

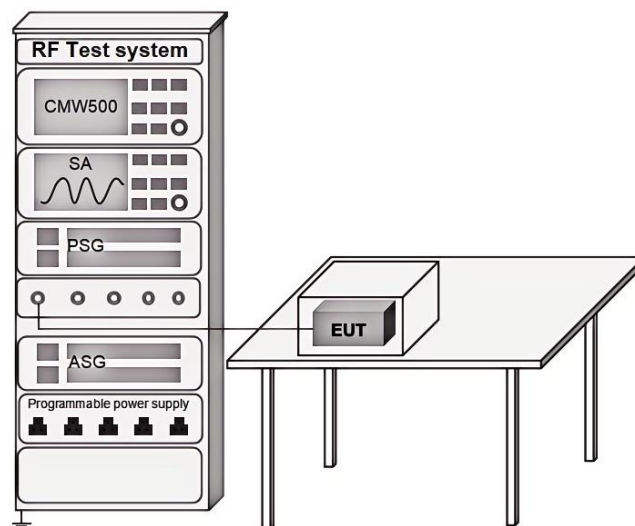
6.15 DFS: Non-occupancy period

Test Standard	47 CFR Part 15, Subpart E 15.407(h)(2)
Test Method	KDB 905462 D02 Section 7.8.3
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.15.1 Limit

Minimum 30 minutes

6.15.2 Test setup



6.15.3 Procedure

- 1)The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2)The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3)A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4)EUT will associate with the master at channel. The file `iperf.exe` specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.

- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

6.15.4 Test data

Pass: Please refer to Report BLA-EMC-202503-A7706 for details

7 Appendix A

7.1 Frequency Stability

Voltage vs. Frequency Stability

Test frequency		Test conditions		Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Max. Deviation (ppm)	Limit (ppm)	Verdict
Band	Frequency	Temp(°C)	Voltage(DC)						
Band 1	(20MHz)Lowest channel=5180MHz	20	10.8V	Ant1	5180.035	35000	6.76	25	Pass
			12V	Ant1	5180.015	15000	2.90	25	Pass
			13.2V	Ant1	5180.037	37000	7.14	25	Pass
Band 1	(40MHz)Lowest channel=5190MHz	20	10.8V	Ant1	5190.0185	18500	3.56	25	Pass
			12V	Ant1	5190.0075	7500	1.45	25	Pass
			13.2V	Ant1	5190.0295	29500	5.68	25	Pass
Band 1	(80MHz)Lowest channel=5210MHz	20	10.8V	Ant1	5210.037	37000	7.10	25	Pass
			12V	Ant1	5210.015	15000	2.88	25	Pass
			13.2V	Ant1	5210.0435	43500	8.35	25	Pass
Band 2	(20MHz)Lowest channel=5260MHz	20	10.8V	Ant1	5260.0285	28500	5.42	25	Pass
			12V	Ant1	5260.0175	17500	3.33	25	Pass
			13.2V	Ant1	5260.012	12000	2.28	25	Pass
Band 2	(40MHz)Lowest channel=5270MHz	20	10.8V	Ant1	5270.0315	31500	5.98	25	Pass
			12V	Ant1	5270.003	3000	0.57	25	Pass
			13.2V	Ant1	5270.002	2000	0.38	25	Pass
Band 2	(80MHz)Lowest channel=5290MHz	20	10.8V	Ant1	5290.0015	1500	0.28	25	Pass
			12V	Ant1	5290.0205	20500	3.88	25	Pass
			13.2V	Ant1	5290.031	31000	5.86	25	Pass
Band 3	(20MHz)Lowest channel=5500MHz	20	10.8V	Ant1	5500.0335	33500	6.09	25	Pass
			12V	Ant1	5500.02	20000	3.64	25	Pass
			13.2V	Ant1	5500.0435	43500	7.91	25	Pass
Band 3	(40MHz)Lowest channel=5510MHz	20	10.8V	Ant1	5510.006	6000	1.09	25	Pass
			12V	Ant1	5510.027	27000	4.90	25	Pass
			13.2V	Ant1	5510.0045	4500	0.82	25	Pass
Band 3	(80MHz)Lowest	20	10.8V	Ant1	5530.015	15000	2.71	25	Pass

