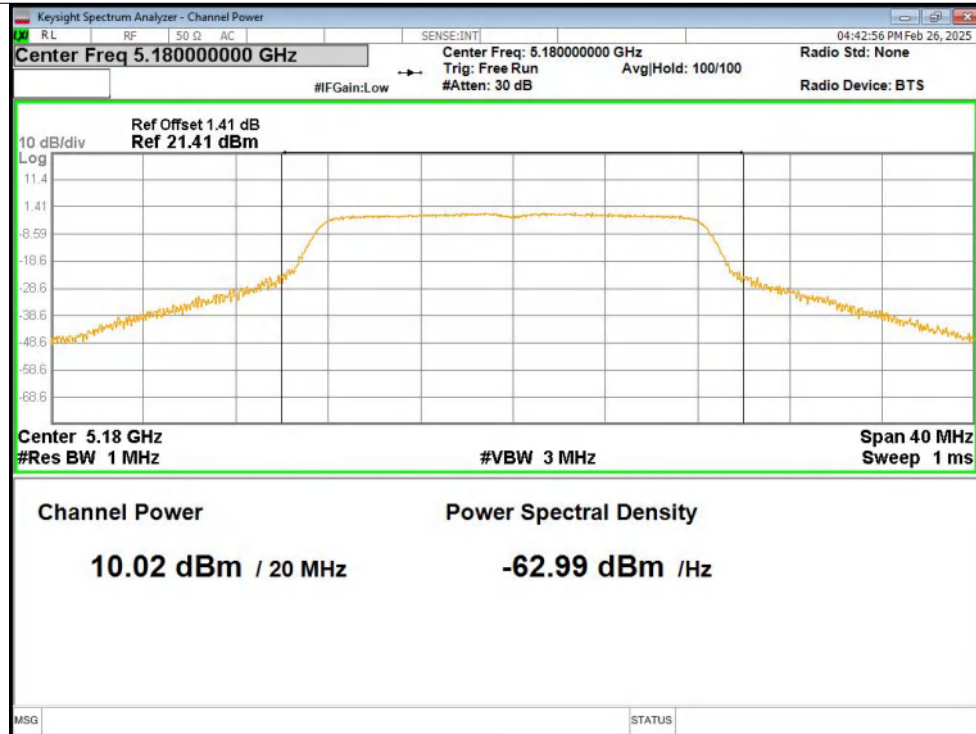
Measurement Data:

5.2GWIFI (5150-5250 MHz)

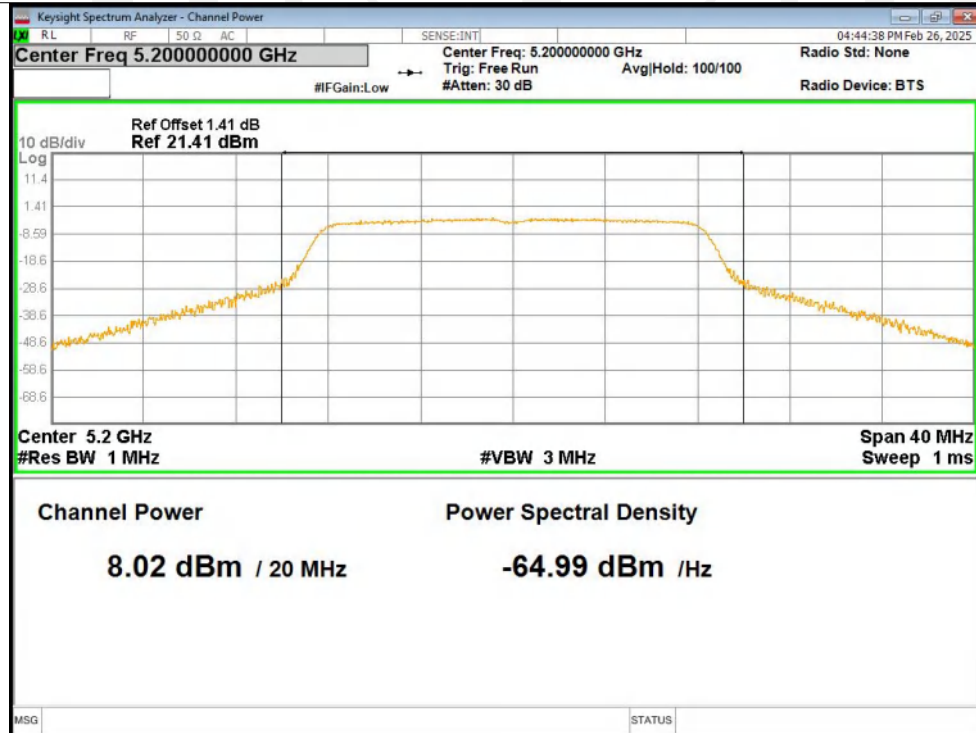
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	10.02	0.83	10.85	24	Pass
NVNT	a	5200	Ant1	8.02	0.47	8.49	24	Pass
NVNT	a	5240	Ant1	10.74	0.76	11.5	24	Pass
NVNT	n20	5180	Ant1	9.19	0.77	9.96	24	Pass
NVNT	n20	5200	Ant1	9.83	0.81	10.64	24	Pass
NVNT	n20	5240	Ant1	10.15	0.81	10.96	24	Pass
NVNT	n40	5190	Ant1	9.94	9.03	18.97	24	Pass
NVNT	n40	5230	Ant1	11.32	1.53	12.85	24	Pass
NVNT	ac20	5180	Ant1	9.59	0.81	10.4	24	Pass
NVNT	ac20	5200	Ant1	9.7	0.46	10.16	24	Pass
NVNT	ac20	5240	Ant1	11.64	0.66	12.3	24	Pass
NVNT	ac40	5190	Ant1	10.32	1.51	11.83	24	Pass
NVNT	ac40	5230	Ant1	10.49	1.51	12	24	Pass
NVNT	ac80	5210	Ant1	10.98	2.78	13.76	24	Pass
NVNT	ax20	5180	Ant1	10.6	1.04	11.64	24	Pass
NVNT	ax20	5200	Ant1	10.52	1.04	11.56	24	Pass
NVNT	ax20	5240	Ant1	11.56	1.04	12.6	24	Pass
NVNT	ax40	5190	Ant1	9.97	1.85	11.82	24	Pass
NVNT	ax40	5230	Ant1	10.56	1.85	12.41	24	Pass
NVNT	ax80	5210	Ant1	10.62	3.15	13.77	24	Pass