	channel=5530MHz		12V	Ant1	5530.011	11000	1.99	25	Pass
			13.2V	Ant1	5530.0295	29500	5.33	25	Pass
Band 4	(20MHz)Lowest channel=5475MHz	20	10.8V	Ant1	5475.0185	18500	3.38	25	Pass
			12V	Ant1	5475.042	42000	7.67	25	Pass
			13.2V	Ant1	5475.0025	2500	0.46	25	Pass
Band 4	(40MHz)Lowest channel=5755MHz	20	10.8V	Ant1	5755.025	25000	4.34	25	Pass
			12V	Ant1	5755.027	27000	4.69	25	Pass
			13.2V	Ant1	5755.037	37000	6.43	25	Pass
Band 4	(80MHz)Lowest channel=5775MHz	20	10.8V	Ant1	5775.0005	500	0.09	25	Pass
			12V	Ant1	5775.031	31000	5.37	25	Pass
			13.2V	Ant1	5775.0405	40500	7.01	25	Pass

Temperature vs. Frequency Stability

Test frequency		Test conditions		Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Max. Deviation (ppm)	Limit (ppm)	Verdict
Band	Frequency	Voltage(DC /60Hz)	Temp(°C)						
Band 1	(20MHz)Lowest channel=5180MHz	12V	-20	Ant1	5180.0185	18500	3.57	25	Pass
			-10	Ant1	5180.0315	31500	6.08	25	Pass
			0	Ant1	5180.043	43000	8.30	25	Pass
			10	Ant1	5180.0315	31500	6.08	25	Pass
			20	Ant1	5180.022	22000	4.25	25	Pass
			30	Ant1	5180.028	28000	5.41	25	Pass
			40	Ant1	5180.006	6000	1.16	25	Pass
			50	Ant1	5180.04	40000	7.72	25	Pass
Band 1	(40MHz)Lowest channel=5190MHz	12V	-20	Ant1	5190.026	26000	5.01	25	Pass
			-10	Ant1	5190.0345	34500	6.65	25	Pass
			0	Ant1	5190.0495	49500	9.54	25	Pass
			10	Ant1	5190.02	20000	3.85	25	Pass
			20	Ant1	5190.0235	23500	4.53	25	Pass
			30	Ant1	5190.015	15000	2.89	25	Pass
			40	Ant1	5190.019	19000	3.66	25	Pass
			50	Ant1	5190.0055	5500	1.06	25	Pass
Band 1	(80MHz)Lowest channel=5210MHz	12V	-20	Ant1	5210.0055	5500	1.06	25	Pass
			-10	Ant1	5210.009	9000	1.73	25	Pass
			0	Ant1	5210.038	38000	7.29	25	Pass
			10	Ant1	5210.045	45000	8.64	25	Pass
			20	Ant1	5210.037	37000	7.10	25	Pass
			30	Ant1	5210.0005	500	0.10	25	Pass
			40	Ant1	5210.0365	36500	7.01	25	Pass
			50	Ant1	5210.019	19000	3.65	25	Pass
Band 2	(20MHz)Lowest channel=5260MHz	12V	-20	Ant1	5260.0145	14500	2.76	25	Pass
			-10	Ant1	5260.014	14000	2.66	25	Pass
			0	Ant1	5260.0145	14500	2.76	25	Pass
			10	Ant1	5260.035	35000	6.65	25	Pass
			20	Ant1	5260.038	38000	7.22	25	Pass
			30	Ant1	5260.033	33000	6.27	25	Pass
			40	Ant1	5260.0025	2500	0.48	25	Pass