Test Graphs

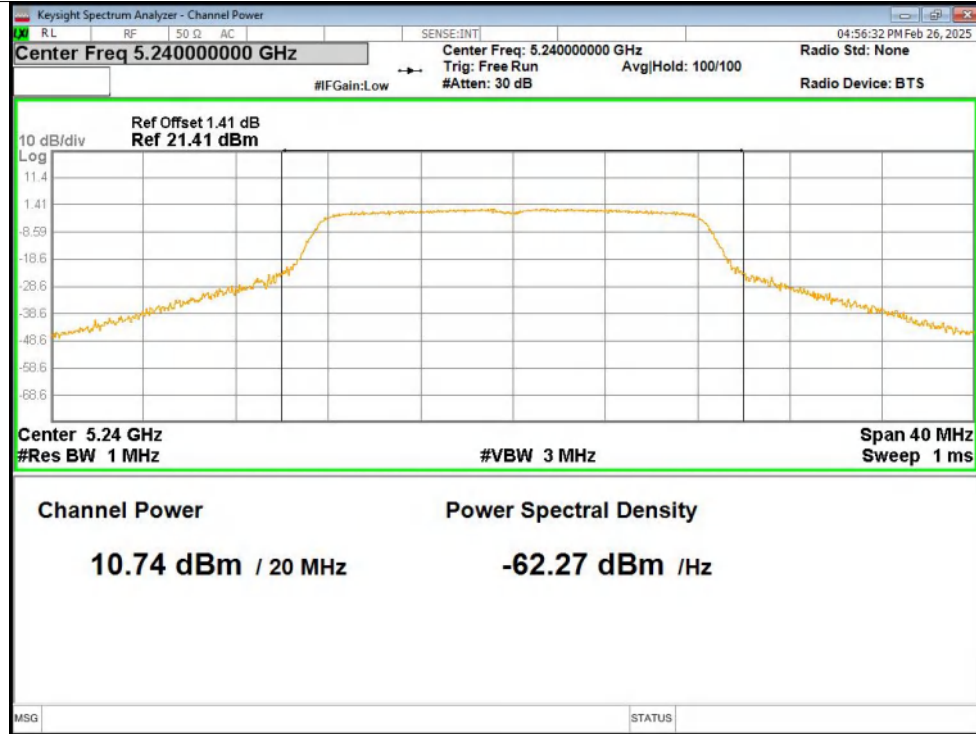
Power NVNT a 5180MHz Ant1



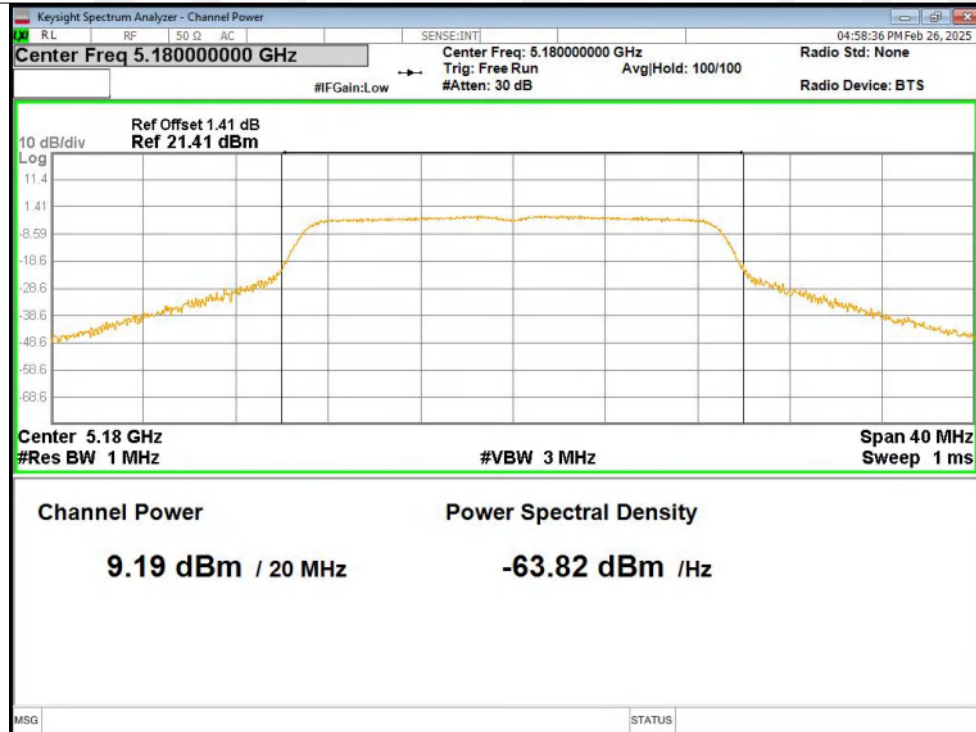
Power NVNT a 5200MHz Ant1



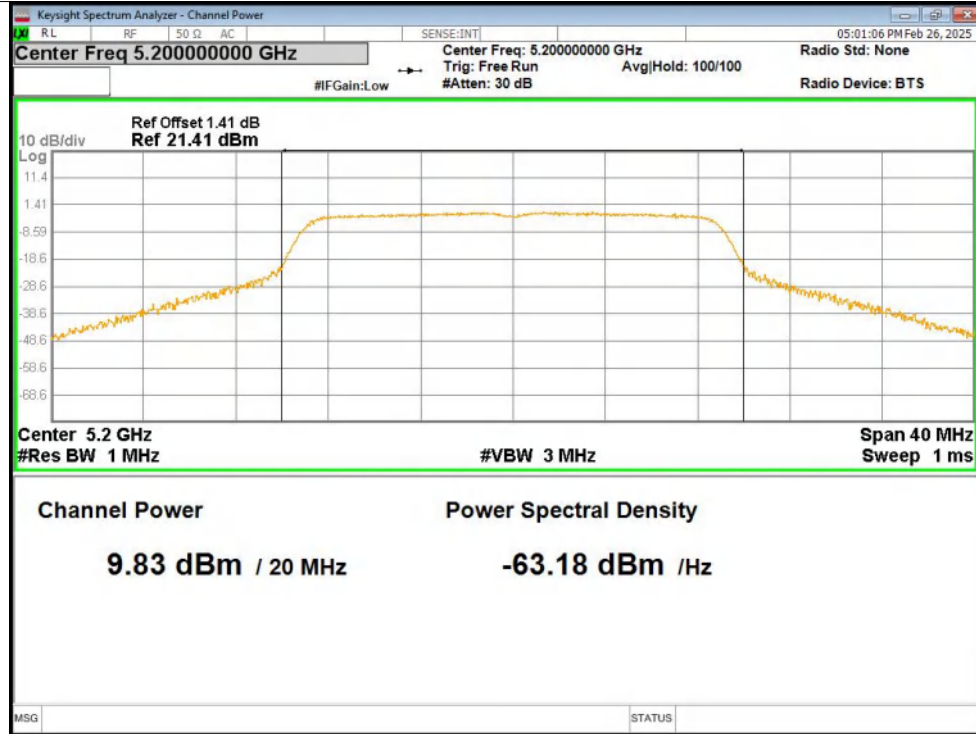
Power NVNT a 5240MHz Ant1



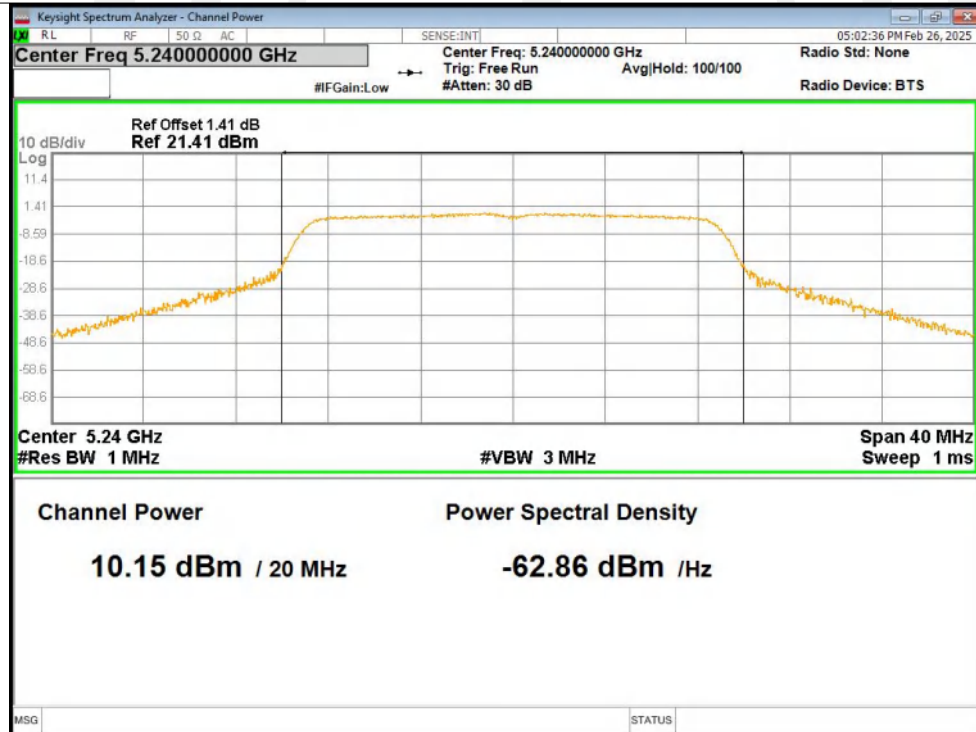
Power NVNT n20 5180MHz Ant1



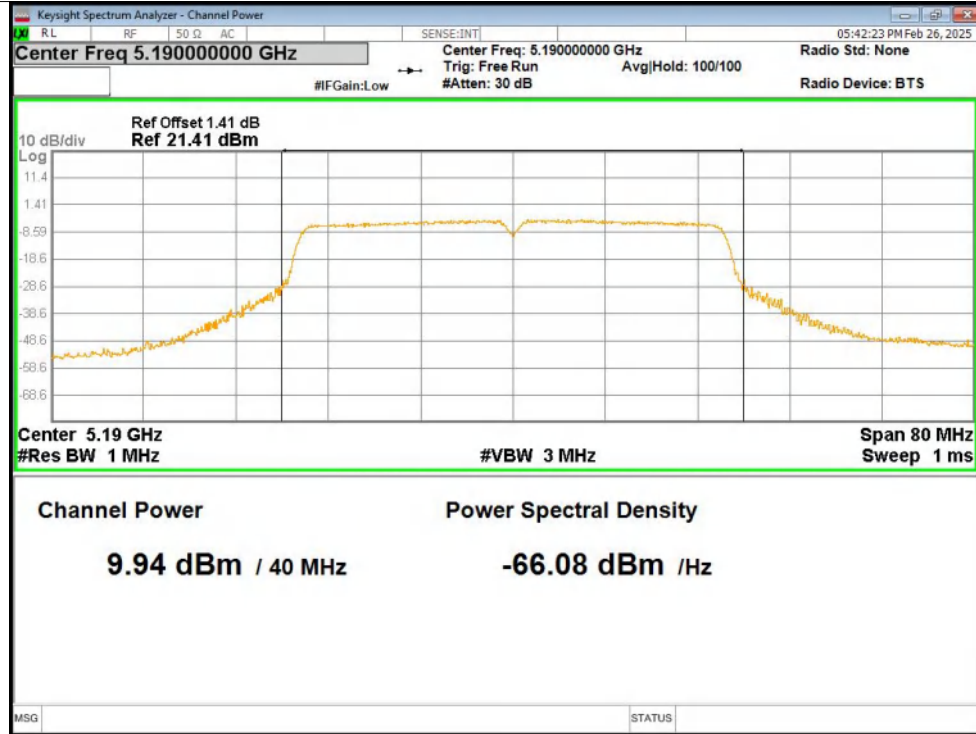
Power NVNT n20 5200MHz Ant1



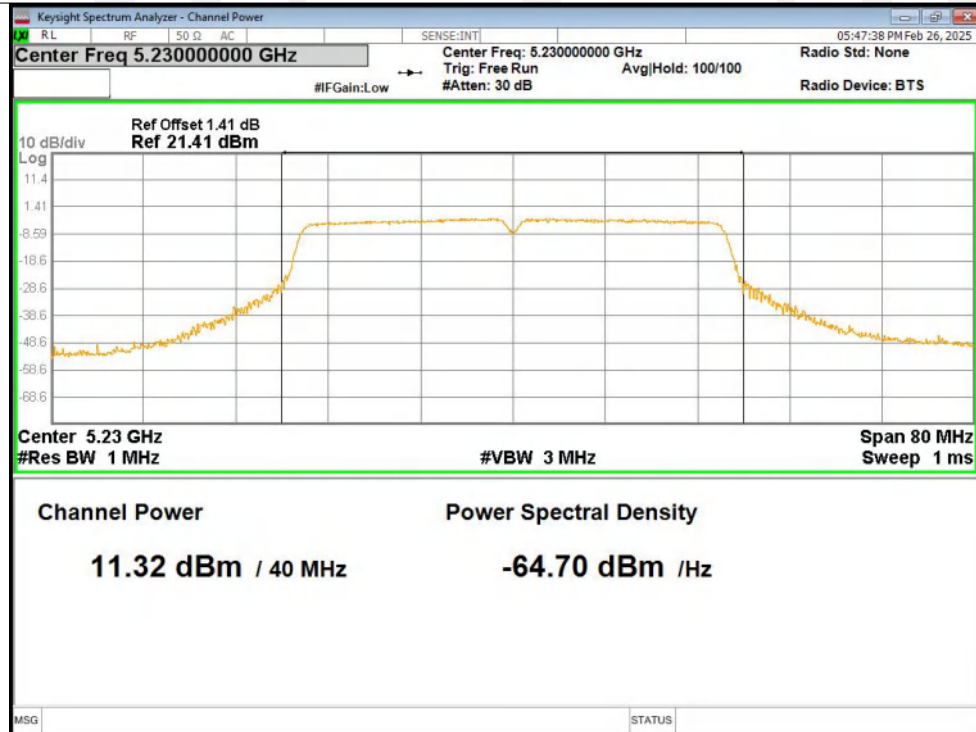
Power NVNT n20 5240MHz Ant1



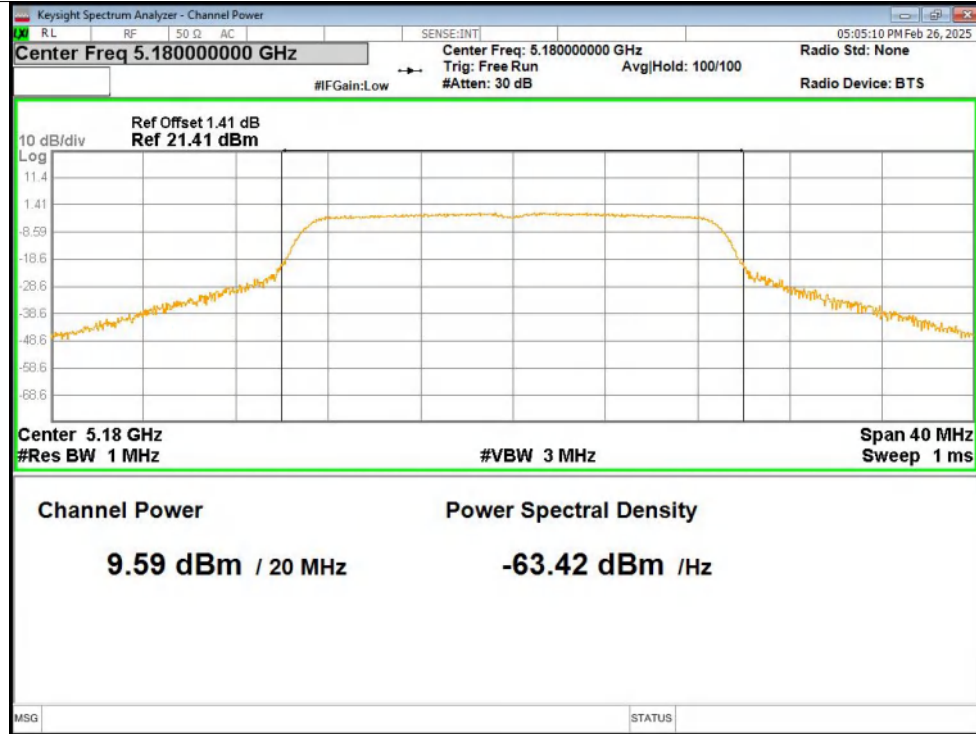
Power NVNT n40 5190MHz Ant1



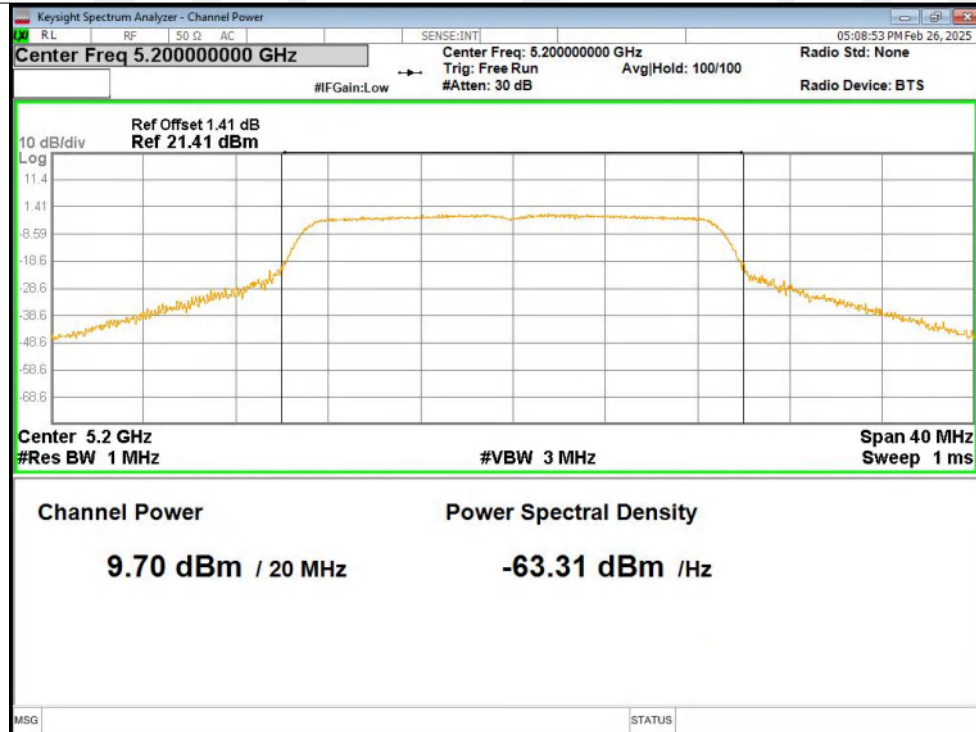
Power NVNT n40 5230MHz Ant1



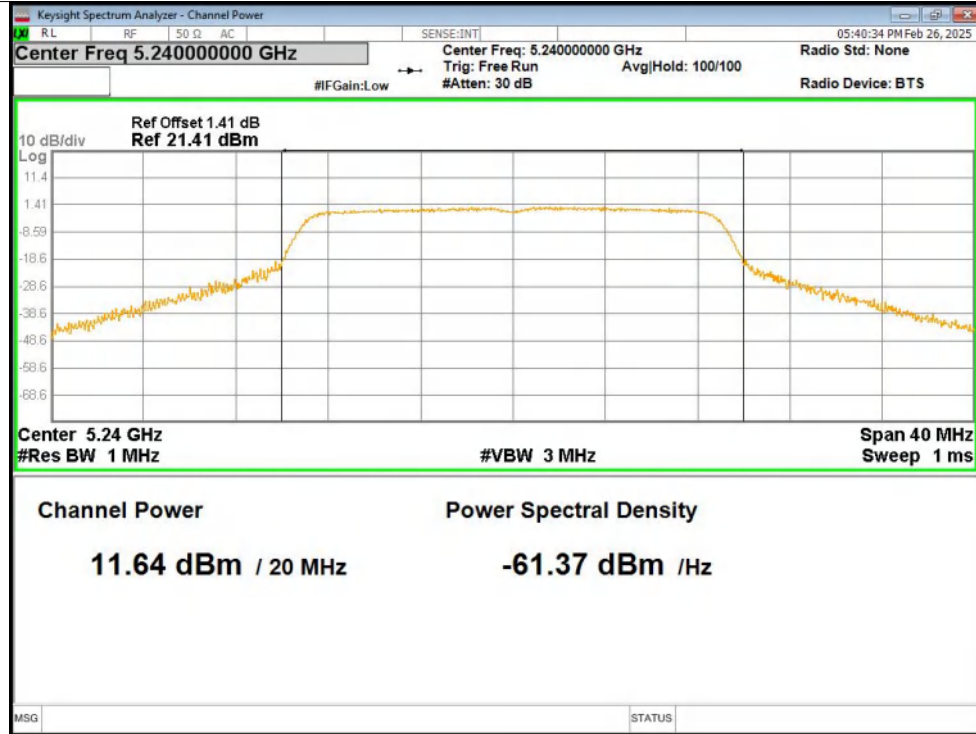
Power NVNT ac20 5180MHz Ant1



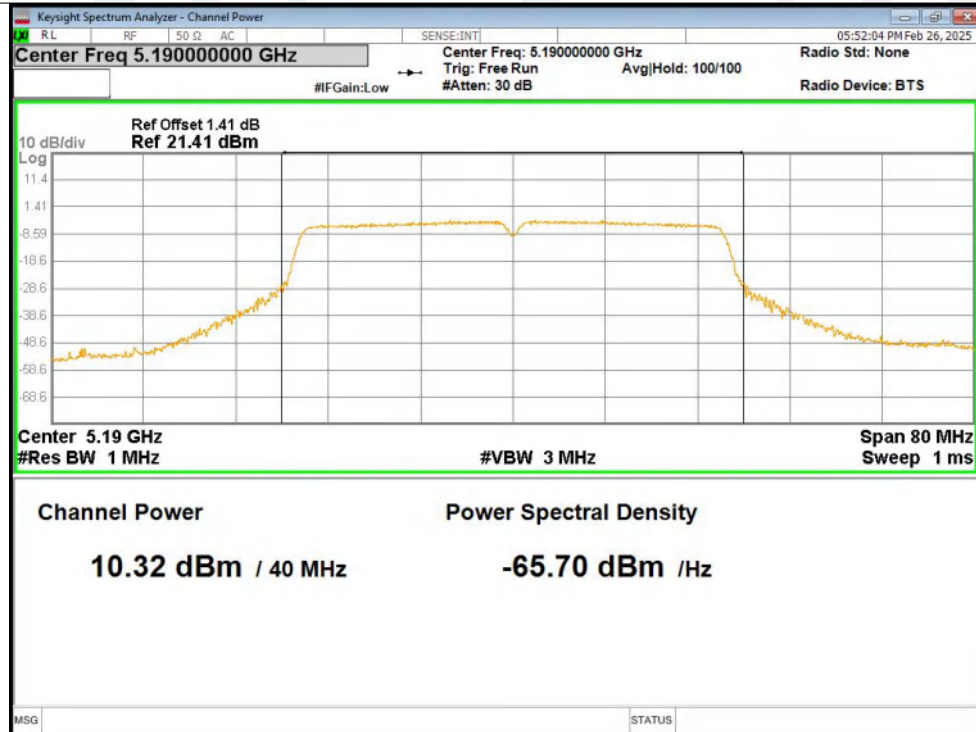
Power NVNT ac20 5200MHz Ant1



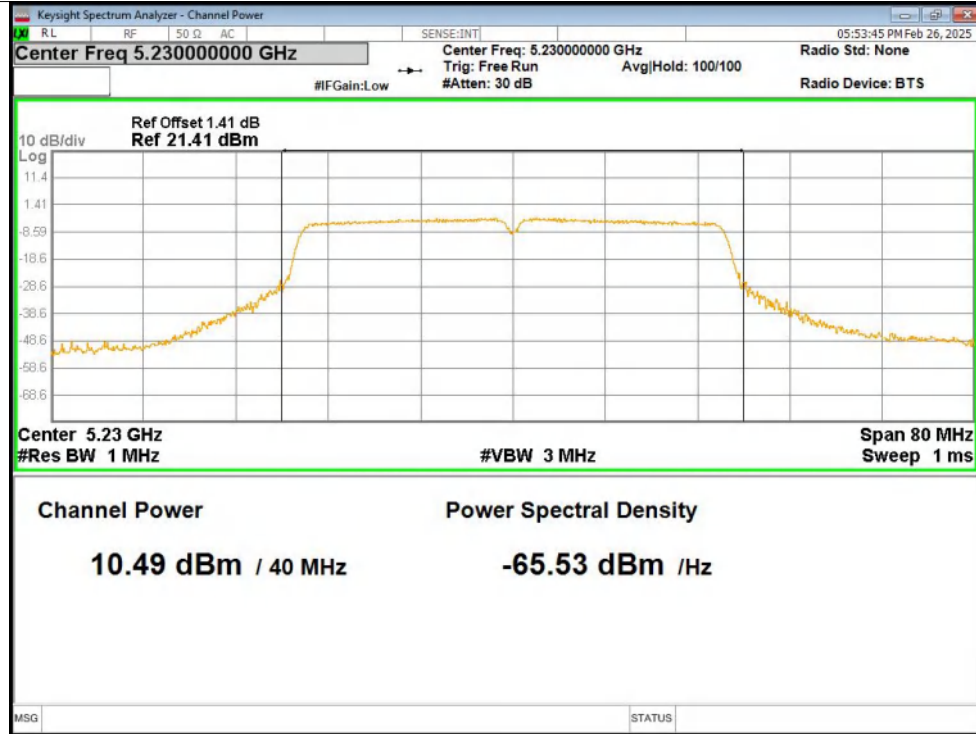
Power NVNT ac20 5240MHz Ant1



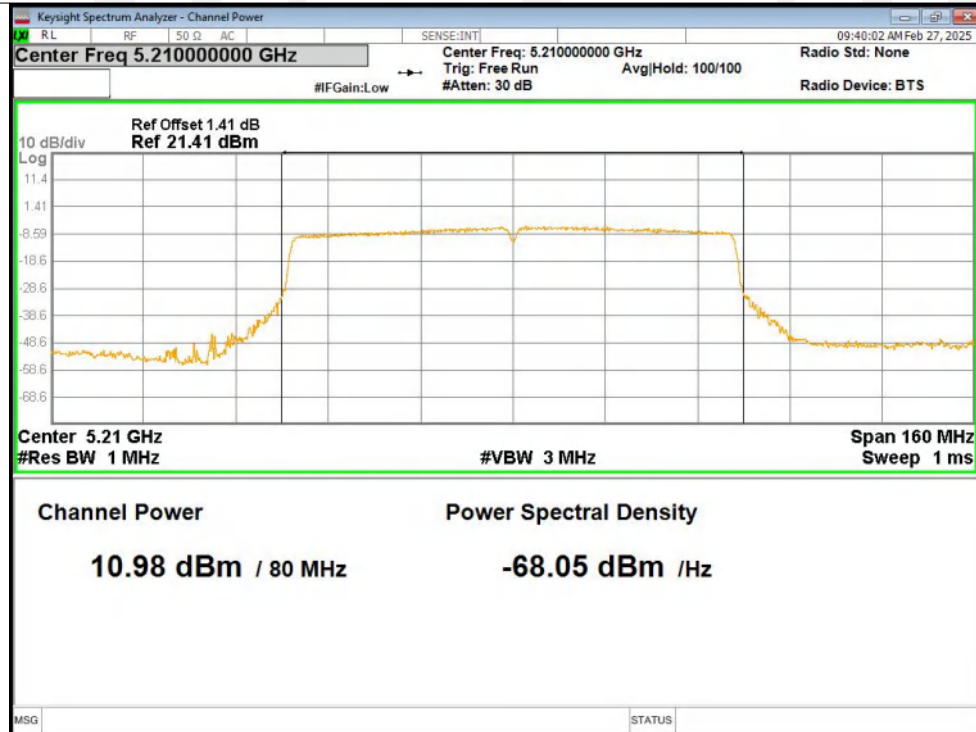
Power NVNT ac40 5190MHz Ant1



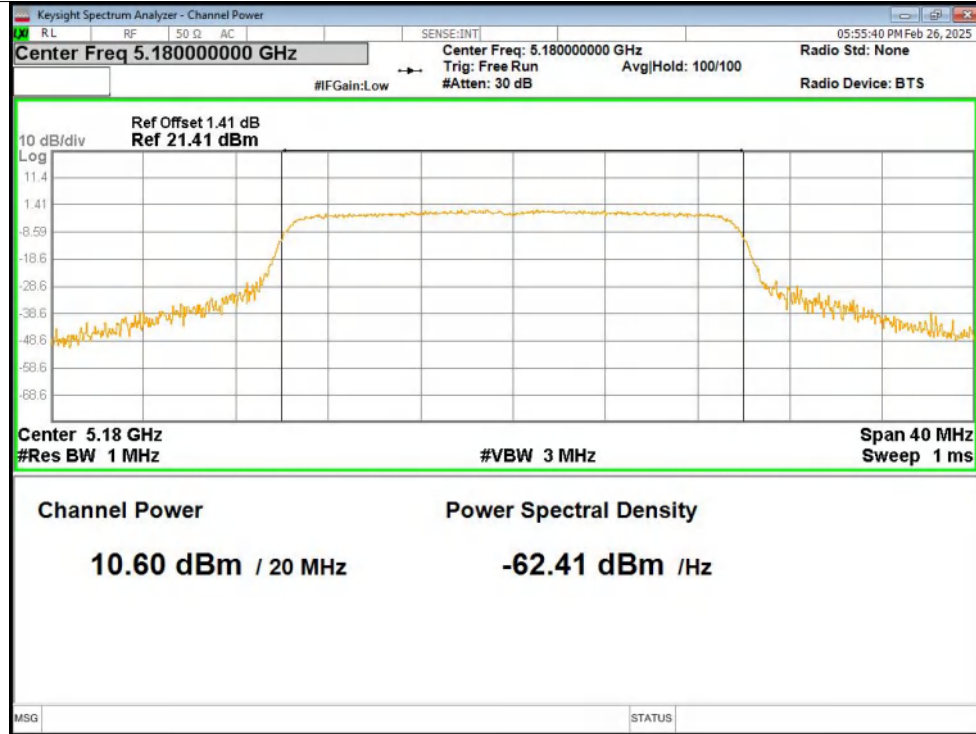
Power NVNT ac40 5230MHz Ant1



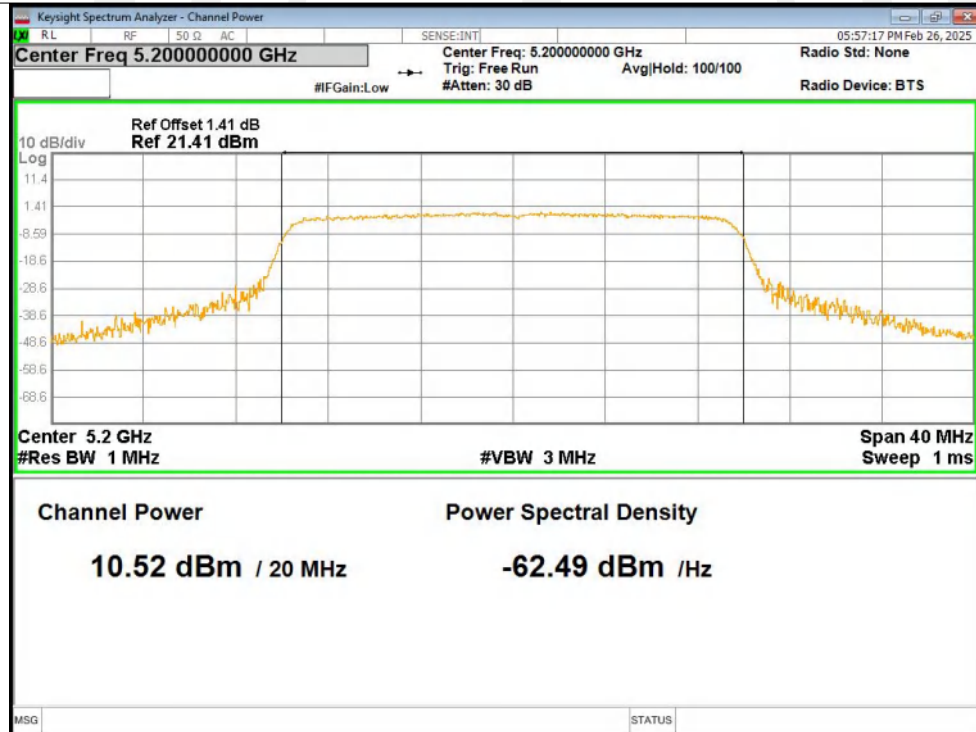
Power NVNT ac80 5210MHz Ant1



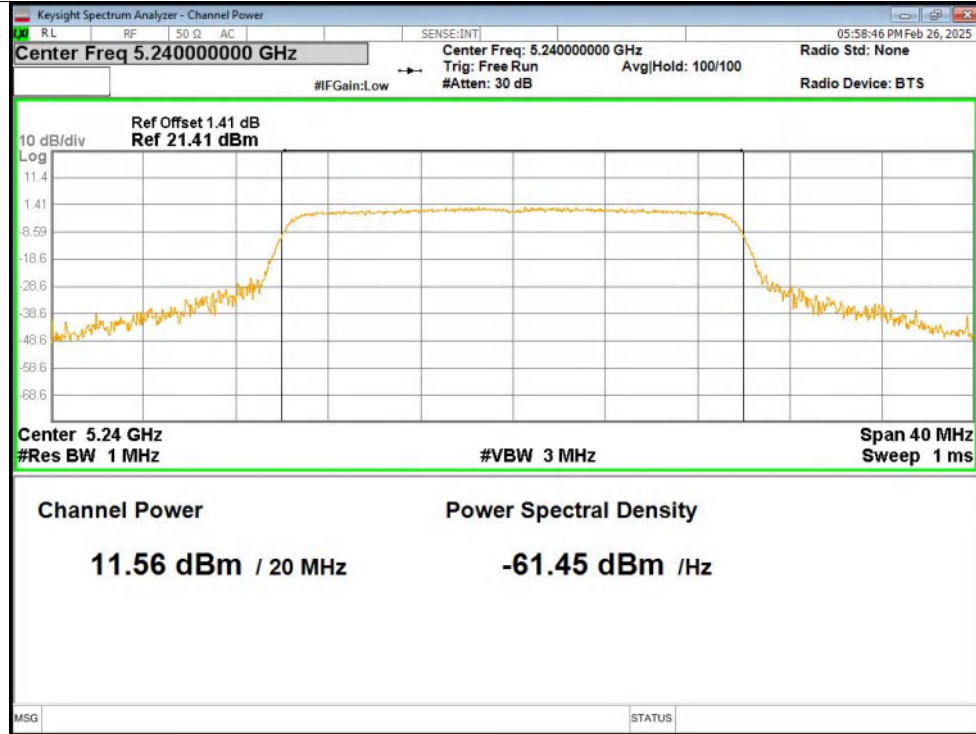
Power NVNT ax20 5180MHz Ant1



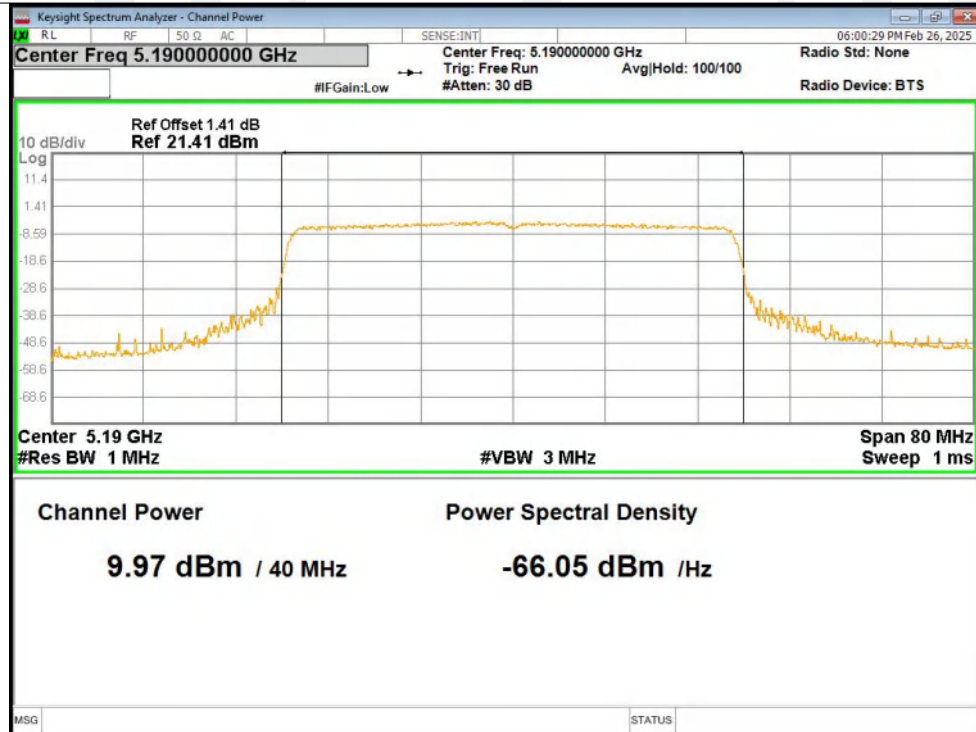
Power NVNT ax20 5200MHz Ant1



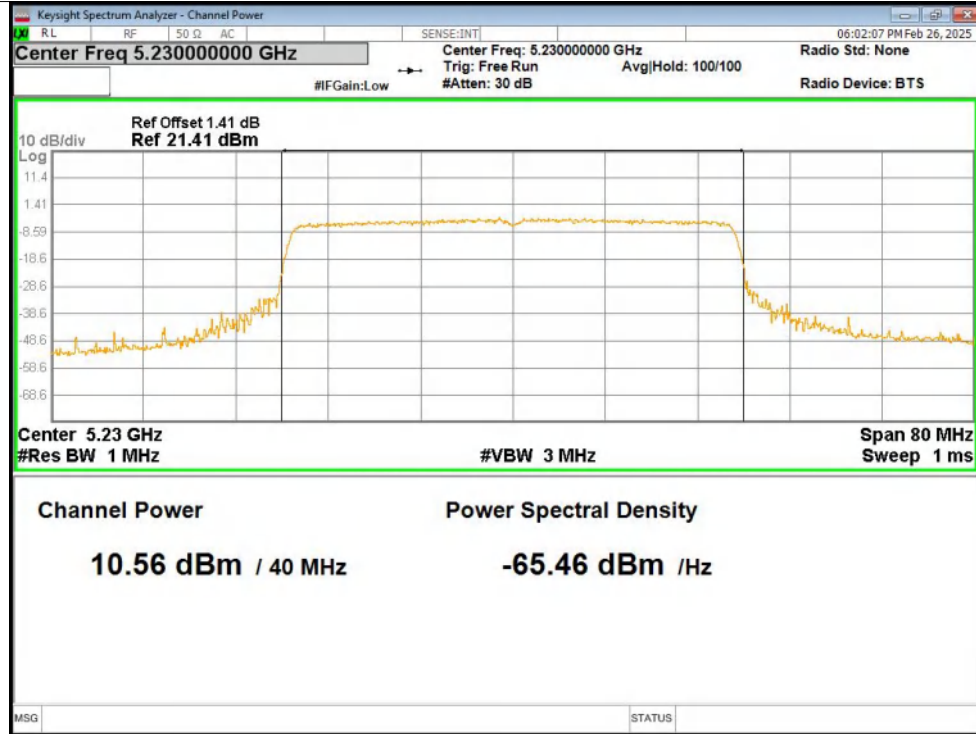
Power NVNT ax20 5240MHz Ant1



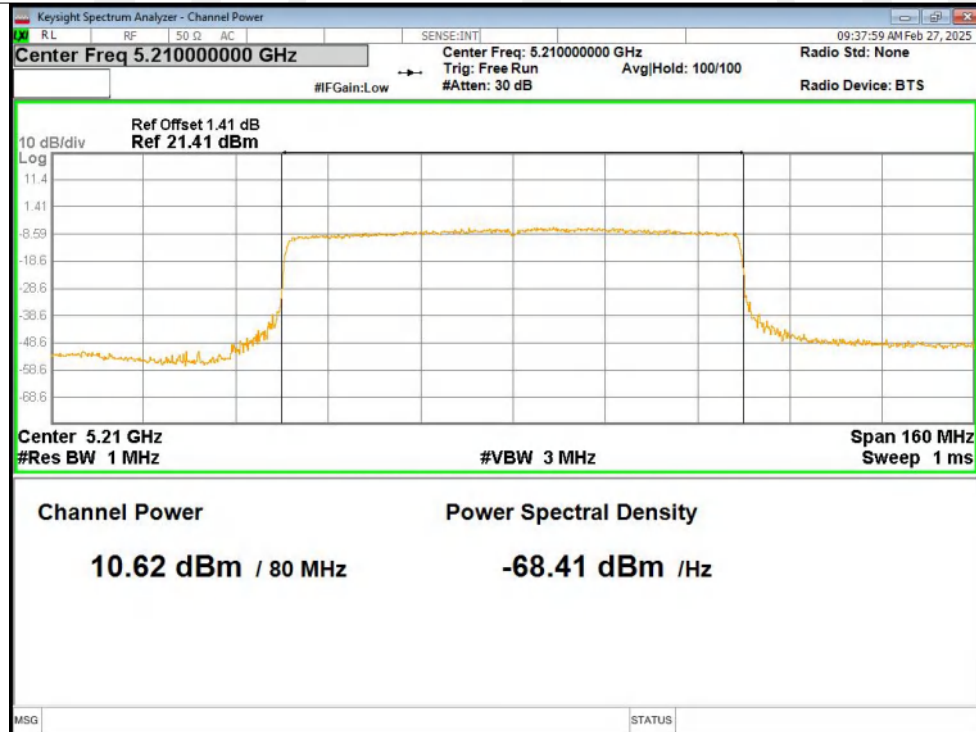
Power NVNT ax40 5190MHz Ant1



Power NVNT ax40 5230MHz Ant1



Power NVNT ax80 5210MHz Ant1

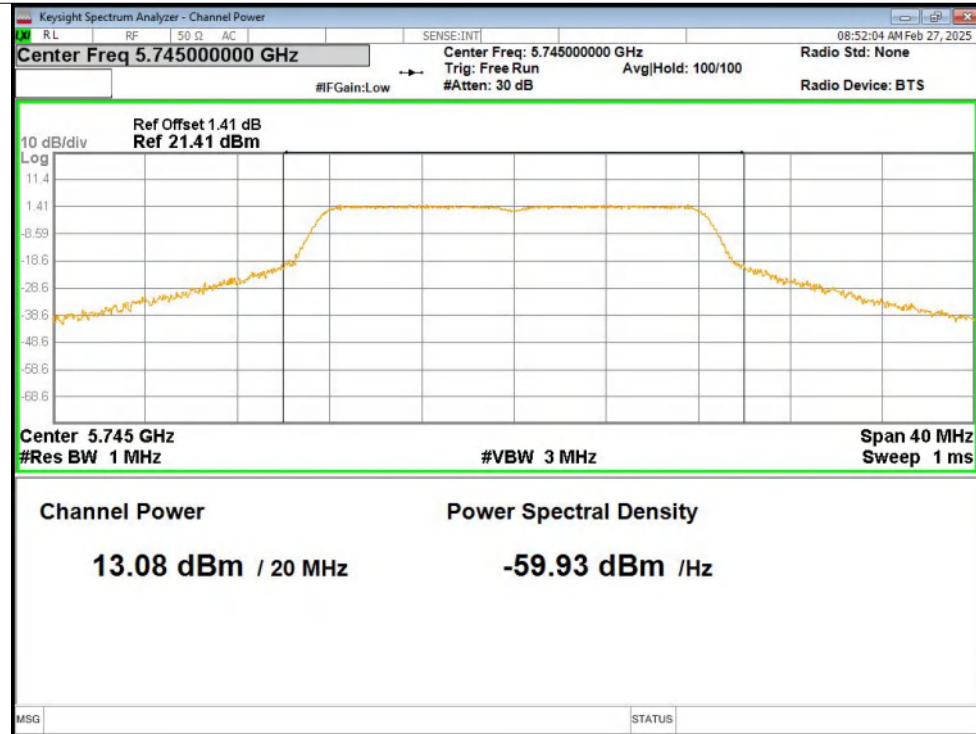


5.8GWIFI (5725MHz-5850 MHz)

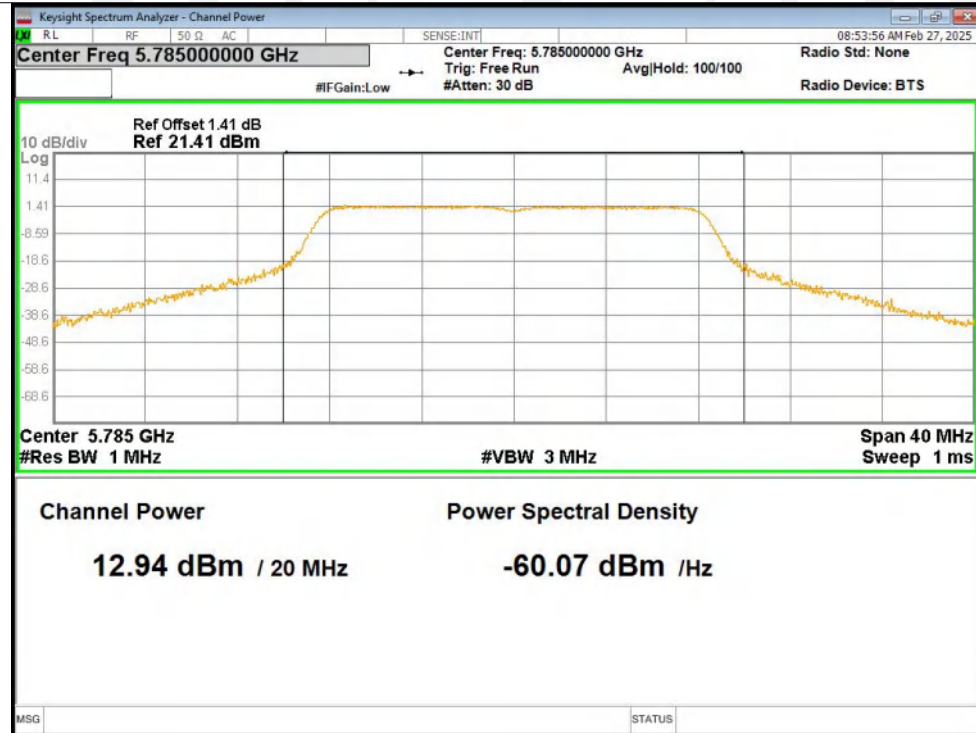
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	13.08	0.75	13.83	30	Pass
NVNT	a	5785	Ant1	12.94	0.75	13.69	30	Pass
NVNT	a	5825	Ant1	12	0.76	12.76	30	Pass
NVNT	n20	5745	Ant1	13.33	0.81	14.14	30	Pass
NVNT	n20	5785	Ant1	12.54	0.81	13.35	30	Pass
NVNT	n20	5825	Ant1	11.95	0.81	12.76	30	Pass
NVNT	n40	5755	Ant1	12.91	1.53	14.44	30	Pass
NVNT	n40	5795	Ant1	12.17	1.53	13.7	30	Pass
NVNT	ac20	5745	Ant1	12.99	0.81	13.8	30	Pass
NVNT	ac20	5785	Ant1	12.88	0.81	13.69	30	Pass
NVNT	ac20	5825	Ant1	11.83	0.81	12.64	30	Pass
NVNT	ac40	5755	Ant1	12.77	1.53	14.3	30	Pass
NVNT	ac40	5795	Ant1	11.73	1.52	13.25	30	Pass
NVNT	ac80	5775	Ant1	11.31	2.76	14.07	30	Pass
NVNT	ax20	5745	Ant1	12.9	1.03	13.93	30	Pass
NVNT	ax20	5785	Ant1	12.67	1.04	13.71	30	Pass
NVNT	ax20	5825	Ant1	11.62	1.03	12.65	30	Pass
NVNT	ax40	5755	Ant1	12.76	1.83	14.59	30	Pass
NVNT	ax40	5795	Ant1	11.97	1.83	13.8	30	Pass
NVNT	ax80	5775	Ant1	11.06	3.17	14.23	30	Pass