			50	Ant1	5260.0185	18500	3.52	25	Pass
Band 2	(40MHz)Lowest channel=5270MH z	12V	-20	Ant1	5270.022	22000	4.17	25	Pass
			-10	Ant1	5270.046	46000	8.73	25	Pass
			0	Ant1	5270.0185	18500	3.51	25	Pass
			10	Ant1	5270.049	49000	9.30	25	Pass
			20	Ant1	5270.0495	49500	9.39	25	Pass
			30	Ant1	5270.003	3000	0.57	25	Pass
			40	Ant1	5270.0345	34500	6.55	25	Pass
			50	Ant1	5270.005	5000	0.95	25	Pass
Band 2	(80MHz)Lowest channel=5290MH z	12V	-20	Ant1	5290.0275	27500	5.20	25	Pass
			-10	Ant1	5290.0335	33500	6.33	25	Pass
			0	Ant1	5290.0145	14500	2.74	25	Pass
			10	Ant1	5290.0075	7500	1.42	25	Pass
			20	Ant1	5290.047	47000	8.88	25	Pass
			30	Ant1	5290	0	0.00	25	Pass
			40	Ant1	5290.013	13000	2.46	25	Pass
			50	Ant1	5290.0415	41500	7.84	25	Pass
Band 3	(20MHz)Lowest channel=5500MH z	12V	-20	Ant1	5500.0115	11500	2.09	25	Pass
			-10	Ant1	5500.0045	4500	0.82	25	Pass
			0	Ant1	5500.0025	2500	0.45	25	Pass
			10	Ant1	5500.0305	30500	5.55	25	Pass
			20	Ant1	5500.0315	31500	5.73	25	Pass
			30	Ant1	5500.0065	6500	1.18	25	Pass
			40	Ant1	5500.022	22000	4.00	25	Pass
			50	Ant1	5500.019	19000	3.45	25	Pass
Band 3	(40MHz)Lowest channel=5510MH z	12V	-20	Ant1	5510.0465	46500	8.44	25	Pass
			-10	Ant1	5510.033	33000	5.99	25	Pass
			0	Ant1	5510.0285	28500	5.17	25	Pass
			10	Ant1	5510.0405	40500	7.35	25	Pass
			20	Ant1	5510.0445	44500	8.08	25	Pass
			30	Ant1	5510.029	29000	5.26	25	Pass
			40	Ant1	5510.0095	9500	1.72	25	Pass
			50	Ant1	5510.0445	44500	8.08	25	Pass
Band 3	(80MHz)Lowest	12V	-20	Ant1	5530.0165	16500	2.98	25	Pass

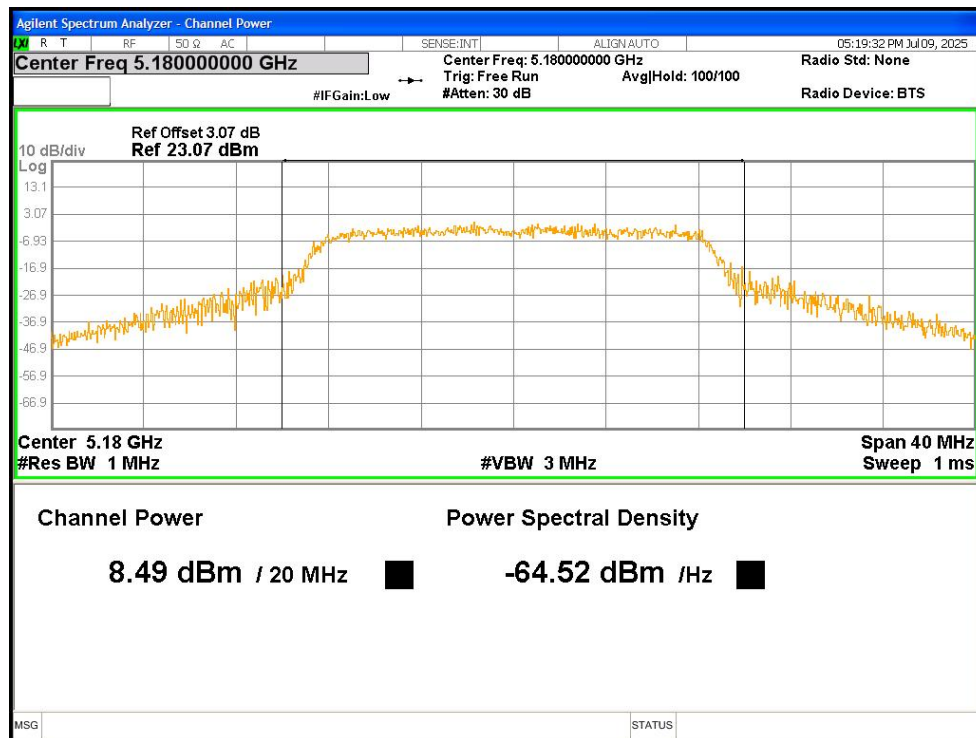
	channel=5530MHz Z		-10	Ant1	5530.0195	19500	3.53	25	Pass
			0	Ant1	5530.0325	32500	5.88	25	Pass
			10	Ant1	5530.0175	17500	3.16	25	Pass
			20	Ant1	5530.012	12000	2.17	25	Pass
			30	Ant1	5530.0185	18500	3.35	25	Pass
			40	Ant1	5530.039	39000	7.05	25	Pass
			50	Ant1	5530.0245	24500	4.43	25	Pass
Band 4	(20MHz)Lowest channel=5475MHz Z	12V	-20	Ant1	5475.038	38000	6.94	25	Pass
			-10	Ant1	5475.005	5000	0.91	25	Pass
			0	Ant1	5475.0055	5500	1.00	25	Pass
			10	Ant1	5475.043	43000	7.85	25	Pass
			20	Ant1	5475.007	7000	1.28	25	Pass
			30	Ant1	5475.0455	45500	8.31	25	Pass
			40	Ant1	5475.0165	16500	3.01	25	Pass
			50	Ant1	5475.008	8000	1.46	25	Pass
			-20	Ant1	5755.0015	1500	0.26	25	Pass
			-10	Ant1	5755.0485	48500	8.43	25	Pass
			0	Ant1	5755.038	38000	6.60	25	Pass
			10	Ant1	5755.0175	17500	3.04	25	Pass
			20	Ant1	5755.019	19000	3.30	25	Pass
			30	Ant1	5755.0035	3500	0.61	25	Pass
Band 4	(40MHz)Lowest channel=5755MHz Z	12V	40	Ant1	5755.005	5000	0.87	25	Pass
			50	Ant1	5755.0335	33500	5.82	25	Pass
			-20	Ant1	5775.01	10000	1.73	25	Pass
			-10	Ant1	5775.0465	46500	8.05	25	Pass
			0	Ant1	5775.008	8000	1.39	25	Pass
			10	Ant1	5775.0005	500	0.09	25	Pass
			20	Ant1	5775.0385	38500	6.67	25	Pass
			30	Ant1	5775.031	31000	5.37	25	Pass
			40	Ant1	5775.0455	45500	7.88	25	Pass
			50	Ant1	5775.0285	28500	4.94	25	Pass