Test Graphs

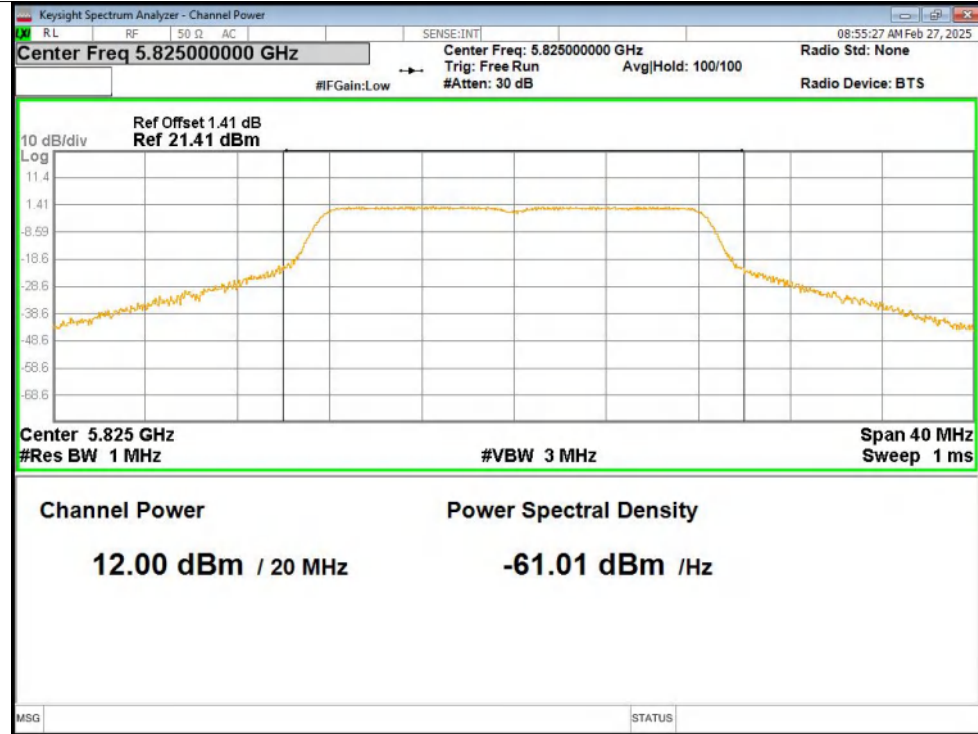
Power NVNT a 5745MHz Ant1



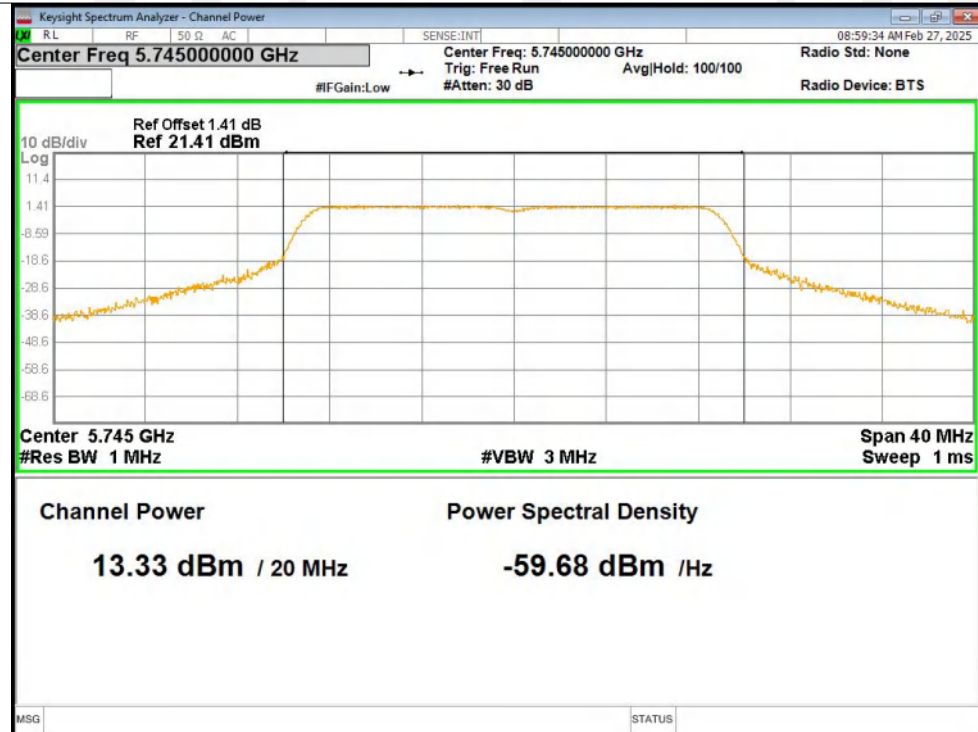
Power NVNT a 5785MHz Ant1



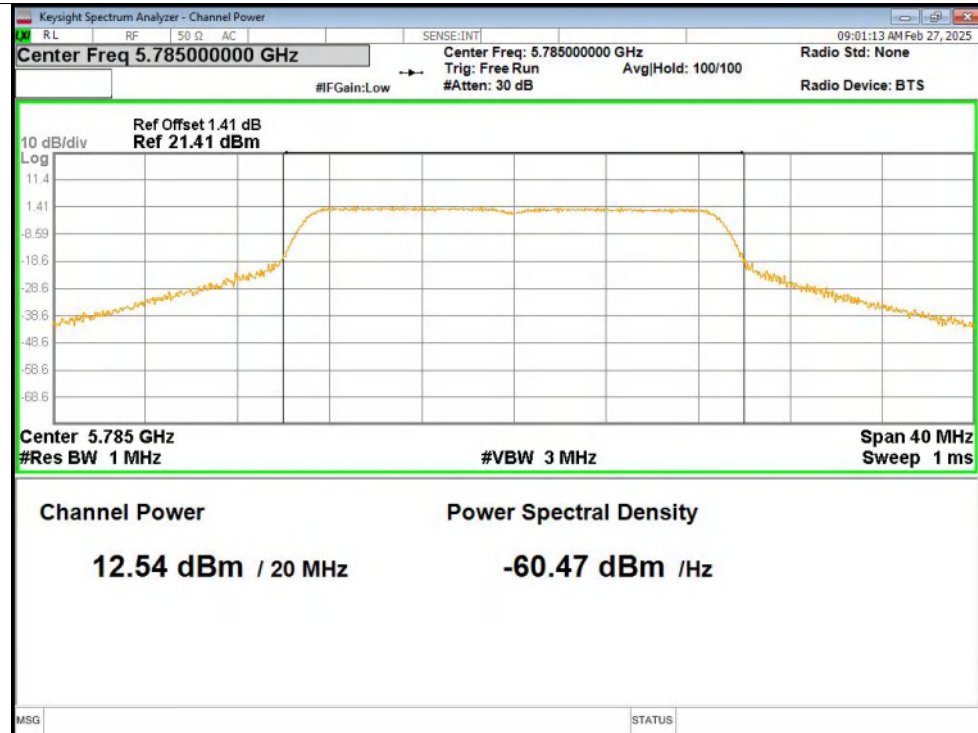
Power NVNT a 5825MHz Ant1



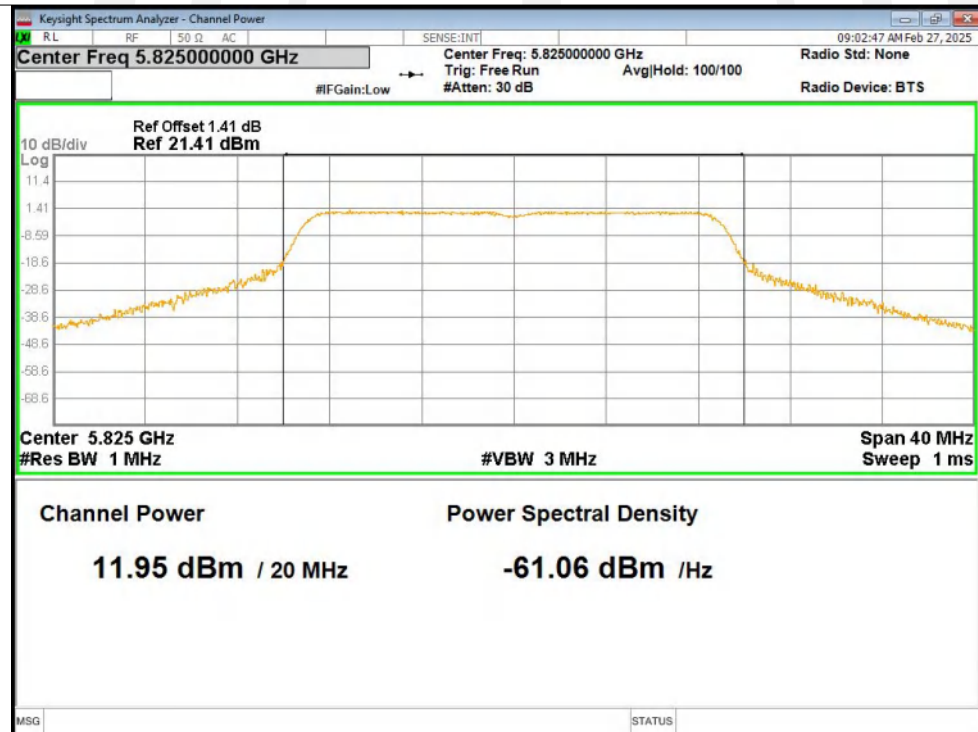
Power NVNT n20 5745MHz Ant1



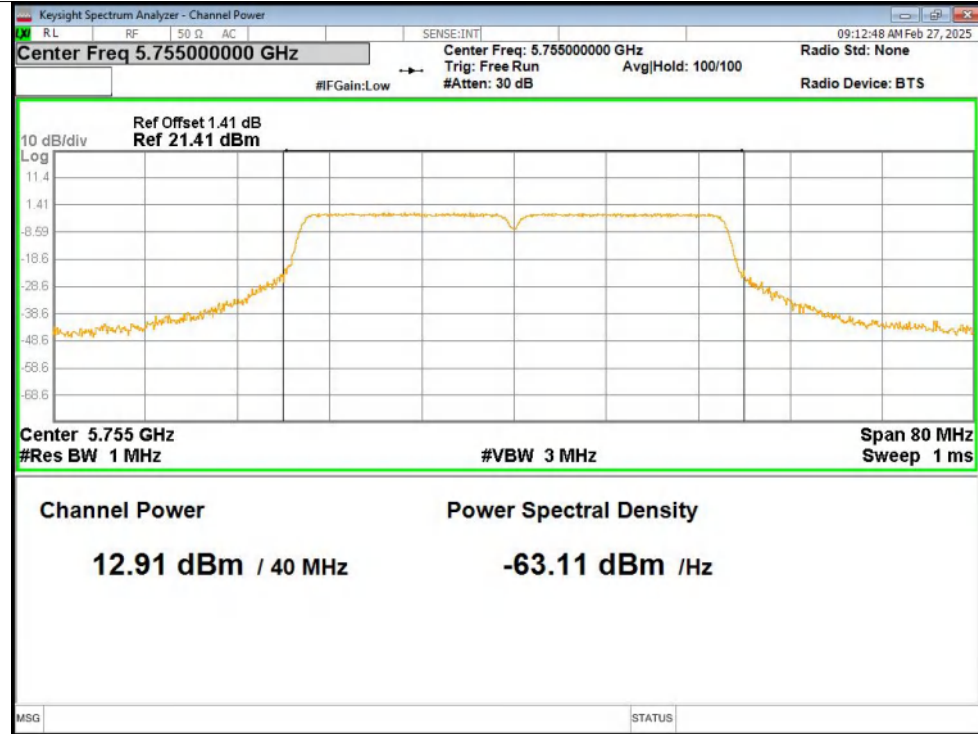
Power NVNT n20 5785MHz Ant1



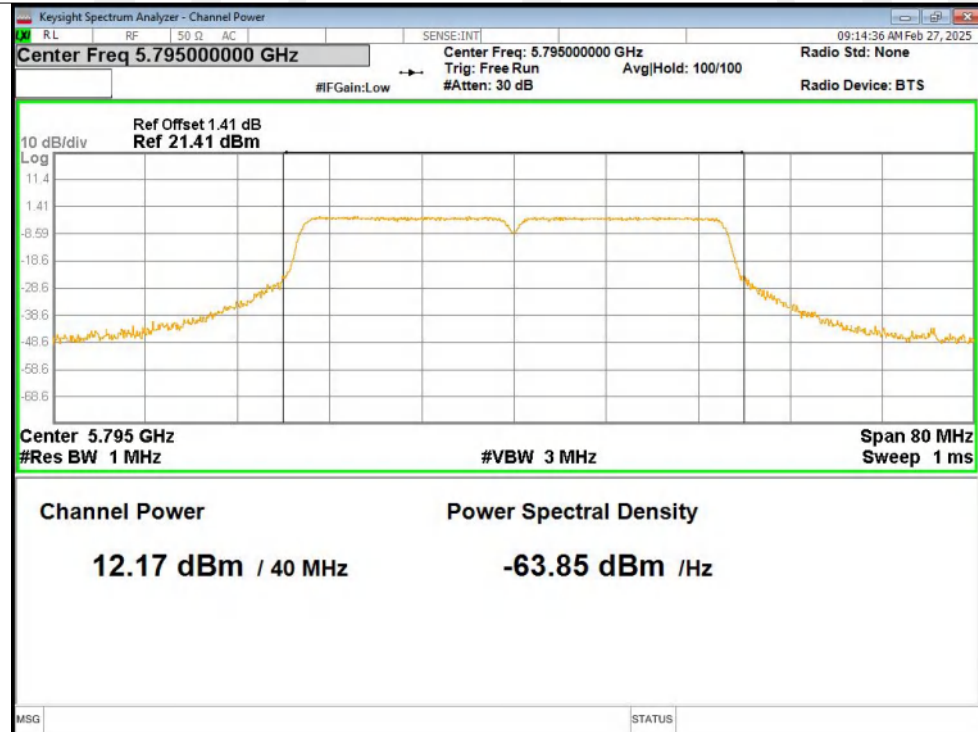
Power NVNT n20 5825MHz Ant1



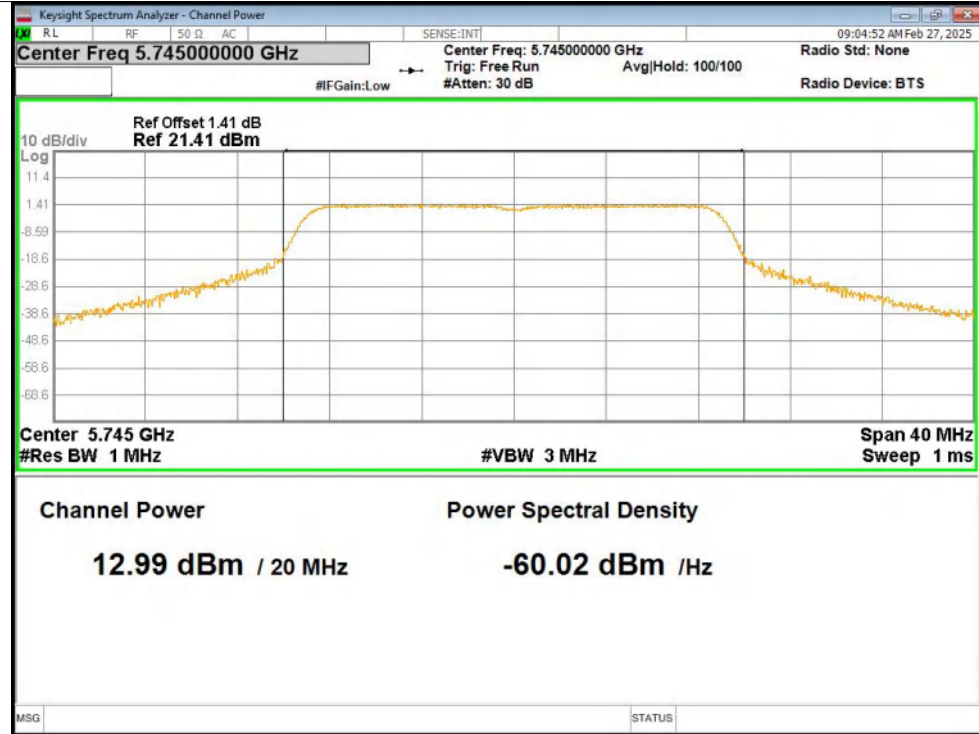
Power NVNT n40 5755MHz Ant1



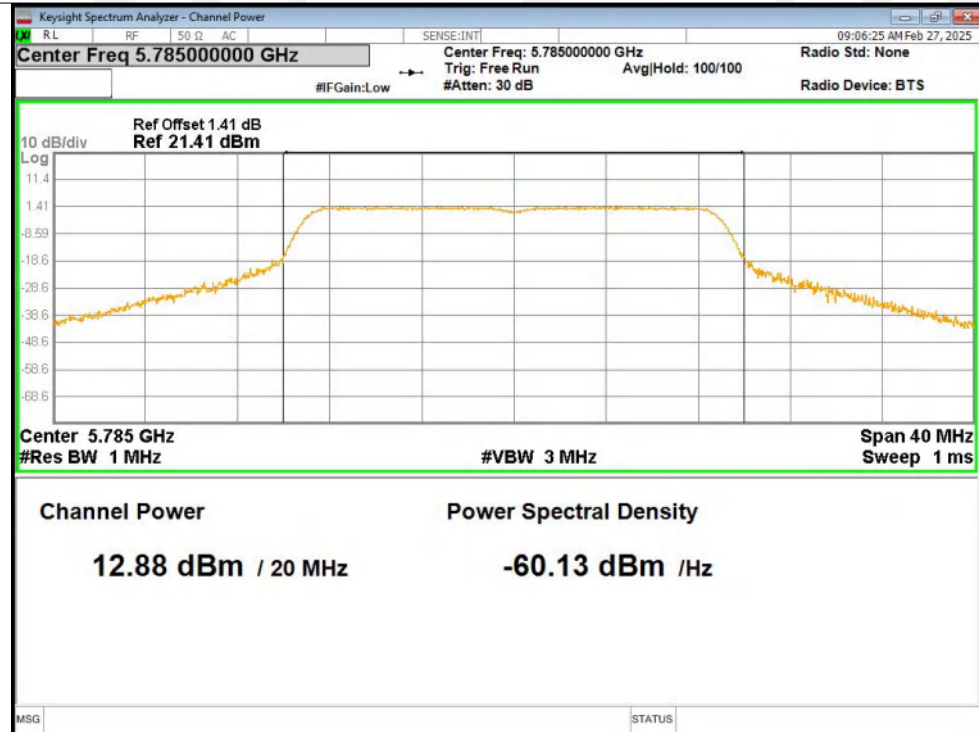
Power NVNT n40 5795MHz Ant1



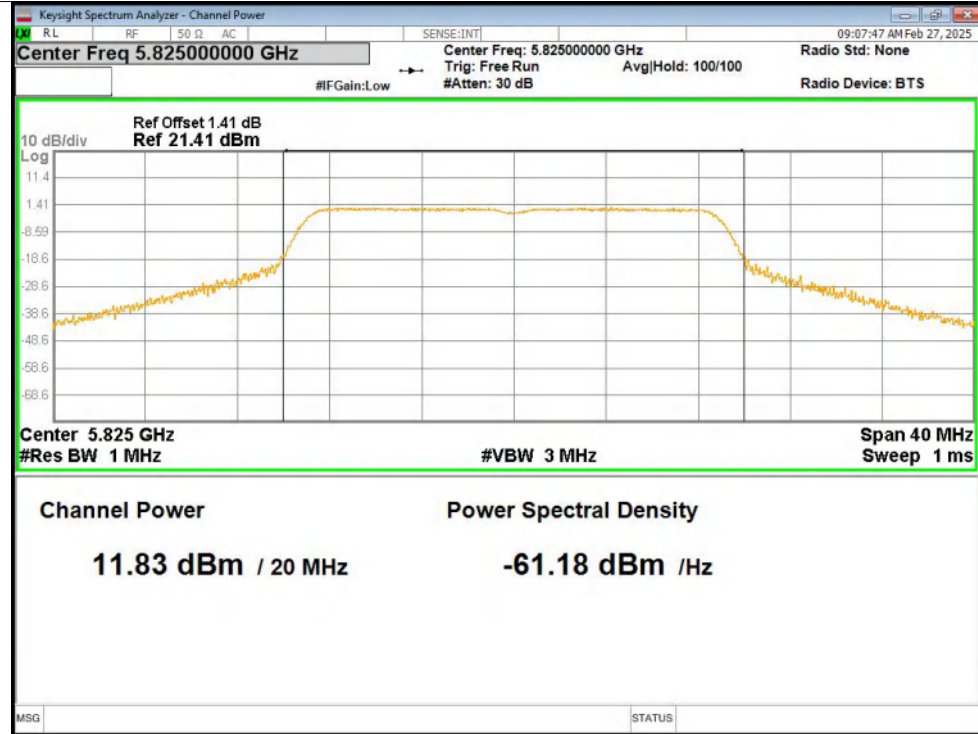
Power NVNT ac20 5745MHz Ant1



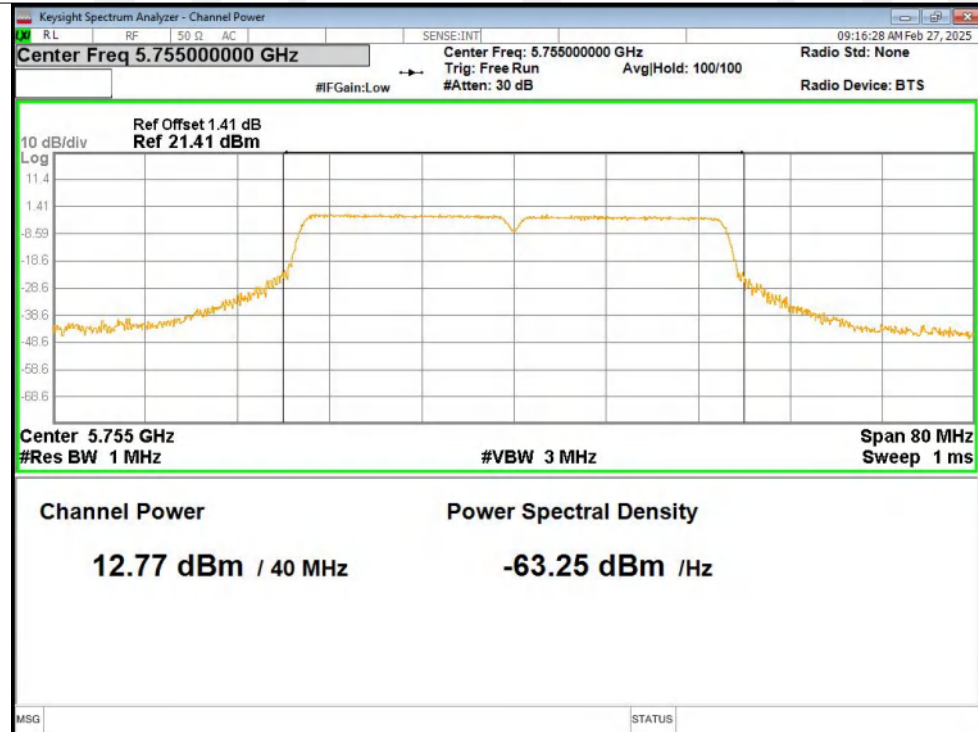
Power NVNT ac20 5785MHz Ant1



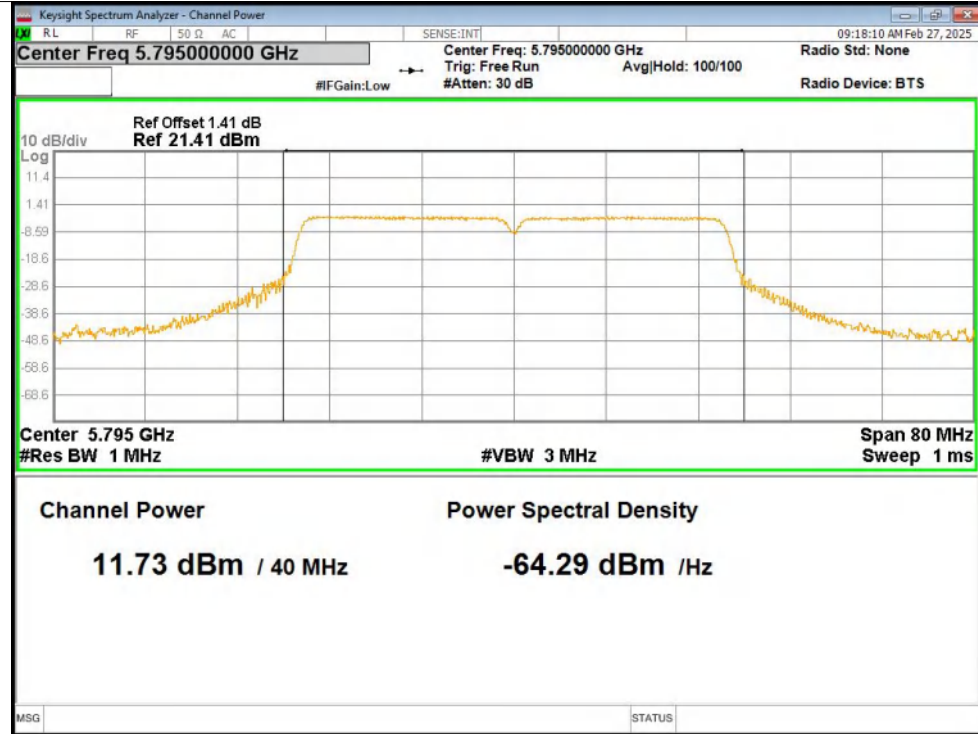
Power NVNT ac20 5825MHz Ant1



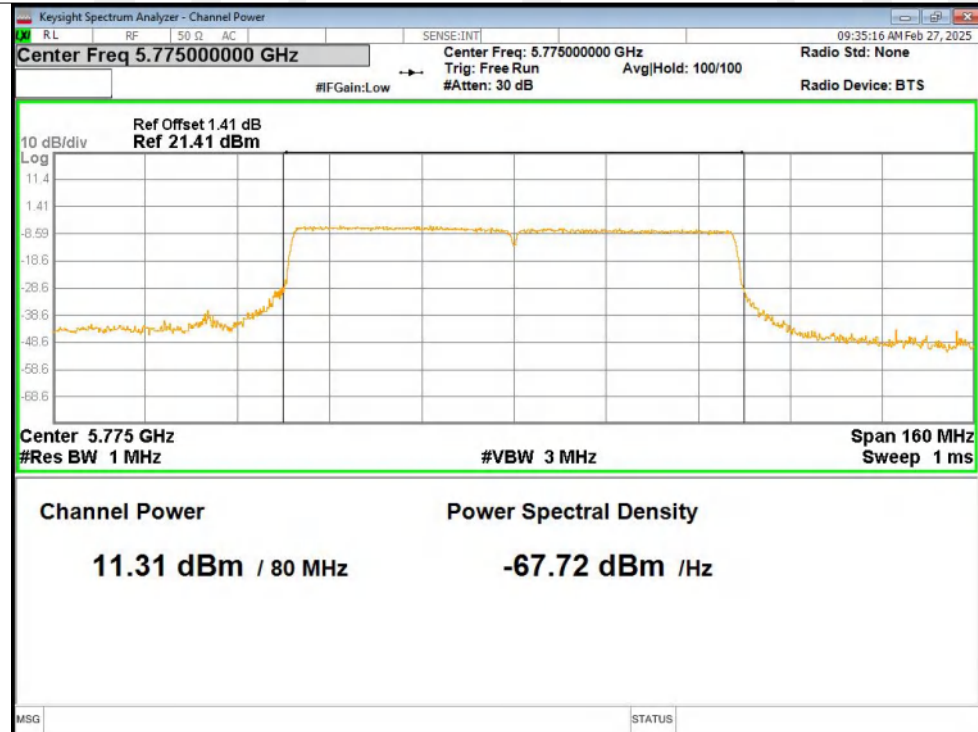
Power NVNT ac40 5755MHz Ant1



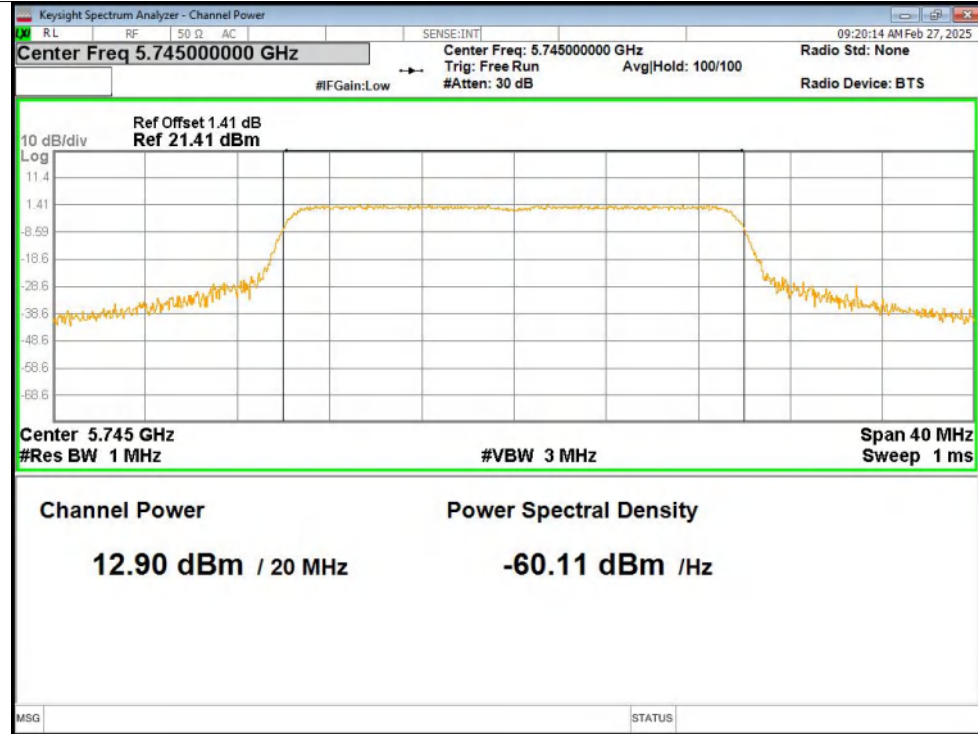
Power NVNT ac40 5795MHz Ant1



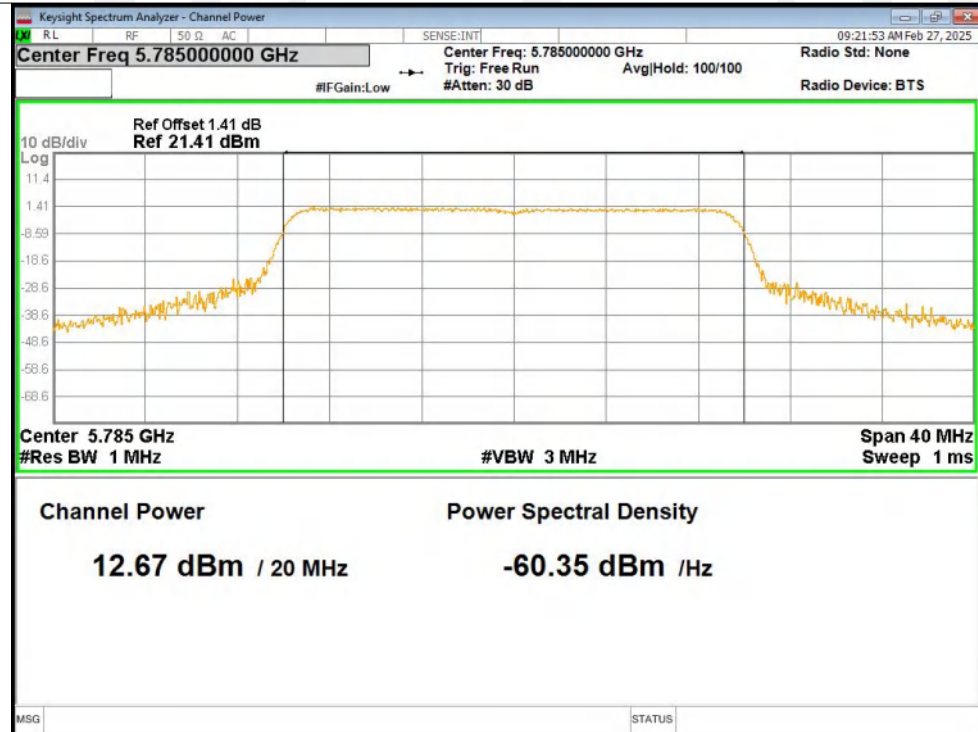
Power NVNT ac80 5775MHz Ant1



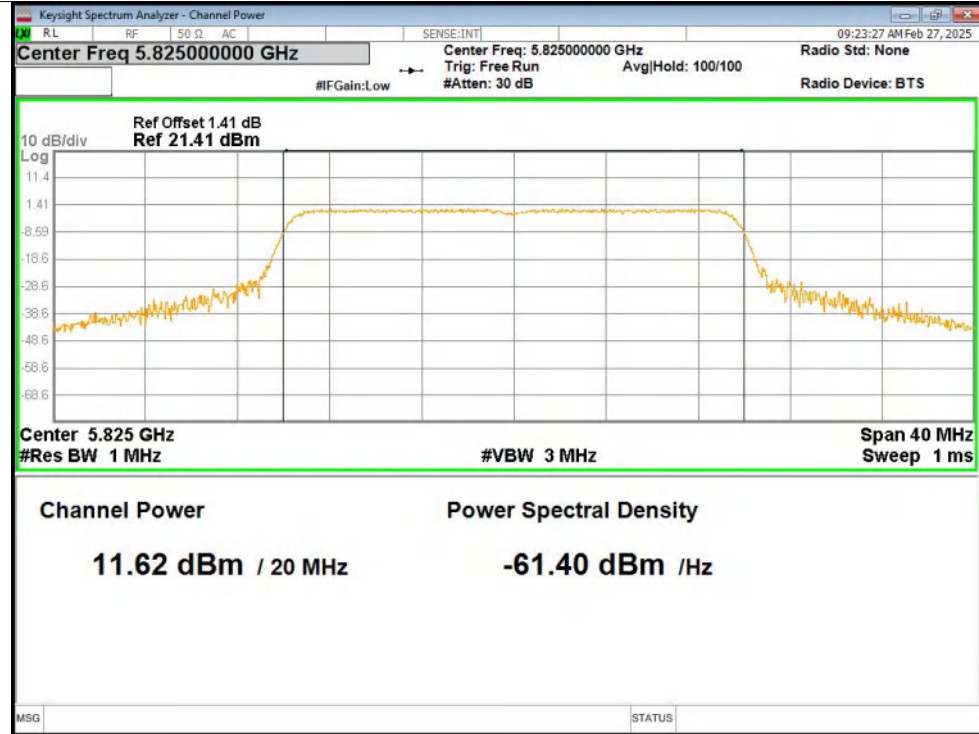
Power NVNT ax20 5745MHz Ant1



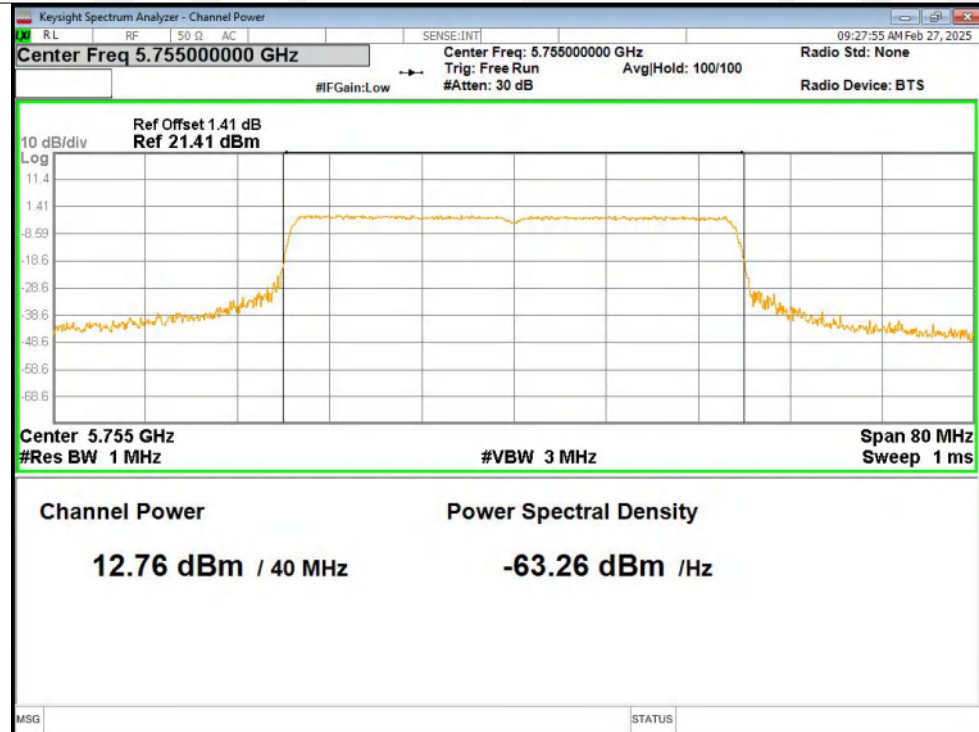
Power NVNT ax20 5785MHz Ant1



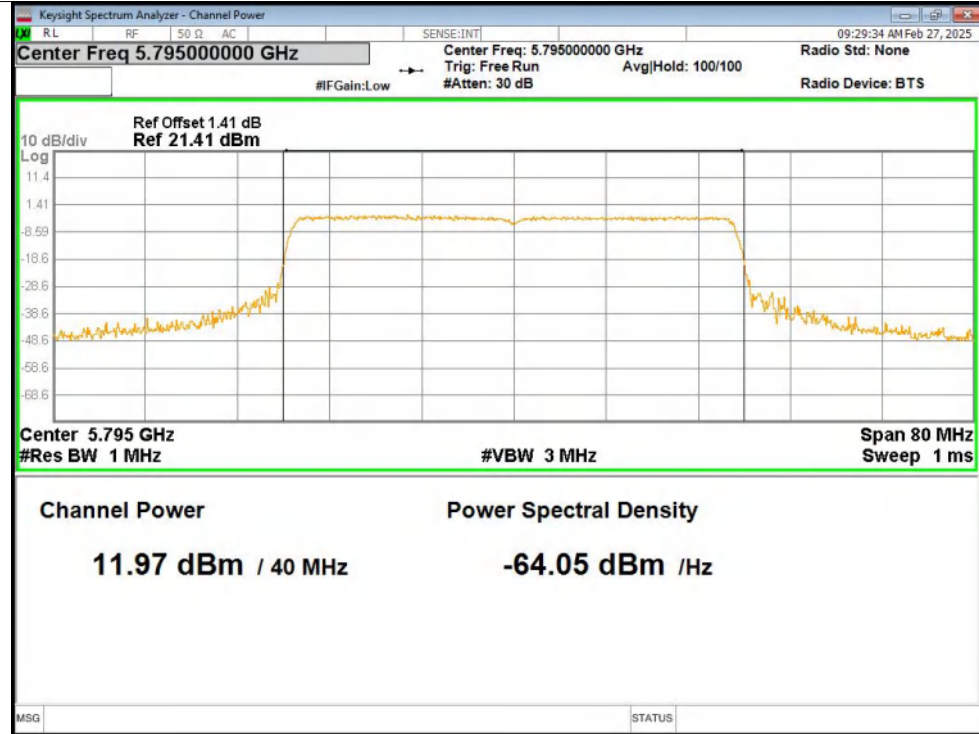
Power NVNT ax20 5825MHz Ant1



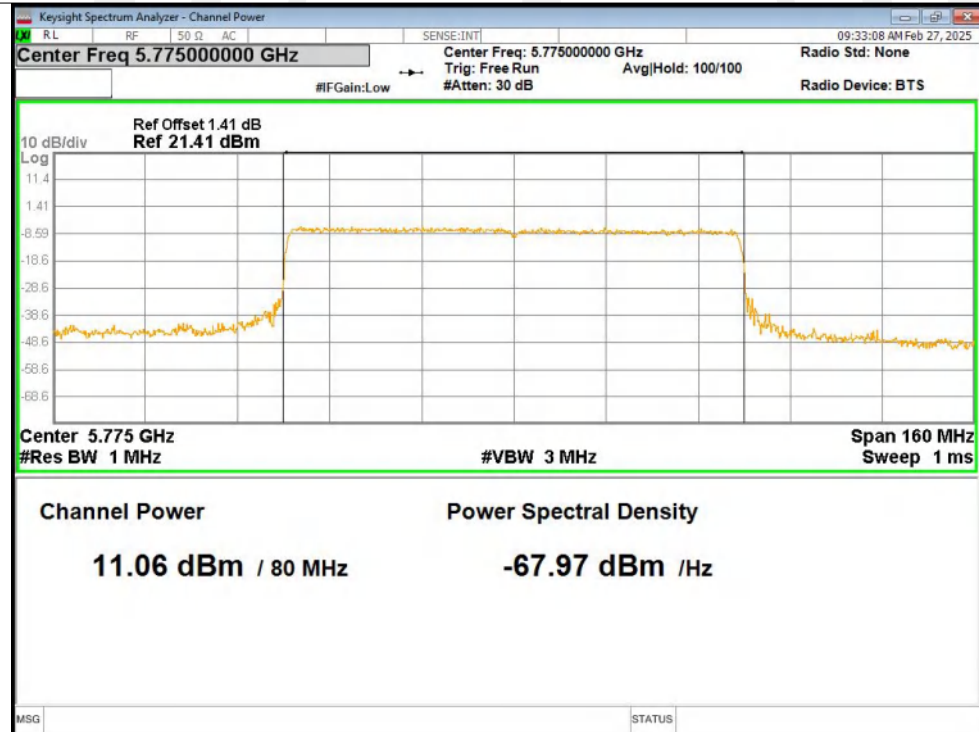
Power NVNT ax40 5755MHz Ant1



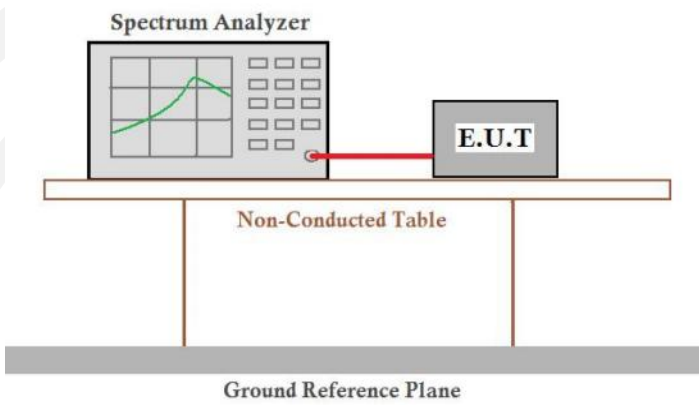
Power NVNT ax40 5795MHz Ant1



Power NVNT ax80 5775MHz Ant1



4.5 Power Spectral Density

Test Requirement:	FCC Part15 E Section 15.407, RSS-247 §6.2
Test Method:	KDB 789033 D02 General UNII Test Procedures New Rules v02r01
Limit:	FCC: 1. $\leq 11.00 \text{ dBm/MHz}$ for 5150MHz-5250MHz, 5250-5350MHz and 5470-5725 MHz 2. $\leq 30.00 \text{ dBm/500KHz}$ for 5725MHz-5850MHz IC: 1. For the 5.15-5.25 GHz, The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band. 2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by a Ground Reference Plane.