7.2 Maximum Conducted Output Power

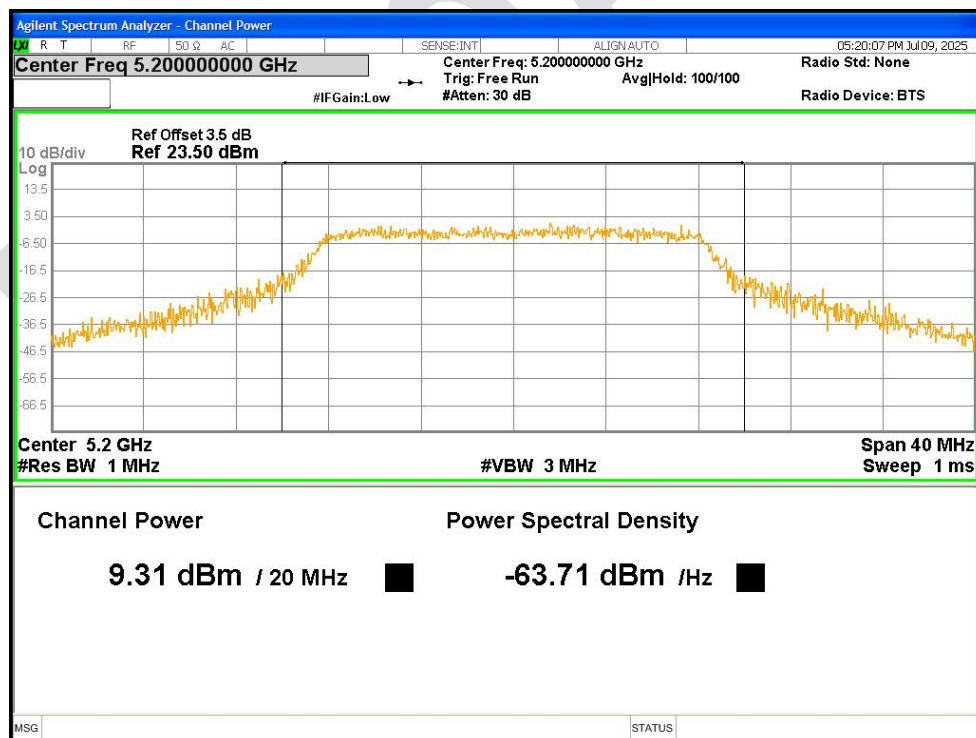
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	8.488	24	Pass
NVNT	a	5200	Ant1	9.305	24	Pass
NVNT	a	5240	Ant1	9.723	24	Pass
NVNT	a	5260	Ant1	9.059	24	Pass
NVNT	a	5280	Ant1	8.33	24	Pass
NVNT	a	5320	Ant1	8.267	24	Pass
NVNT	a	5500	Ant1	17.45	24	Pass
NVNT	a	5600	Ant1	15.904	24	Pass
NVNT	a	5700	Ant1	16.989	24	Pass
NVNT	a	5745	Ant1	15.193	30	Pass
NVNT	a	5785	Ant1	15.66	30	Pass
NVNT	a	5825	Ant1	15.529	30	Pass
NVNT	n20	5180	Ant1	7.937	24	Pass
NVNT	n20	5200	Ant1	8.915	24	Pass
NVNT	n20	5240	Ant1	8.482	24	Pass
NVNT	n20	5260	Ant1	7.825	24	Pass
NVNT	n20	5280	Ant1	8.249	24	Pass
NVNT	n20	5320	Ant1	7.888	24	Pass
NVNT	n20	5500	Ant1	14.589	24	Pass
NVNT	n20	5600	Ant1	14.489	24	Pass
NVNT	n20	5700	Ant1	15.817	24	Pass
NVNT	n20	5745	Ant1	14.225	30	Pass
NVNT	n20	5785	Ant1	14.439	30	Pass
NVNT	n20	5825	Ant1	14.345	30	Pass
NVNT	n40	5190	Ant1	8.061	24	Pass
NVNT	n40	5230	Ant1	8.44	24	Pass
NVNT	n40	5270	Ant1	8.295	24	Pass
NVNT	n40	5310	Ant1	8.249	24	Pass
NVNT	n40	5510	Ant1	15.491	24	Pass
NVNT	n40	5590	Ant1	14.282	24	Pass
NVNT	n40	5670	Ant1	15.477	24	Pass
NVNT	n40	5755	Ant1	13.898	30	Pass