Test procedure:	1) Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, "Compute power...". 2) Use the peak search function on the instrument to find the peak of the spectrum. 3) Make the following adjustments to the peak value of the spectrum, if applicable: a) If Method SA-2 or SA-2 Alternative was used, add $10 \log(1/x)$, where x is the duty cycle, to the peak of the spectrum. b) If Method SA-3 Alternative was used and the linear mode was used in step E)2)g)(viii), add 1 dB to the final result to compensate for the difference between linear averaging and power averaging. 4) The result is the PSD.
Test Instruments:	Refer to section 3.0 for details
Test mode:	Refer to section 2.2 for details
Test results:	Pass

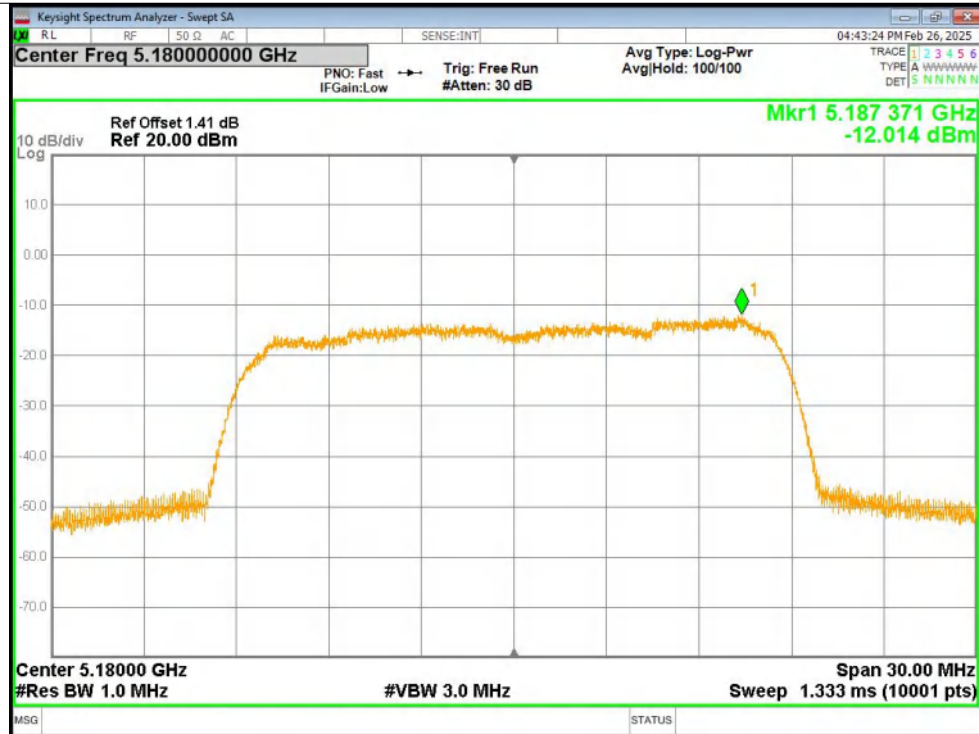
Measurement Data:

5.2GWIFI (5150-5250 MHz)

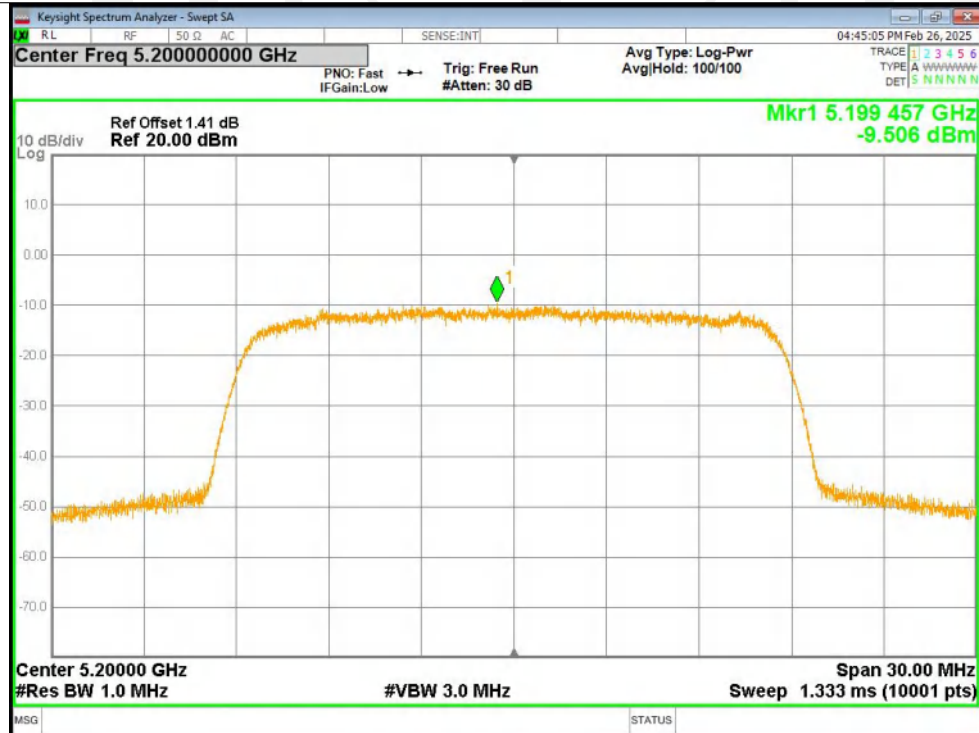
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-12.01	0.83	-11.18	11	Pass
NVNT	a	5200	Ant1	-9.51	0.47	-9.04	11	Pass
NVNT	a	5240	Ant1	-5.97	0.76	-5.21	11	Pass
NVNT	n20	5180	Ant1	-10.66	0.77	-9.89	11	Pass
NVNT	n20	5200	Ant1	-11.07	0.81	-10.26	11	Pass
NVNT	n20	5240	Ant1	-8.48	0.81	-7.67	11	Pass
NVNT	n40	5190	Ant1	-20.24	9.03	-11.21	11	Pass
NVNT	n40	5230	Ant1	-19.22	1.53	-17.69	11	Pass
NVNT	ac20	5180	Ant1	-11.14	0.81	-10.33	11	Pass
NVNT	ac20	5200	Ant1	-10.71	0.46	-10.25	11	Pass
NVNT	ac20	5240	Ant1	-10.01	0.66	-9.35	11	Pass
NVNT	ac40	5190	Ant1	-18.72	1.51	-17.21	11	Pass
NVNT	ac40	5230	Ant1	-18.51	1.51	-17	11	Pass
NVNT	ac80	5210	Ant1	-26.77	2.78	-23.99	11	Pass
NVNT	ax20	5180	Ant1	-9.36	1.04	-8.32	11	Pass
NVNT	ax20	5200	Ant1	-12.92	1.04	-11.88	11	Pass
NVNT	ax20	5240	Ant1	-12.88	1.04	-11.84	11	Pass
NVNT	ax40	5190	Ant1	-27.87	1.85	-26.02	11	Pass
NVNT	ax40	5230	Ant1	-17.6	1.85	-15.75	11	Pass
NVNT	ax80	5210	Ant1	-31.83	3.15	-28.68	11	Pass

Test Graphs

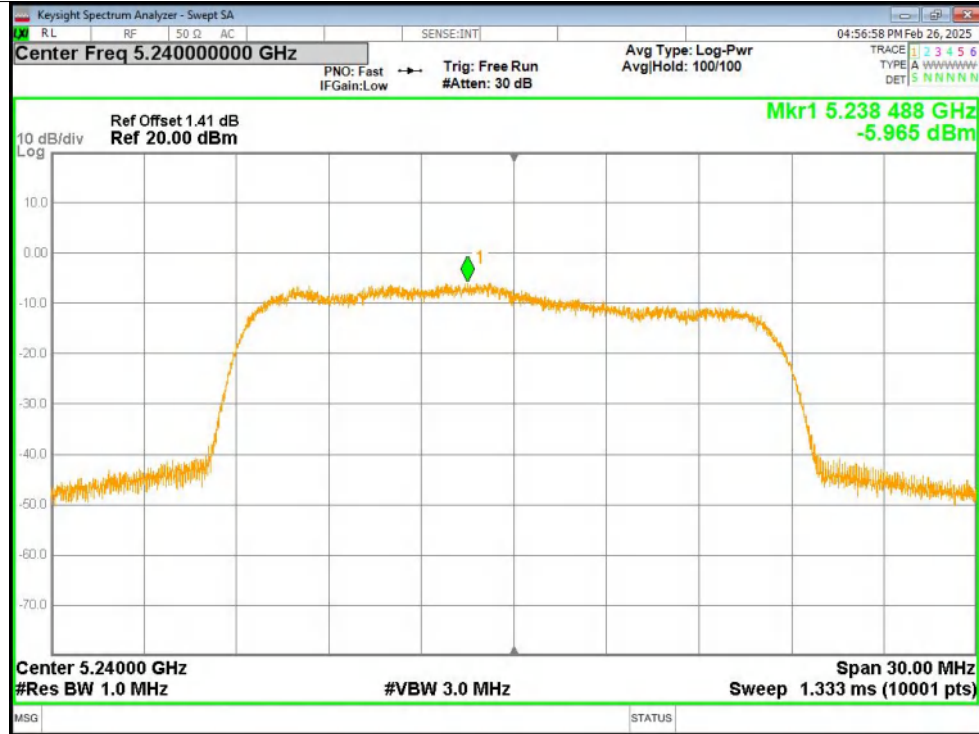
PSD NVNT a 5180MHz Ant1



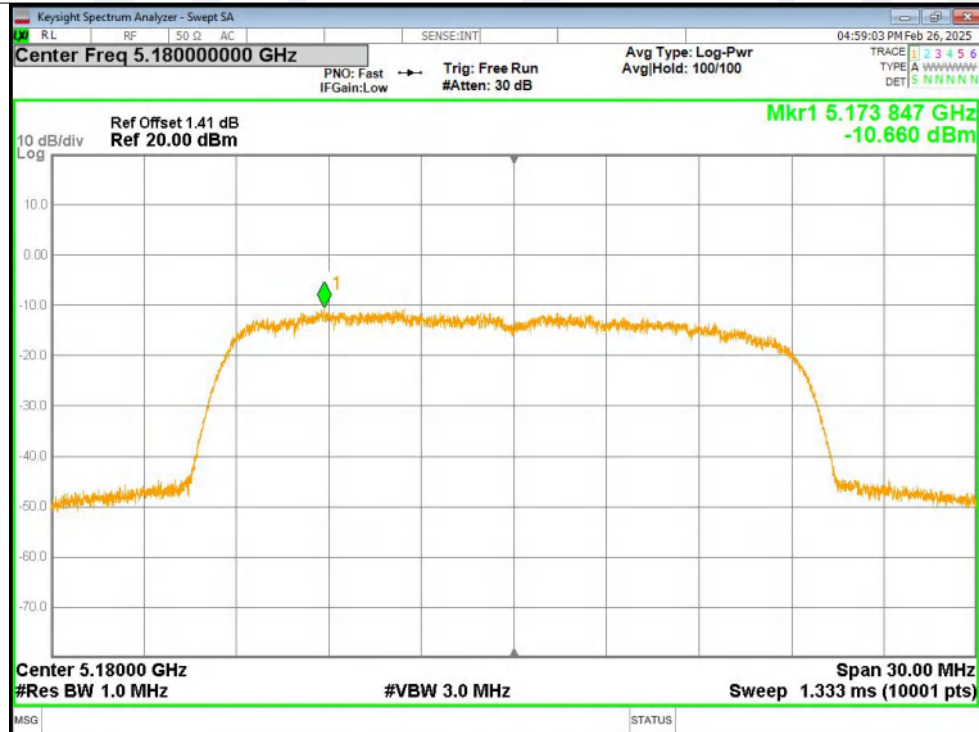
PSD NVNT a 5200MHz Ant1

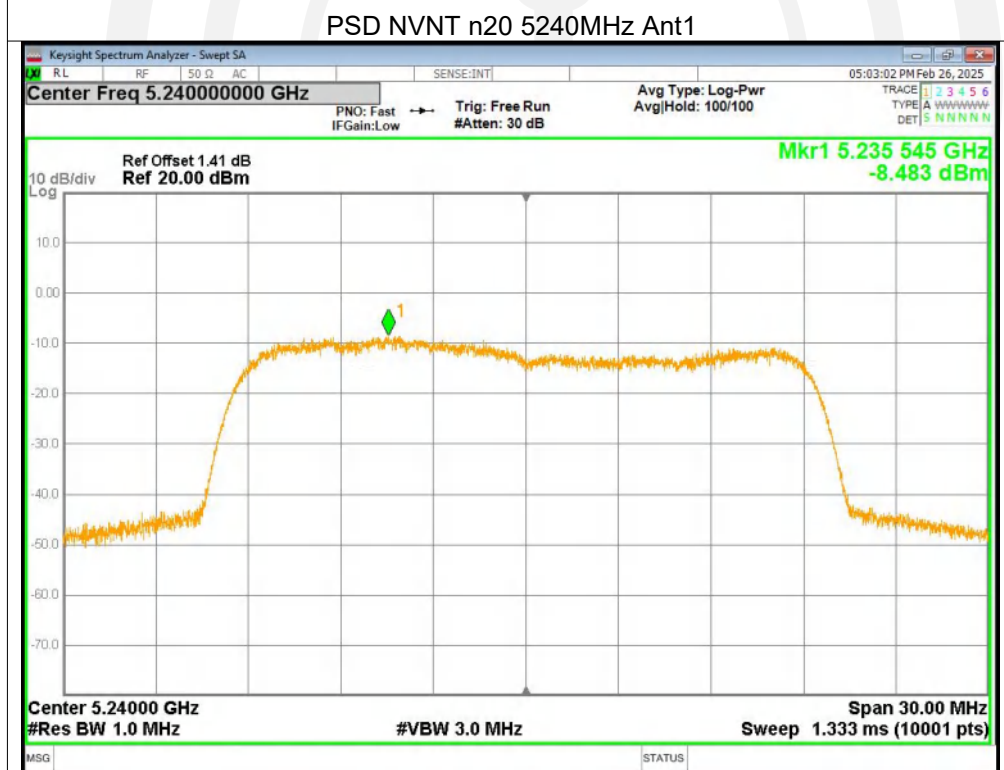
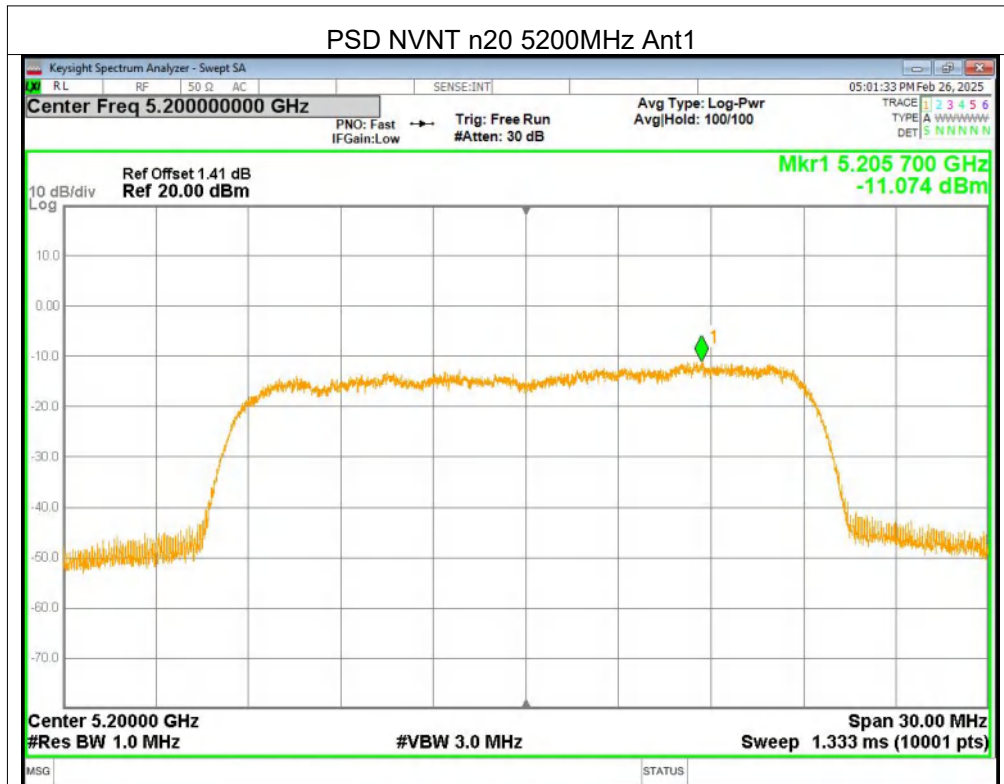


PSD NVNT a 5240MHz Ant1

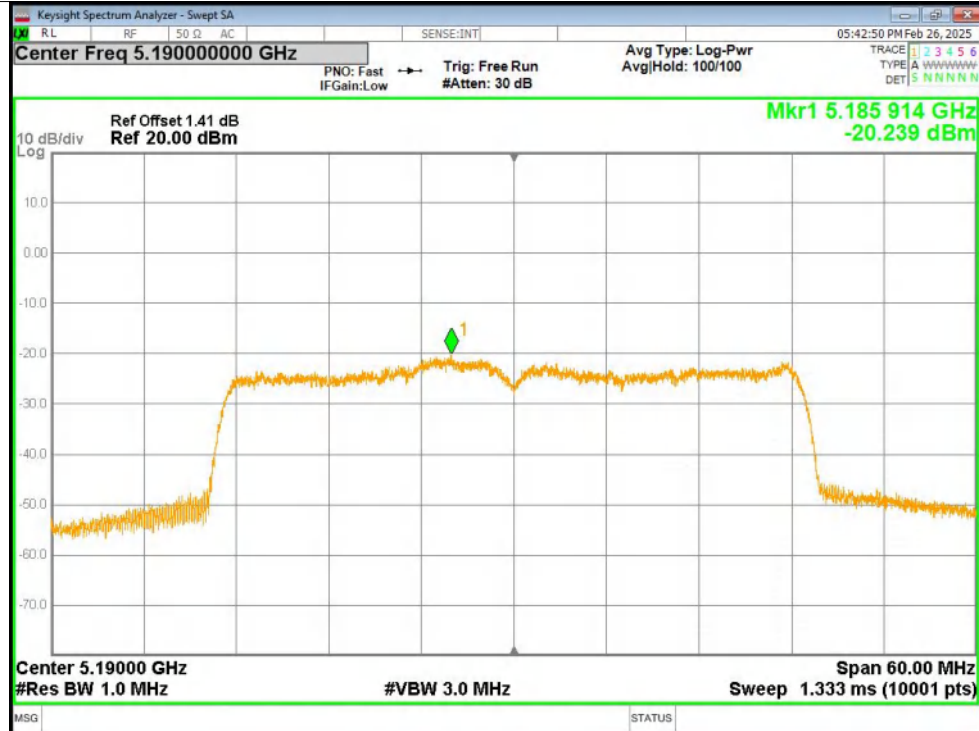


PSD NVNT n20 5180MHz Ant1

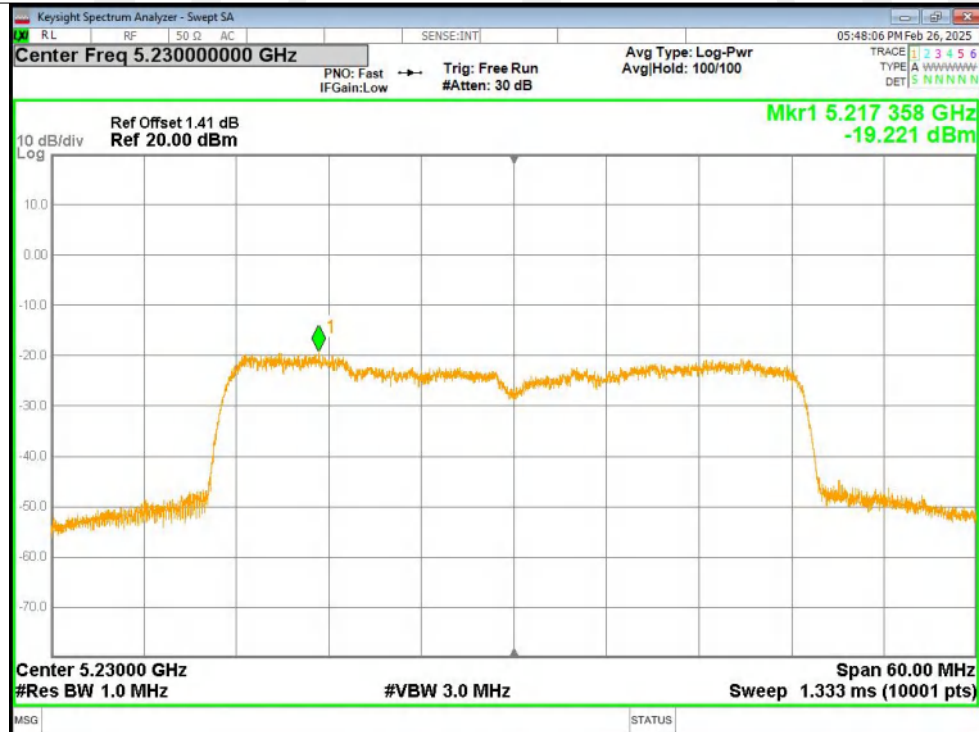




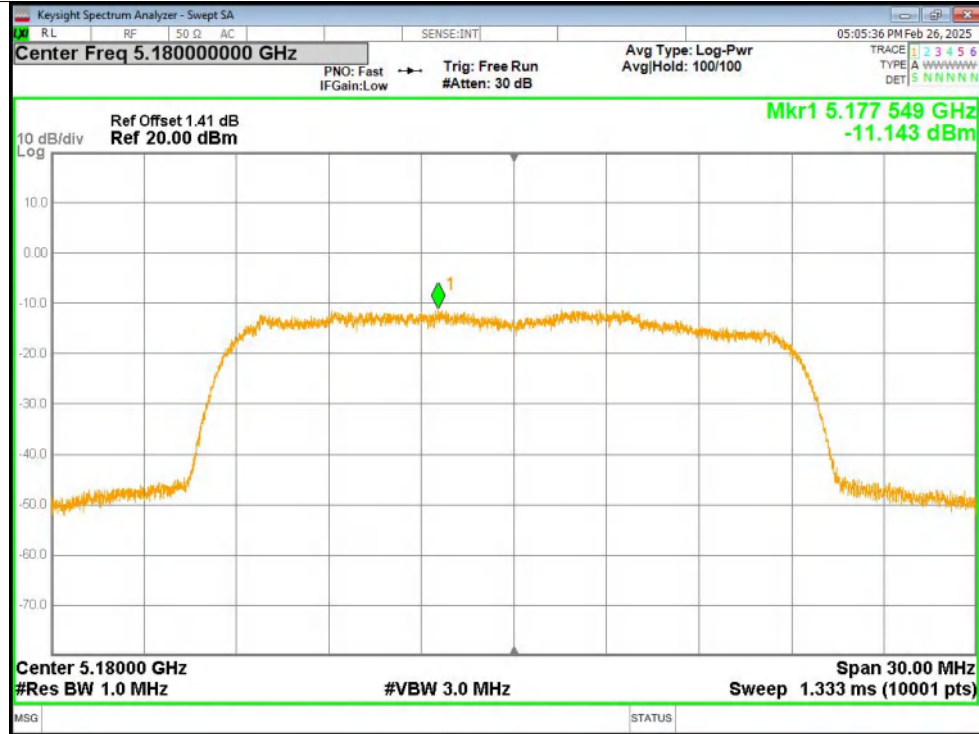
PSD NVNT n40 5190MHz Ant1



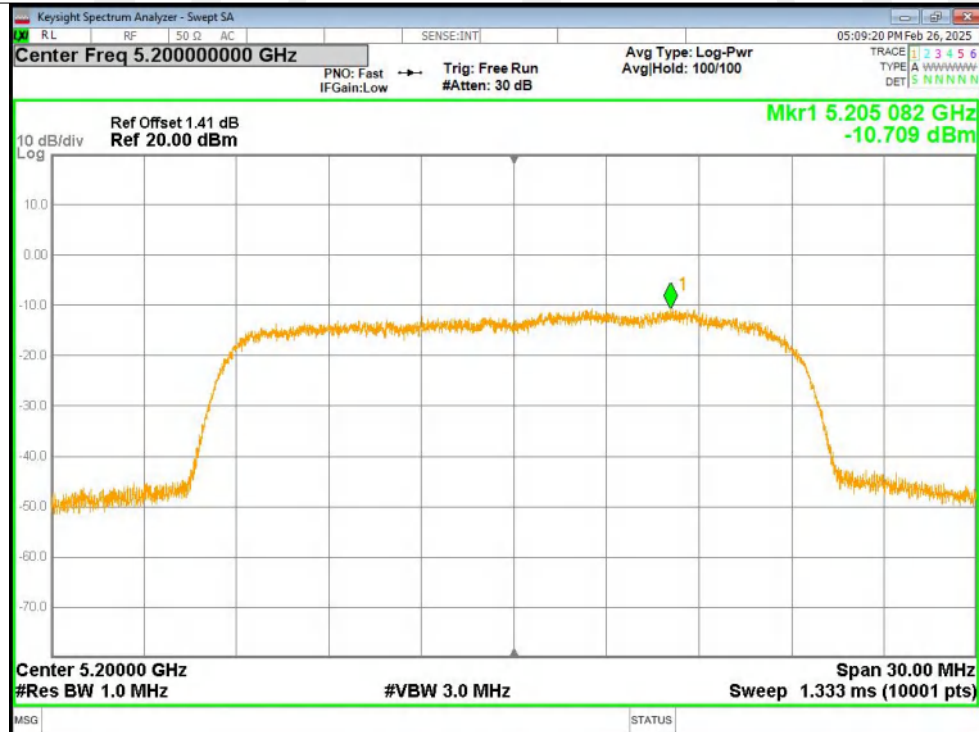
PSD NVNT n40 5230MHz Ant1



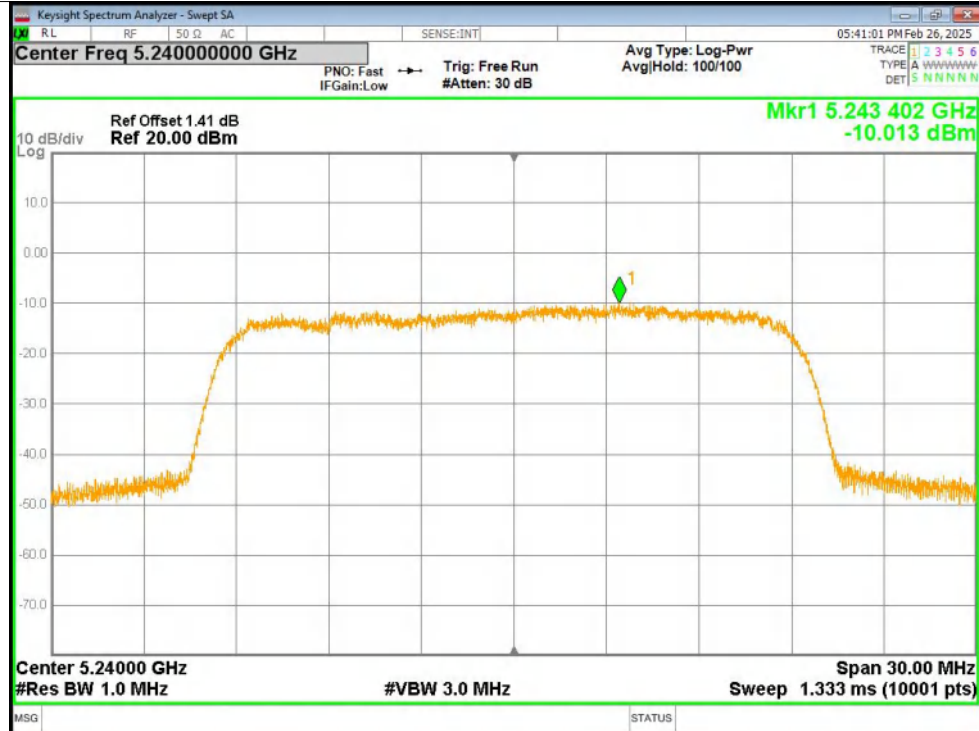
PSD NVNT ac20 5180MHz Ant1



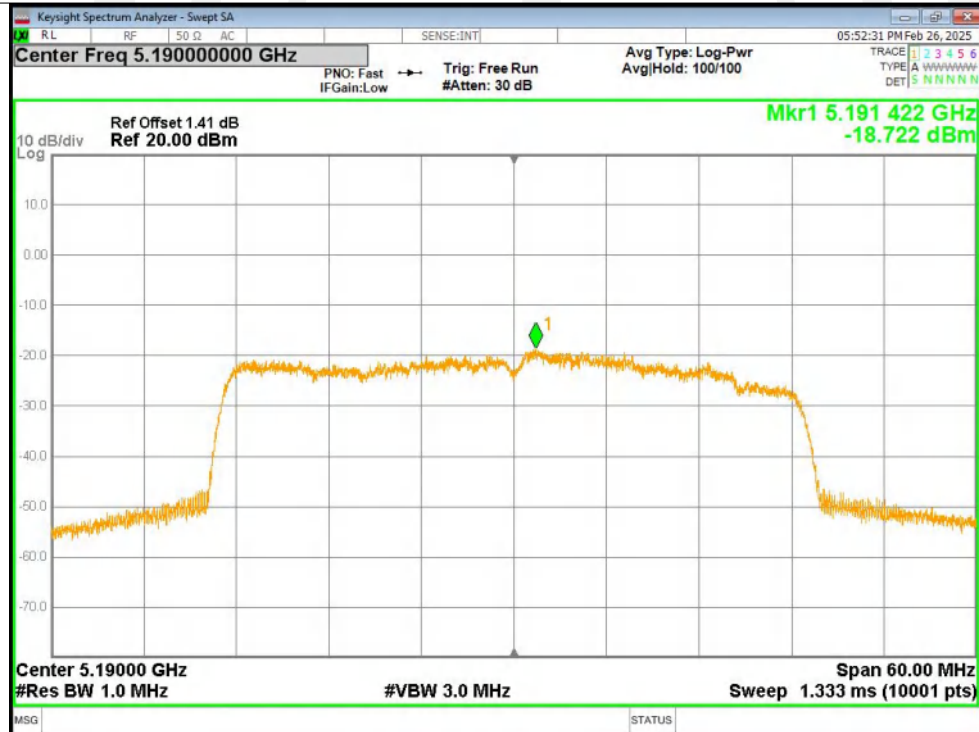
PSD NVNT ac20 5200MHz Ant1



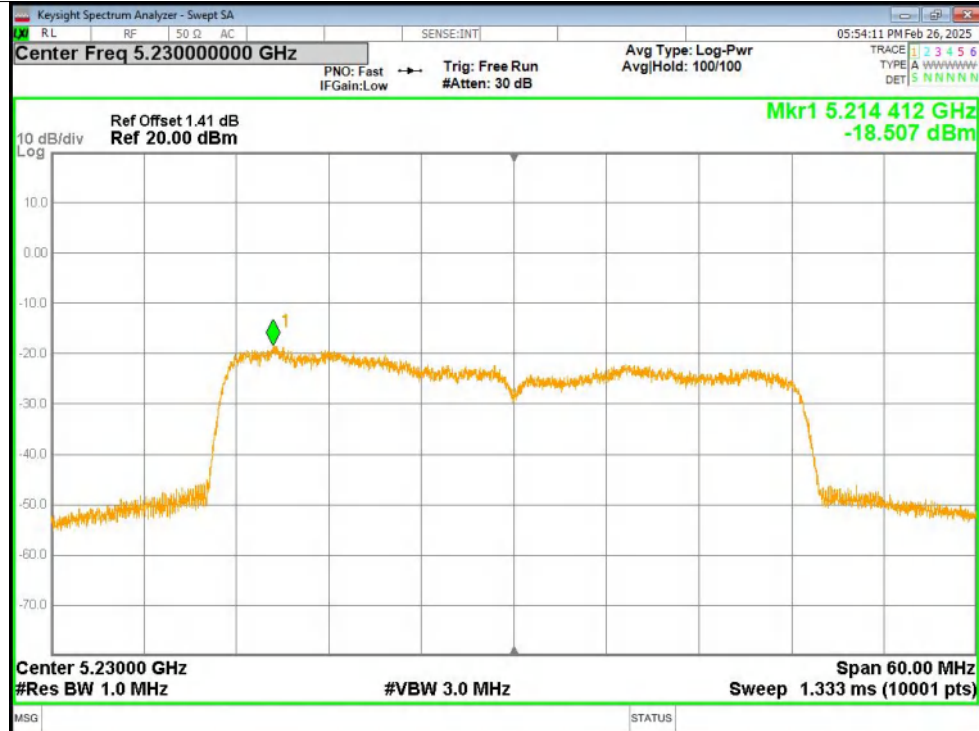
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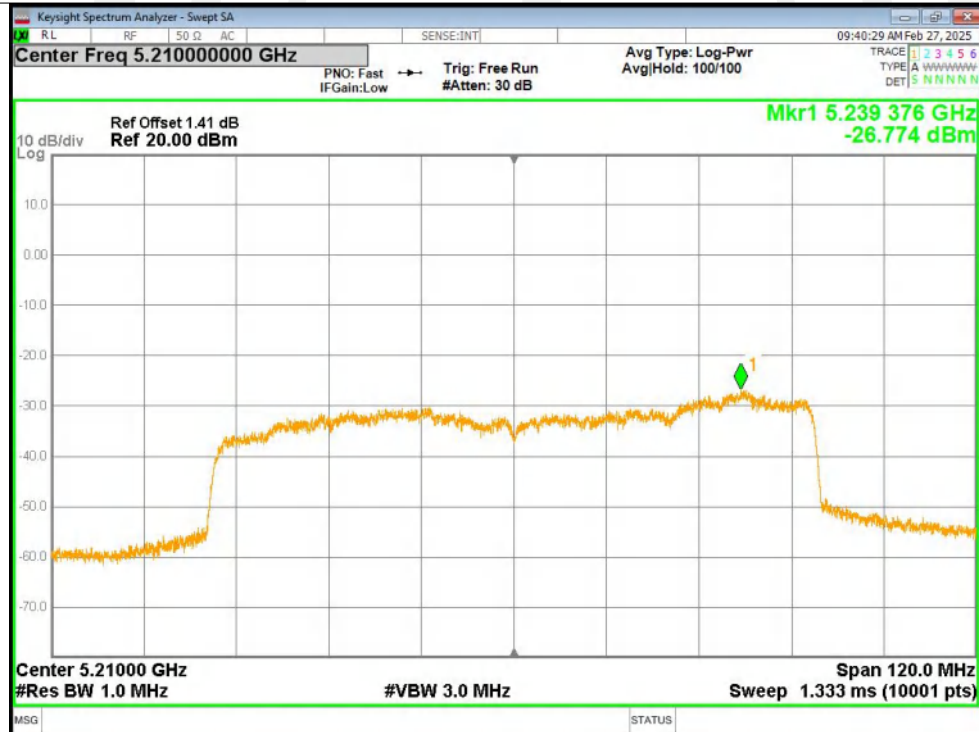
PSD NVNT ac40 5190MHz Ant1