NVNT	n40	5795	Ant1	13.737	30	Pass
NVNT	ac20	5180	Ant1	7.342	24	Pass
NVNT	ac20	5200	Ant1	7.549	24	Pass
NVNT	ac20	5240	Ant1	8.032	24	Pass
NVNT	ac20	5260	Ant1	8.505	24	Pass
NVNT	ac20	5280	Ant1	8.548	24	Pass
NVNT	ac20	5320	Ant1	7.828	24	Pass
NVNT	ac20	5500	Ant1	15.064	24	Pass
NVNT	ac20	5600	Ant1	13.744	24	Pass
NVNT	ac20	5700	Ant1	14.948	24	Pass
NVNT	ac20	5745	Ant1	13.431	30	Pass
NVNT	ac20	5785	Ant1	13.804	30	Pass
NVNT	ac20	5825	Ant1	13.853	30	Pass
NVNT	ac40	5190	Ant1	7.923	24	Pass
NVNT	ac40	5230	Ant1	8.167	24	Pass
NVNT	ac40	5270	Ant1	8.723	24	Pass
NVNT	ac40	5310	Ant1	8.209	24	Pass
NVNT	ac40	5510	Ant1	14.67	24	Pass
NVNT	ac40	5590	Ant1	13.721	24	Pass
NVNT	ac40	5670	Ant1	14.749	24	Pass
NVNT	ac40	5755	Ant1	13.133	30	Pass
NVNT	ac40	5795	Ant1	13.183	30	Pass
NVNT	ac80	5210	Ant1	7.712	24	Pass
NVNT	ac80	5290	Ant1	8.78	24	Pass
NVNT	ac80	5530	Ant1	14.886	24	Pass
NVNT	ac80	5610	Ant1	14	24	Pass
NVNT	ac80	5775	Ant1	13.817	30	Pass

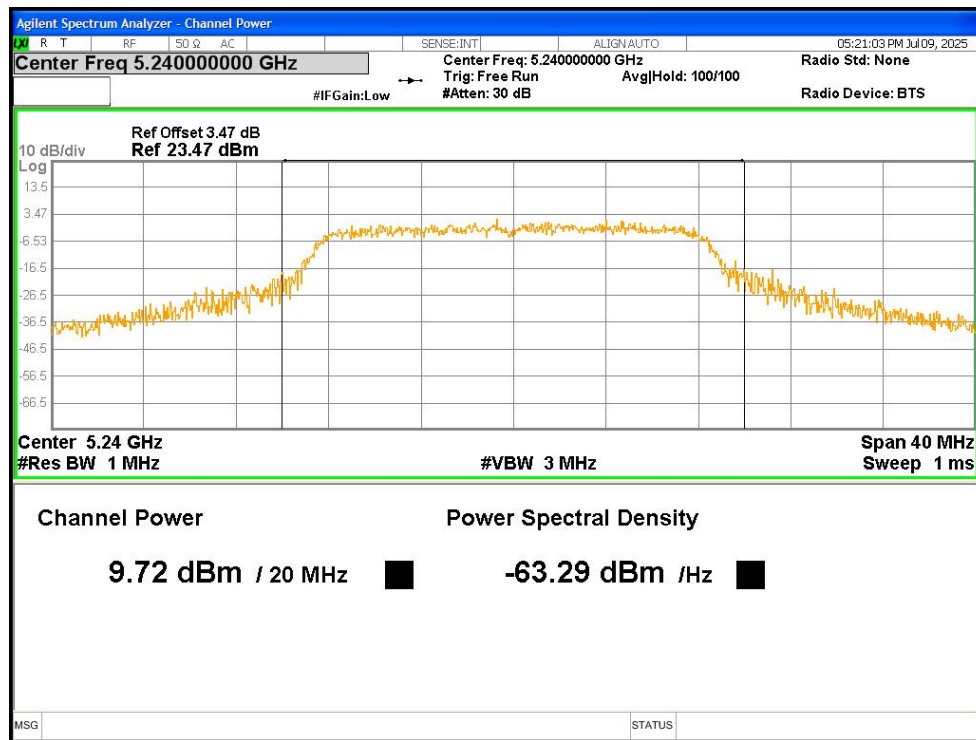
Power NVNT a 5180MHz Ant1



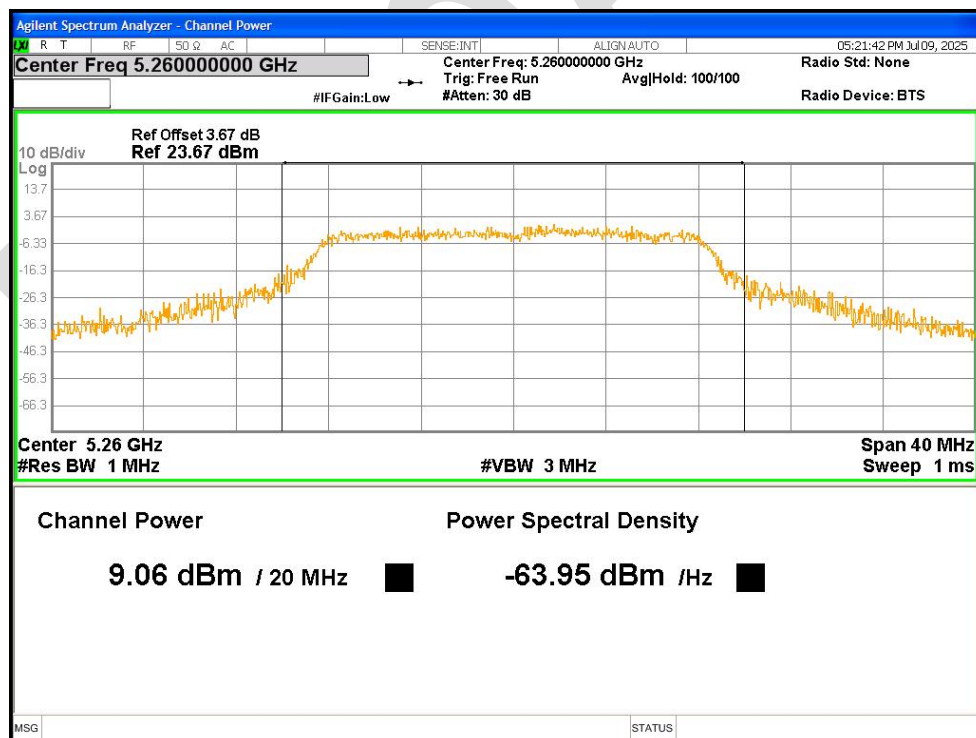
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