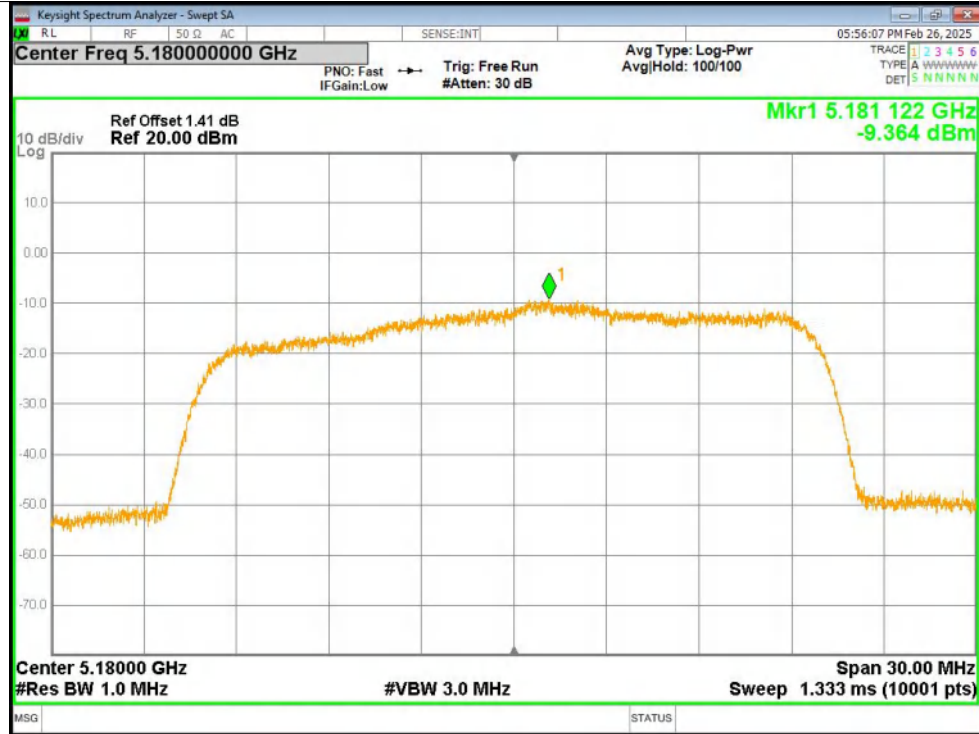
PSD NVNT ac40 5230MHz Ant1



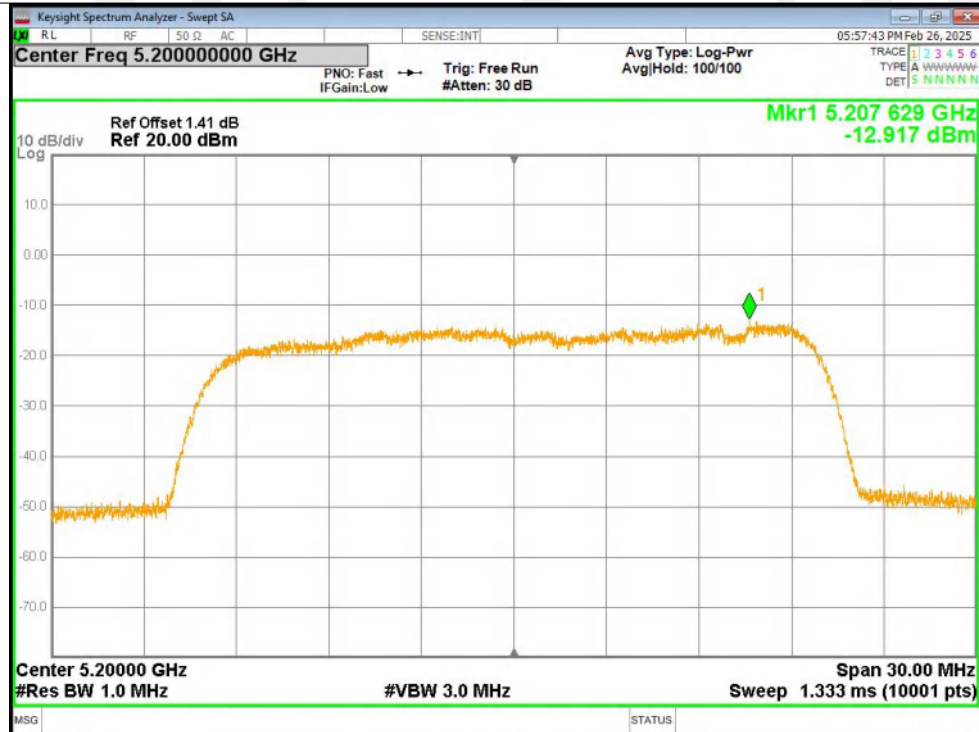
PSD NVNT ac80 5210MHz Ant1



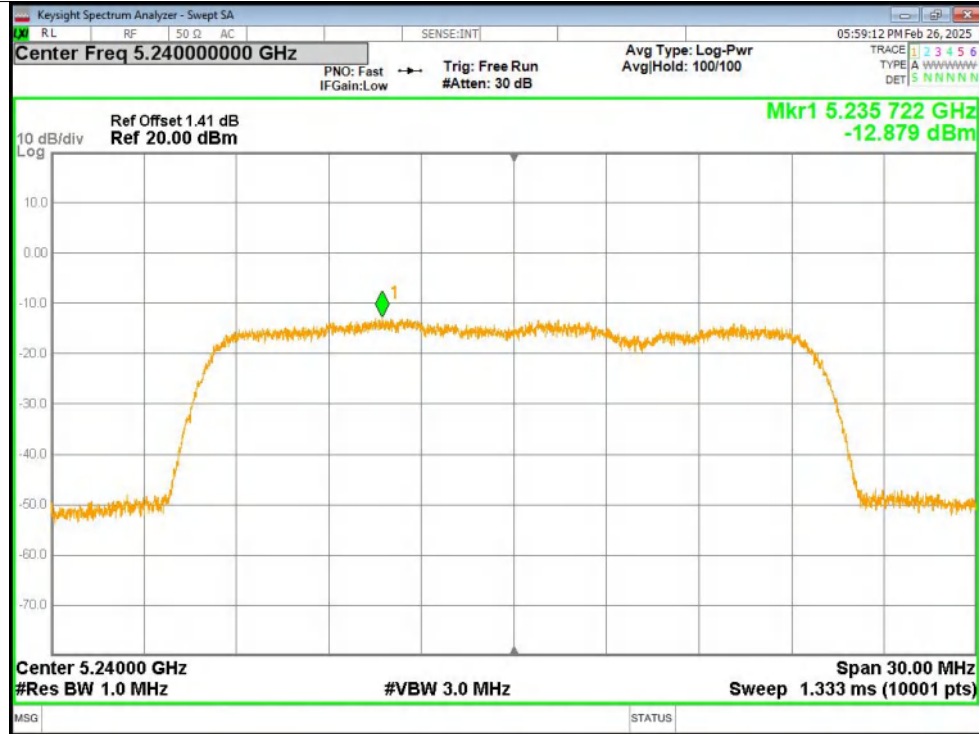
PSD NVNT ax20 5180MHz Ant1



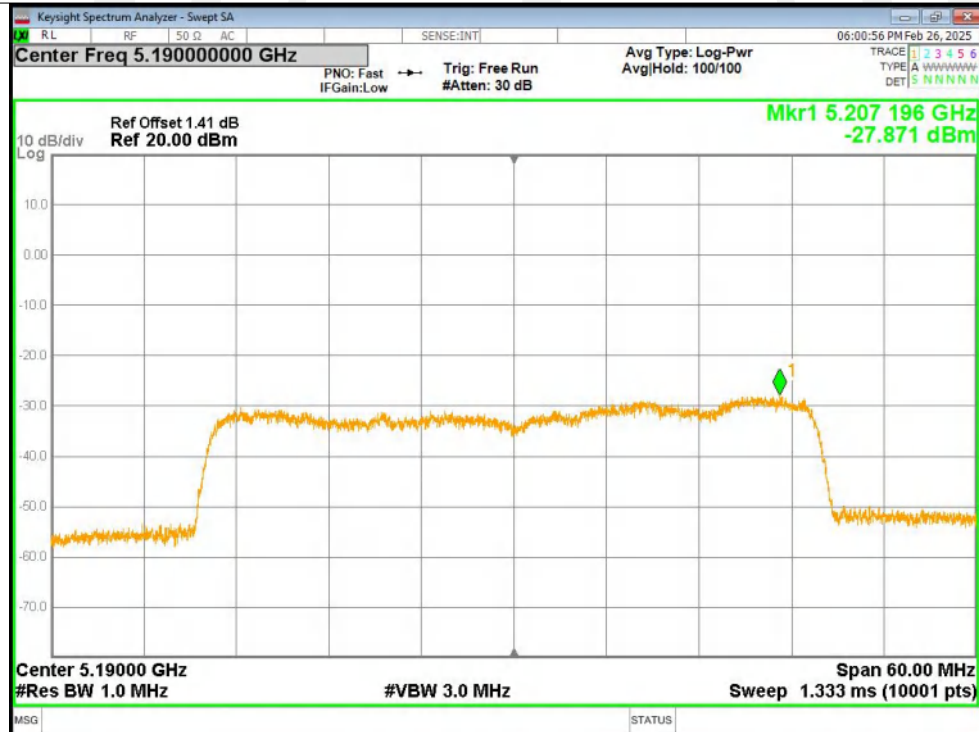
PSD NVNT ax20 5200MHz Ant1



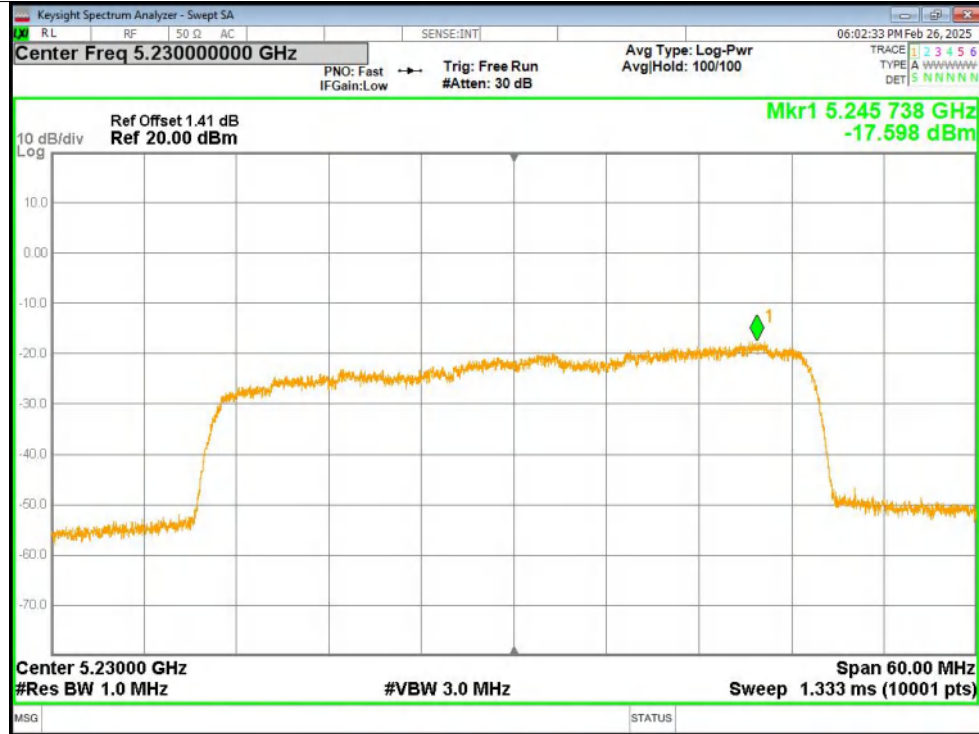
PSD NVNT ax20 5240MHz Ant1



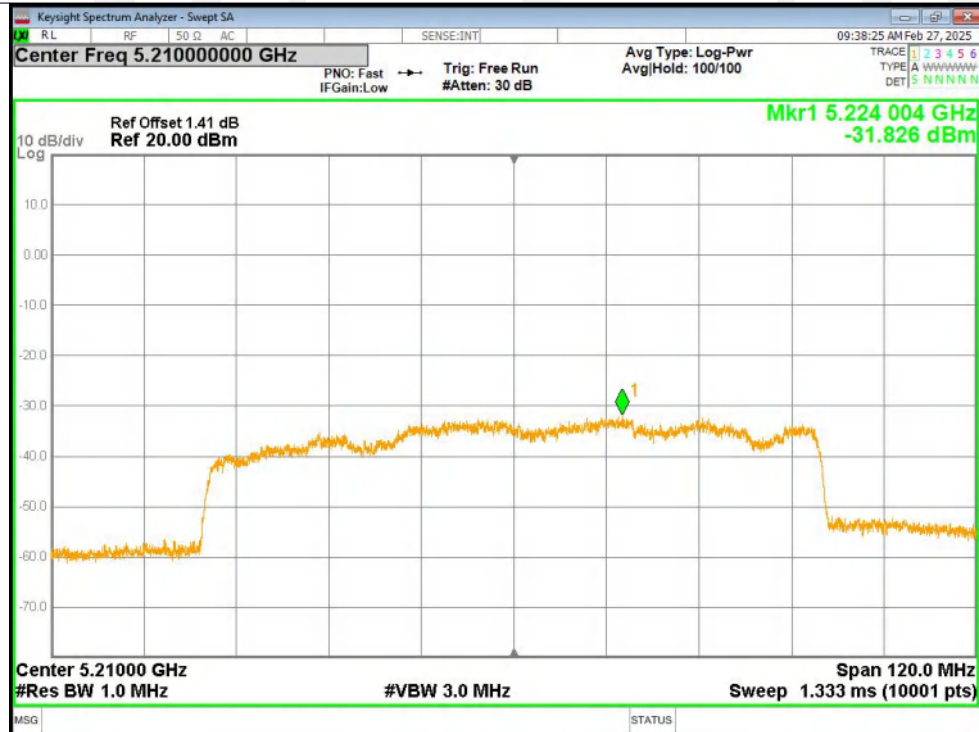
PSD NVNT ax40 5190MHz Ant1



PSD NVNT ax40 5230MHz Ant1



PSD NVNT ax80 5210MHz Ant1



5.8GWIFI (5725MHz-5850 MHz)

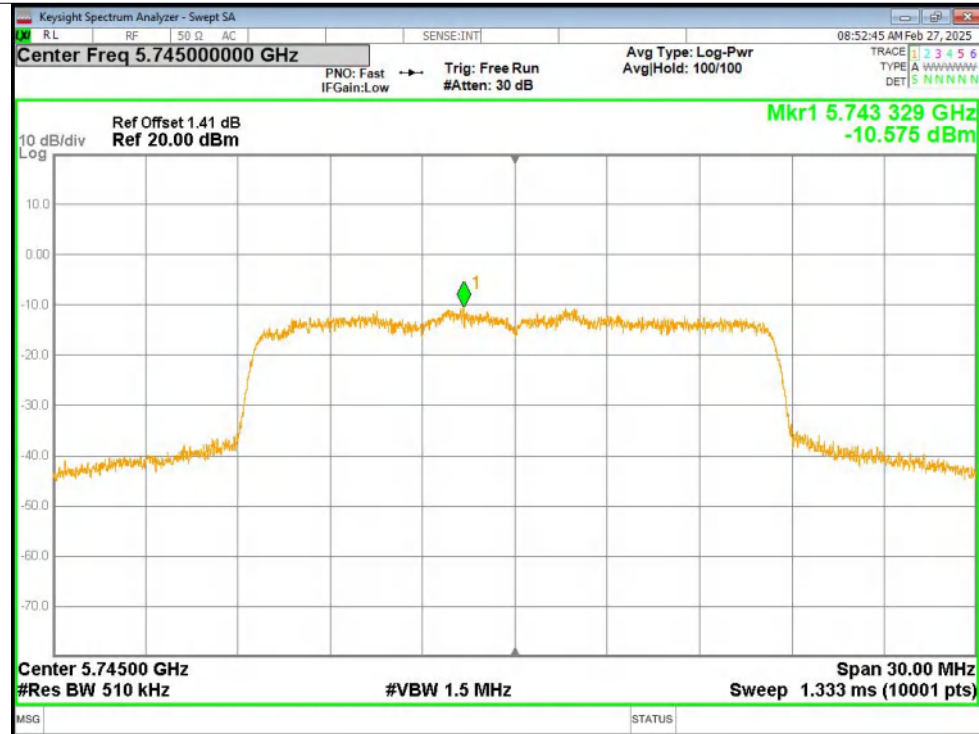
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-10.58	0.75	-9.83	30	Pass
NVNT	a	5785	Ant1	-10.67	0.75	-9.92	30	Pass
NVNT	a	5825	Ant1	-11.83	0.76	-11.07	30	Pass
NVNT	n20	5745	Ant1	-13.57	0.81	-12.76	30	Pass
NVNT	n20	5785	Ant1	-11.77	0.81	-10.96	30	Pass
NVNT	n20	5825	Ant1	-12.8	0.81	-11.99	30	Pass
NVNT	n40	5755	Ant1	-18.79	1.53	-17.26	30	Pass
NVNT	n40	5795	Ant1	-20.64	1.53	-19.11	30	Pass
NVNT	ac20	5745	Ant1	-10.49	0.81	-9.68	30	Pass
NVNT	ac20	5785	Ant1	-7.09	0.81	-6.28	30	Pass
NVNT	ac20	5825	Ant1	-12.11	0.81	-11.3	30	Pass
NVNT	ac40	5755	Ant1	-20.94	1.53	-19.41	30	Pass
NVNT	ac40	5795	Ant1	-19.83	1.52	-18.31	30	Pass
NVNT	ac80	5775	Ant1	-28.61	2.76	-25.85	30	Pass
NVNT	ax20	5745	Ant1	-10.13	1.03	-9.1	30	Pass
NVNT	ax20	5785	Ant1	-14.1	1.04	-13.06	30	Pass
NVNT	ax20	5825	Ant1	-11.91	1.03	-10.88	30	Pass
NVNT	ax40	5755	Ant1	-17.9	1.83	-16.07	30	Pass
NVNT	ax40	5795	Ant1	-19.67	1.83	-17.84	30	Pass
NVNT	ax80	5775	Ant1	-35.23	3.17	-32.06	30	Pass

RB factor = $10 \lg (\text{Measure RB} / 500)$, Measure RB = 510 kHz

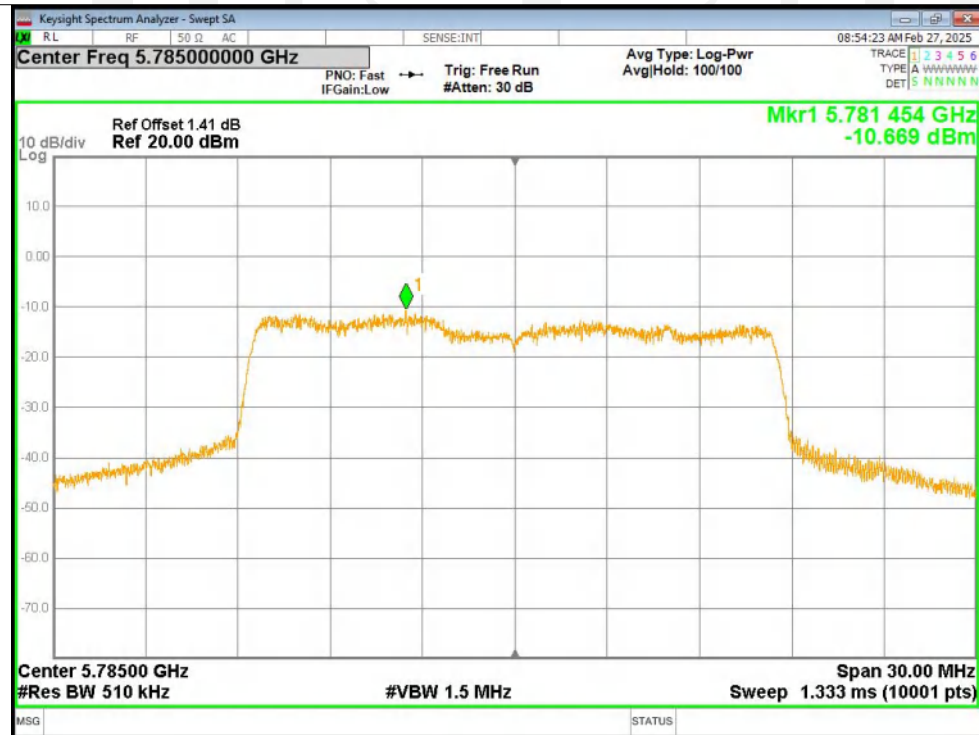
Total PSD = Conducted PSD + Duty factor(dB) + RB factor(dB)