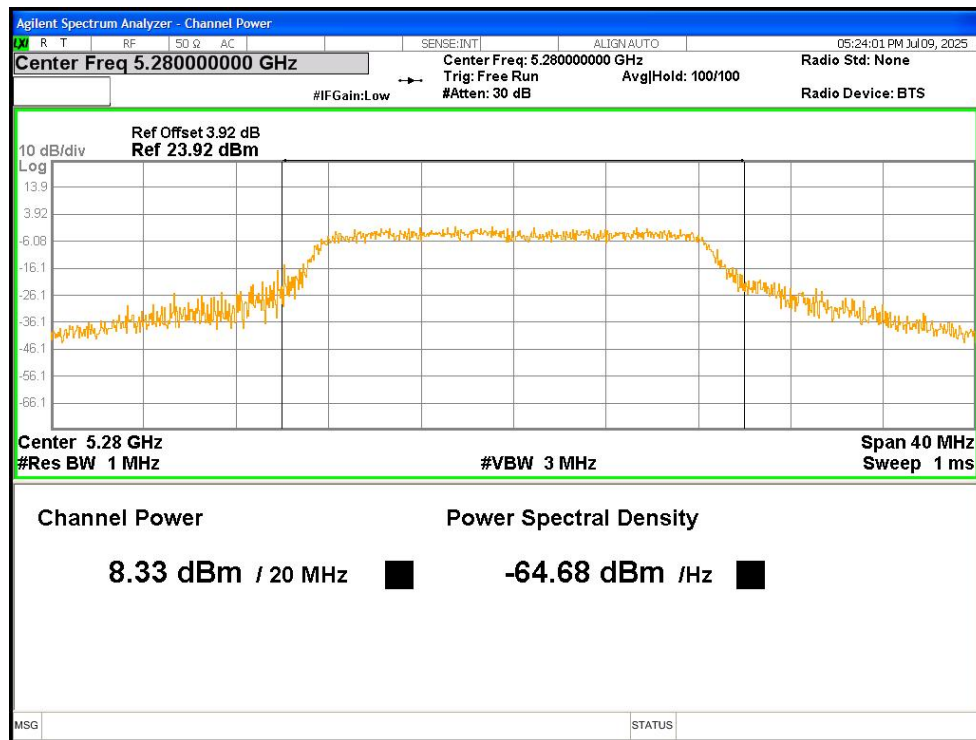
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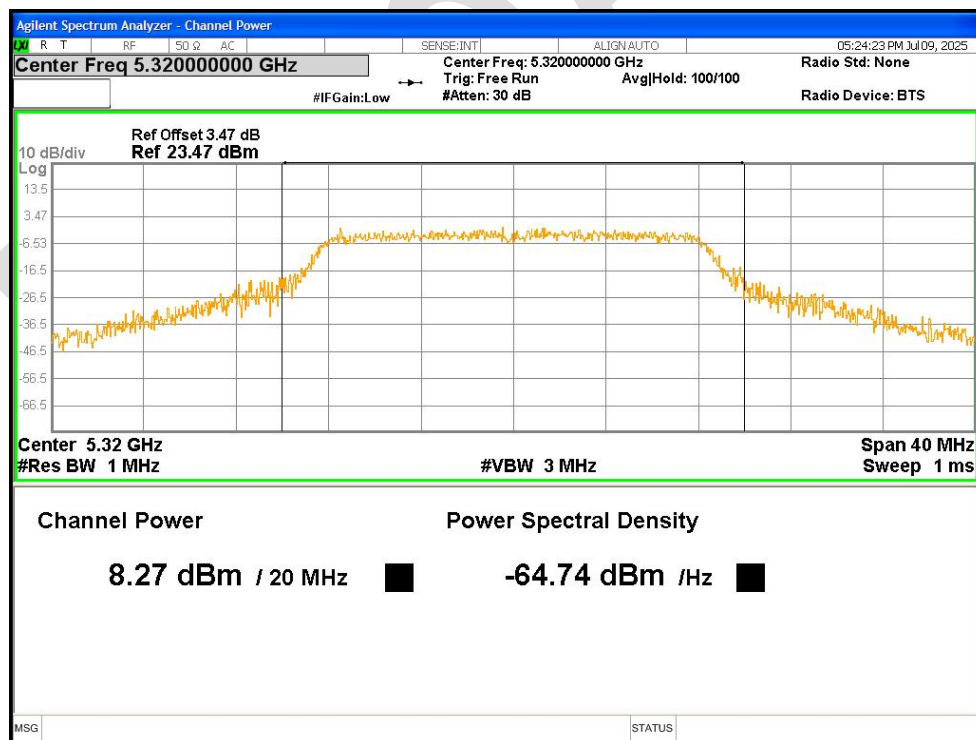
Power NVNT a 5260MHz Ant1