Test Graphs

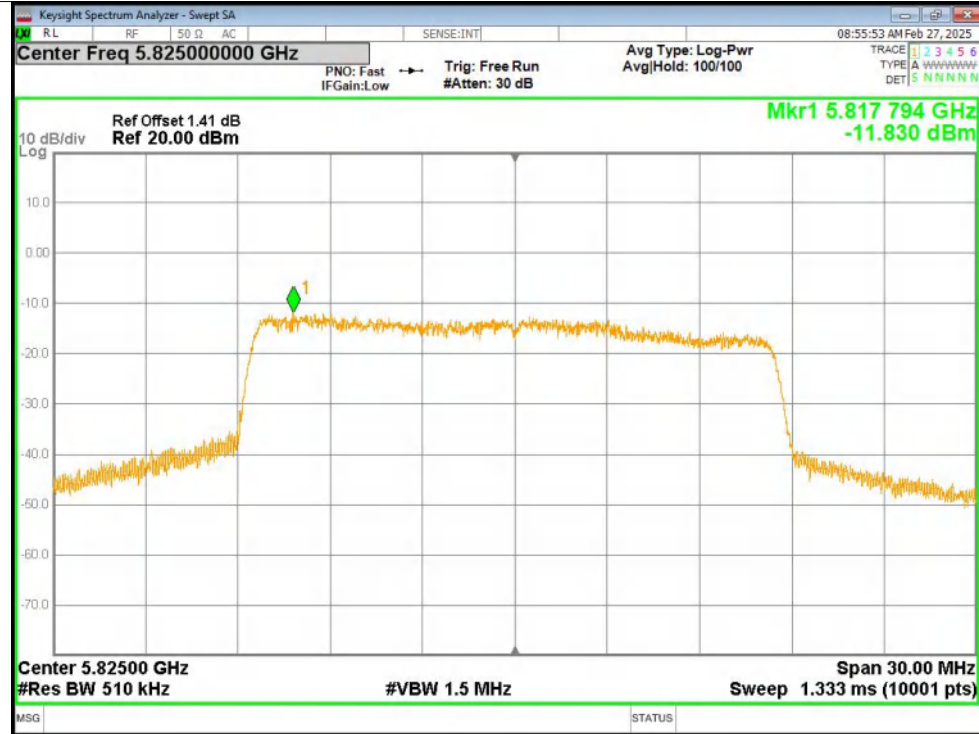
PSD NVNT a 5745MHz Ant1



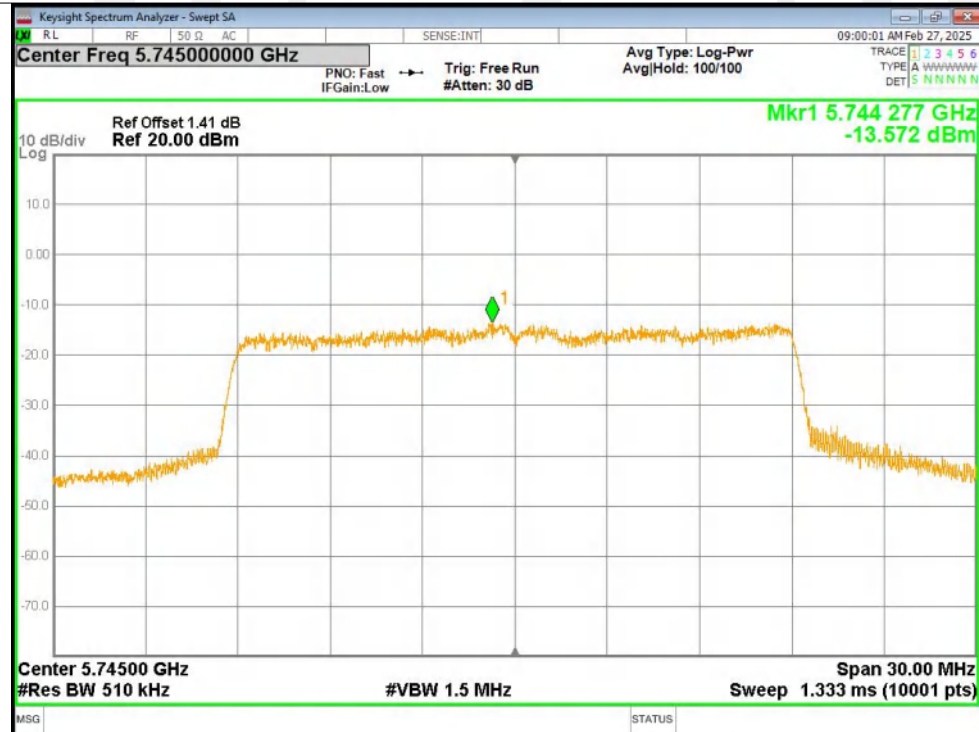
PSD NVNT a 5785MHz Ant1



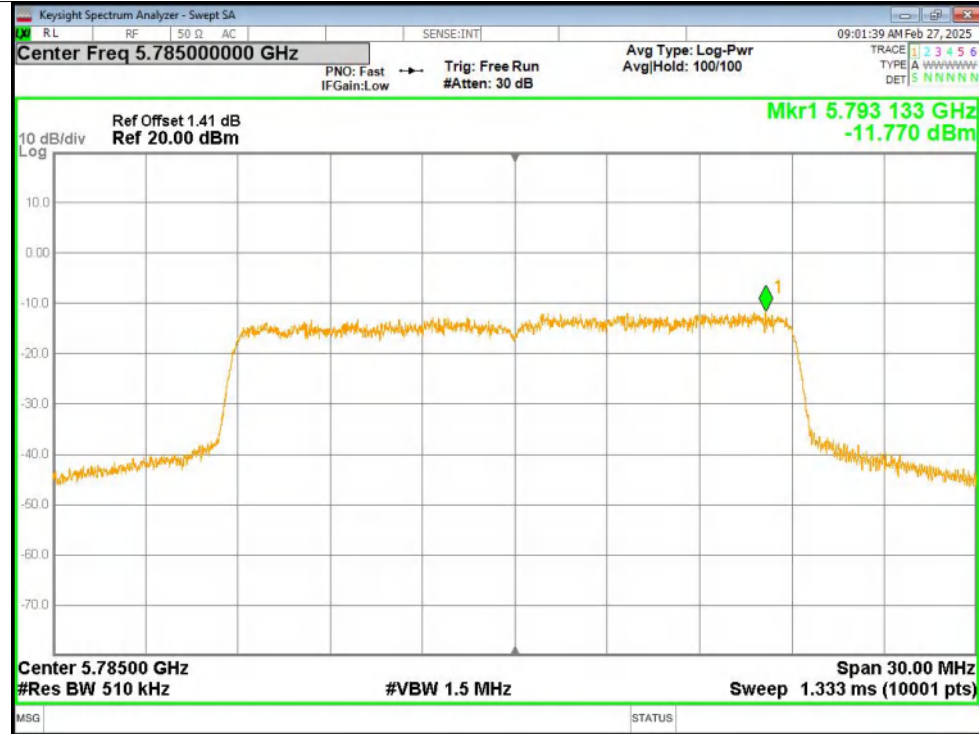
PSD NVNT a 5825MHz Ant1



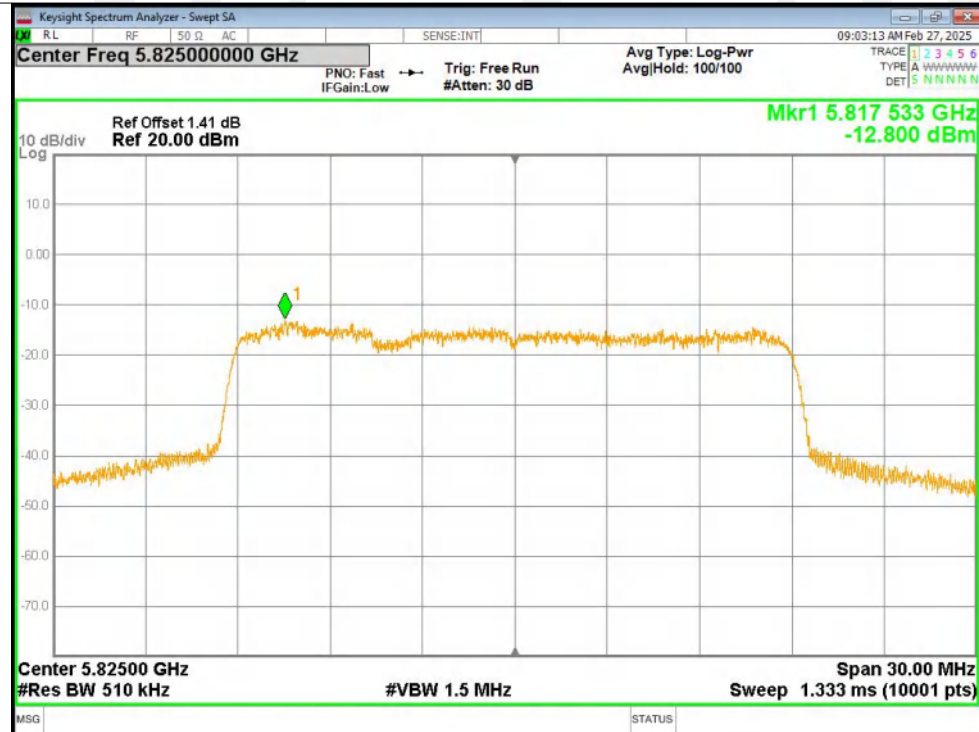
PSD NVNT n20 5745MHz Ant1



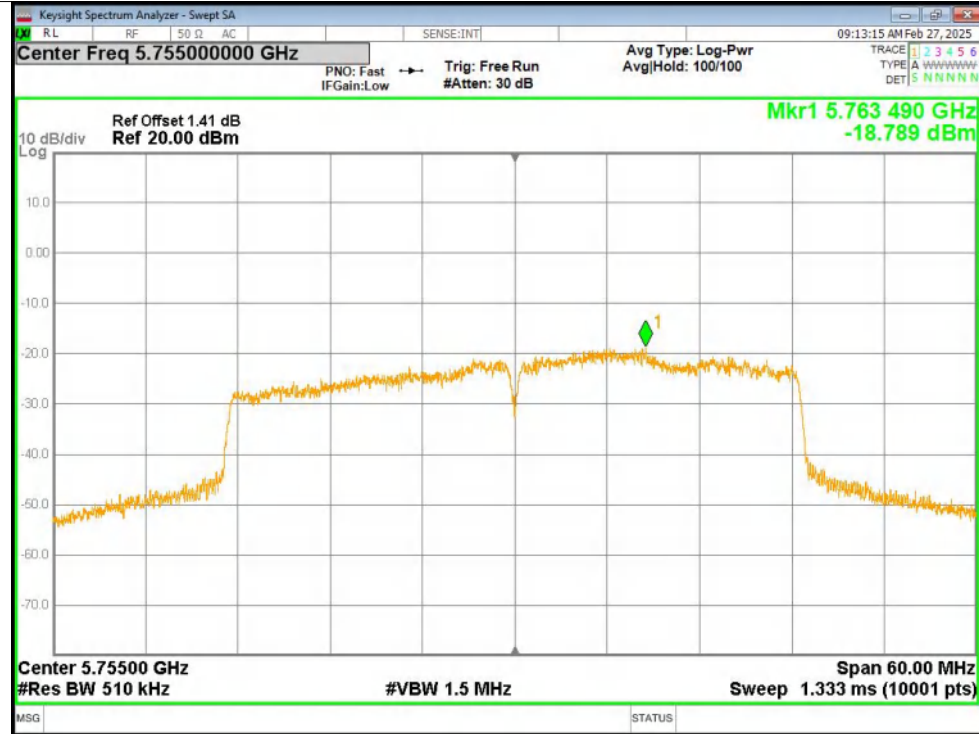
PSD NVNT n20 5785MHz Ant1



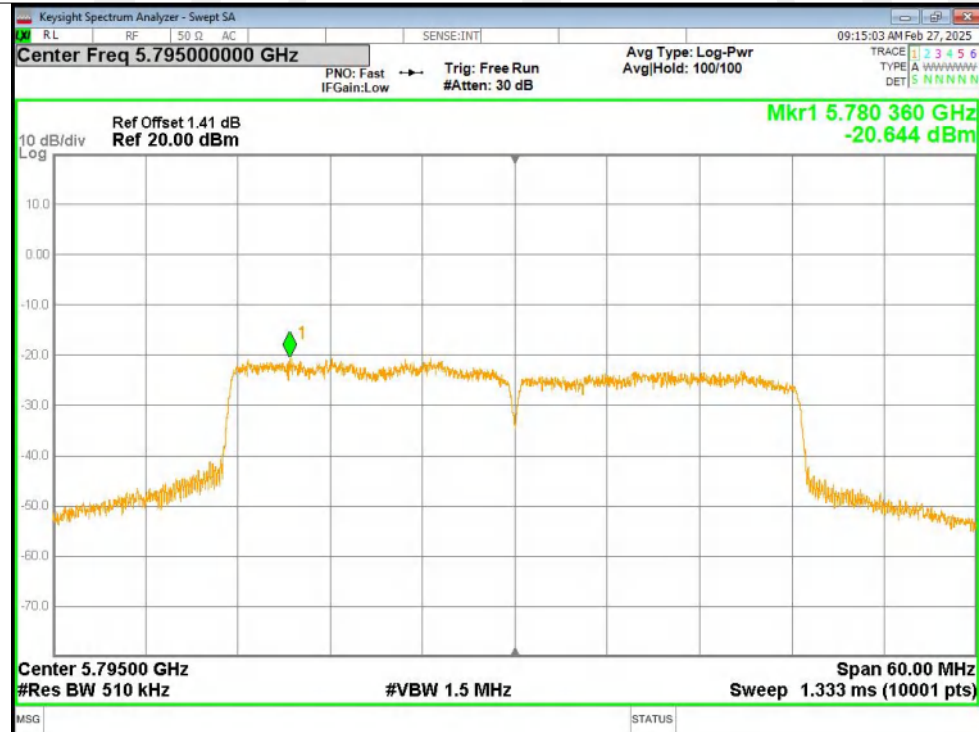
PSD NVNT n20 5825MHz Ant1



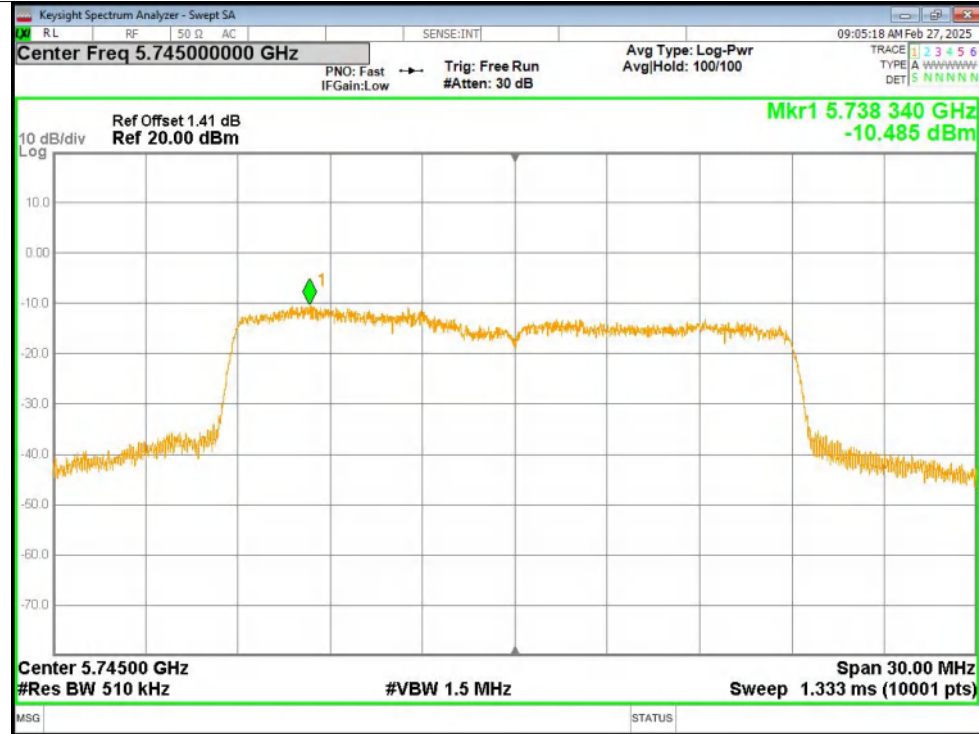
PSD NVNT n40 5755MHz Ant1



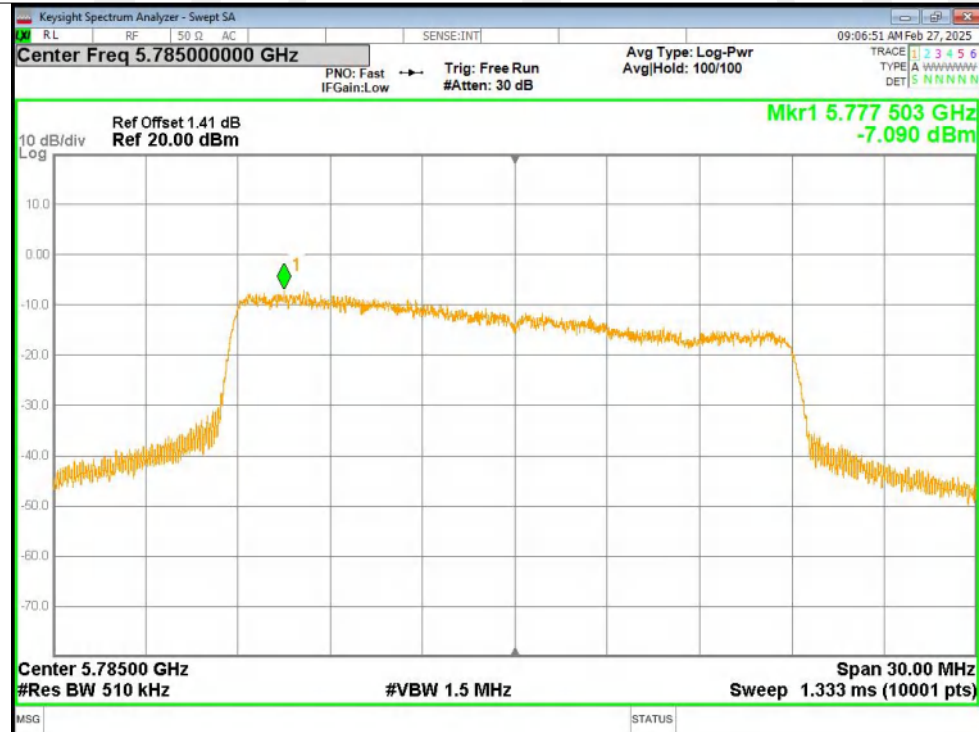
PSD NVNT n40 5795MHz Ant1



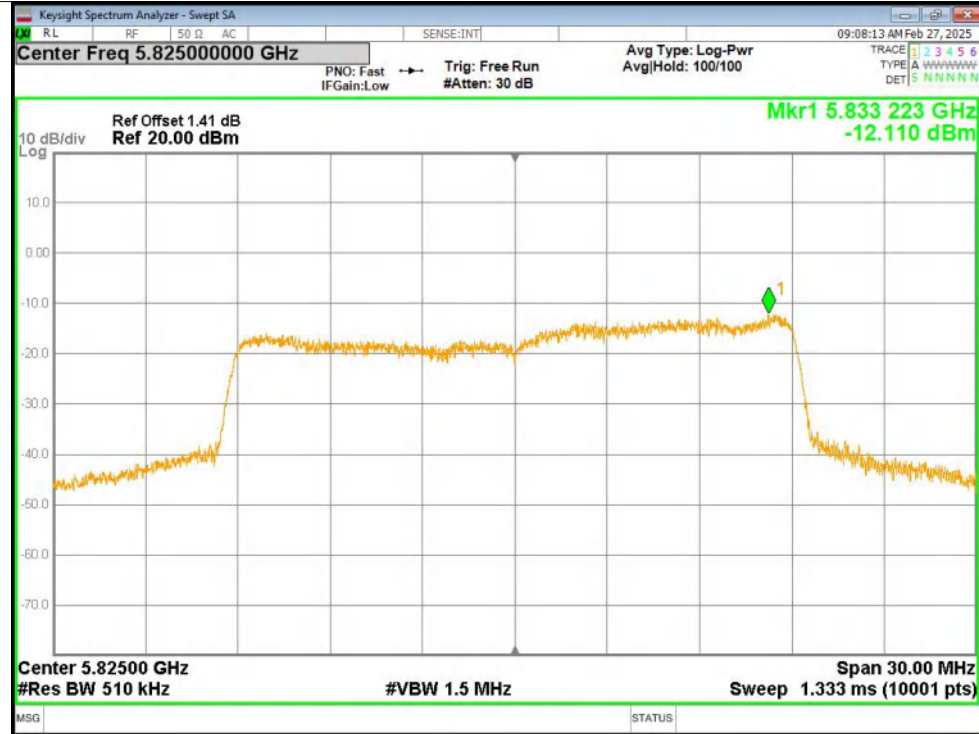
PSD NVNT ac20 5745MHz Ant1



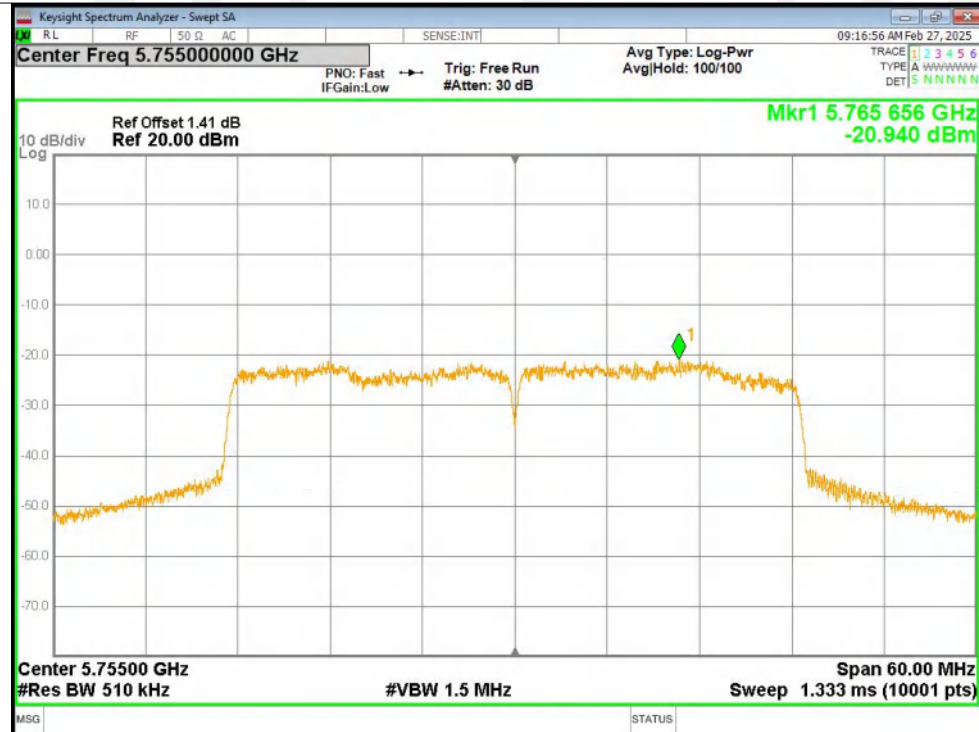
PSD NVNT ac20 5785MHz Ant1



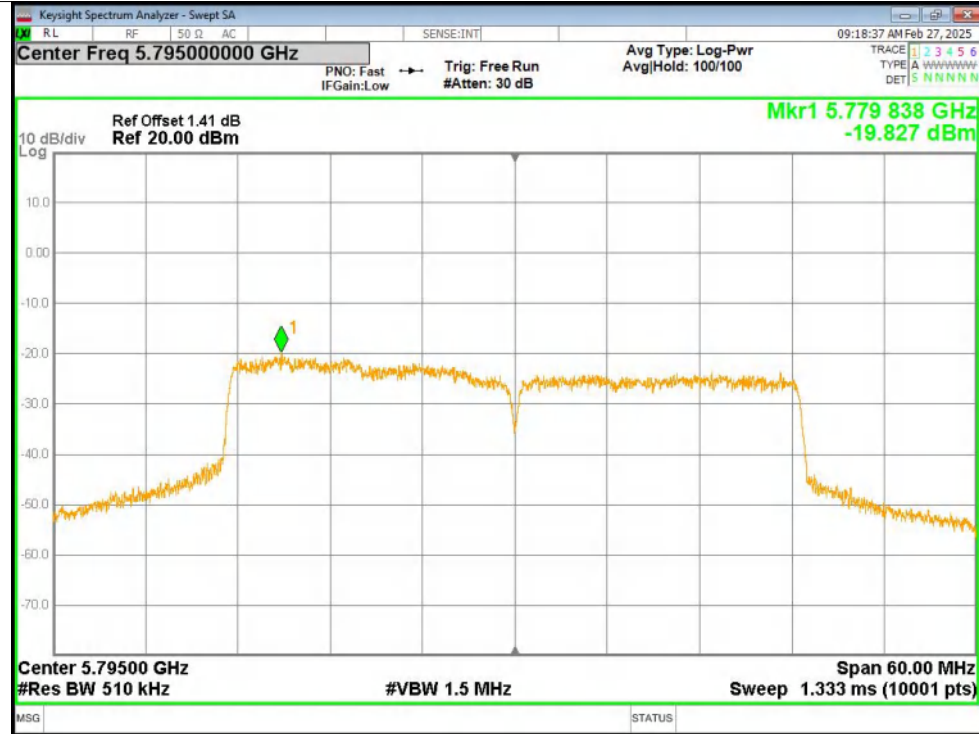
PSD NVNT ac20 5825MHz Ant1



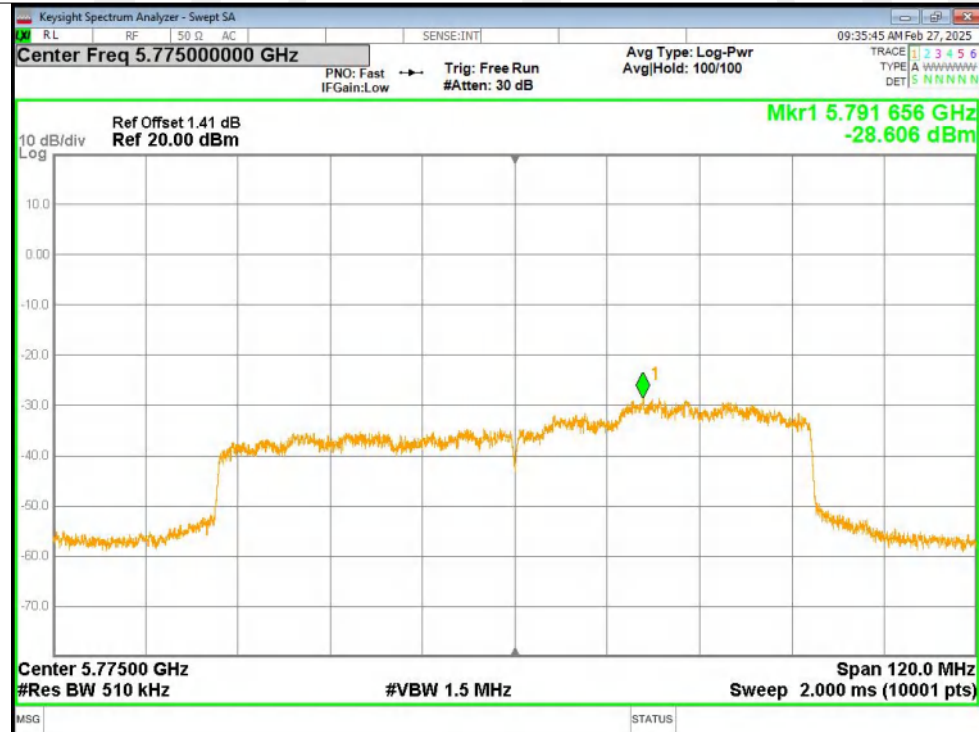
PSD NVNT ac40 5755MHz Ant1



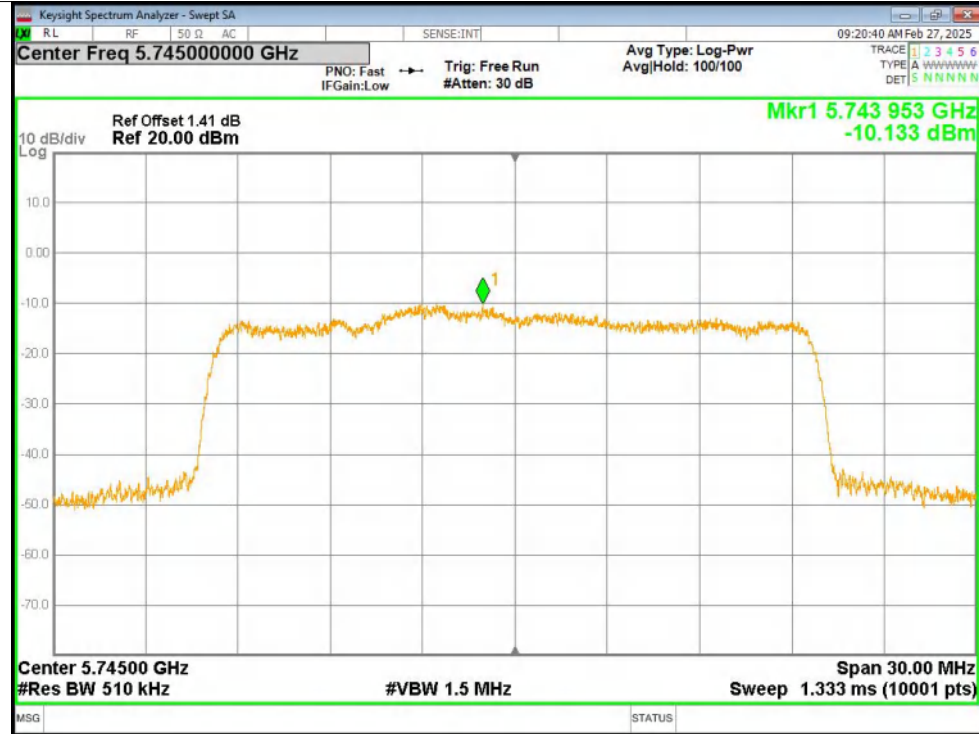
PSD NVNT ac40 5795MHz Ant1



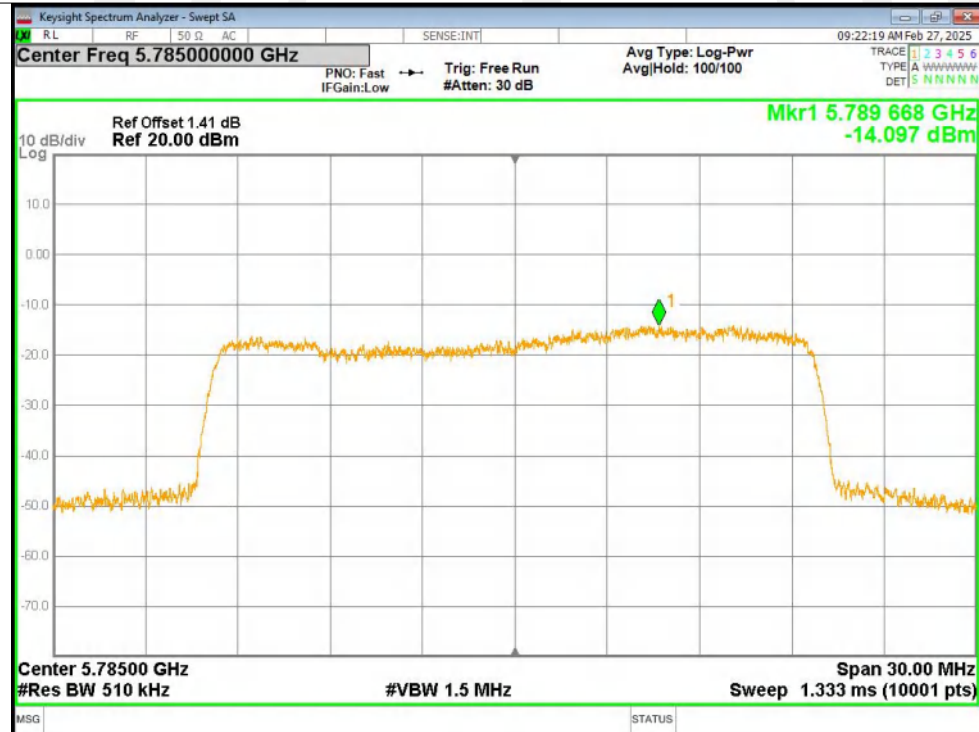
PSD NVNT ac80 5775MHz Ant1



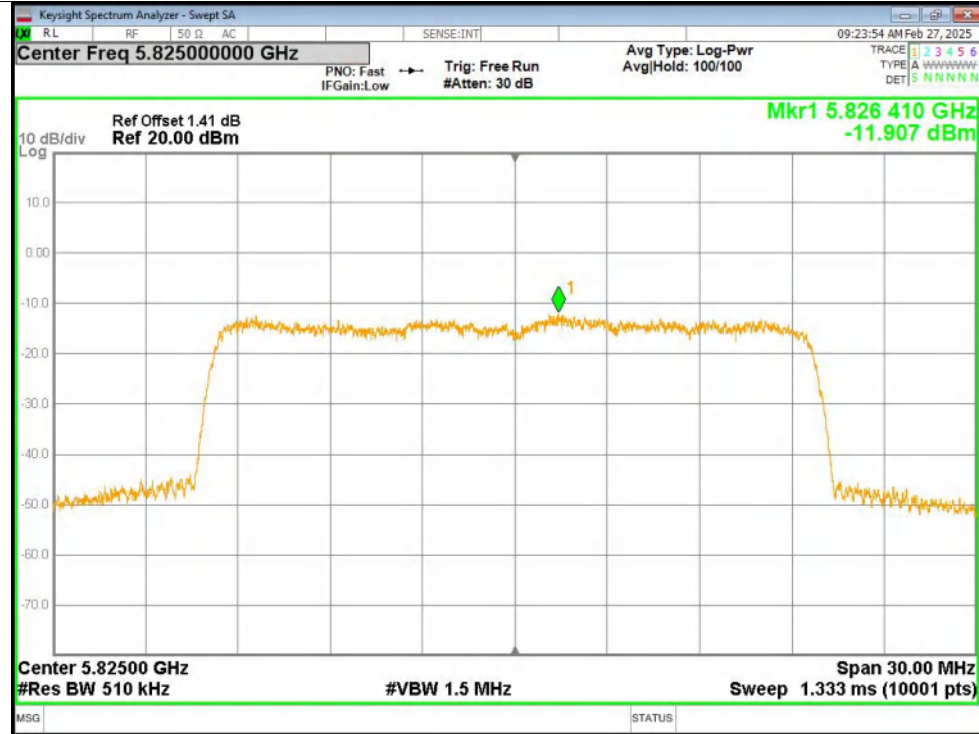
PSD NVNT ax20 5745MHz Ant1



PSD NVNT ax20 5785MHz Ant1



PSD NVNT ax20 5825MHz Ant1



PSD NVNT ax40 5755MHz Ant1