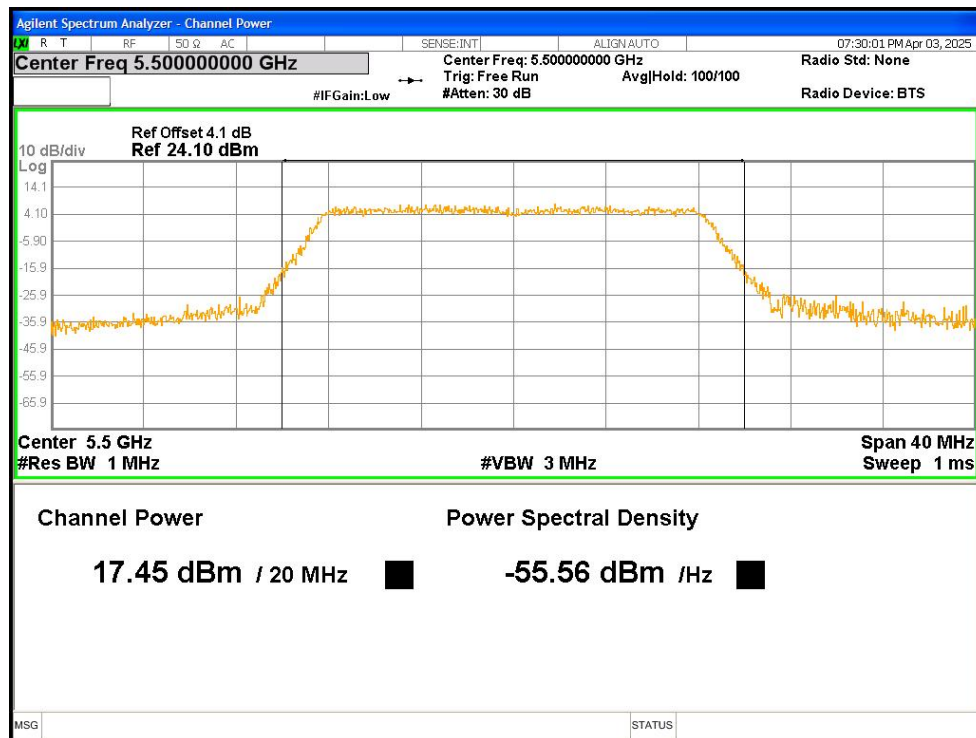
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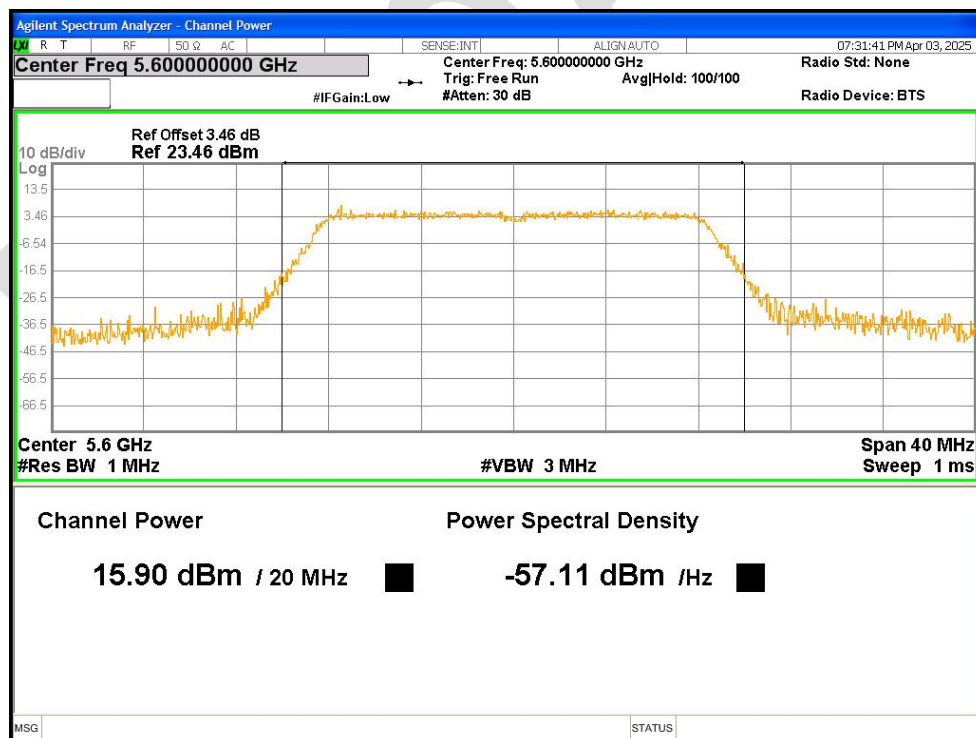
Power NVNT a 5320MHz Ant1



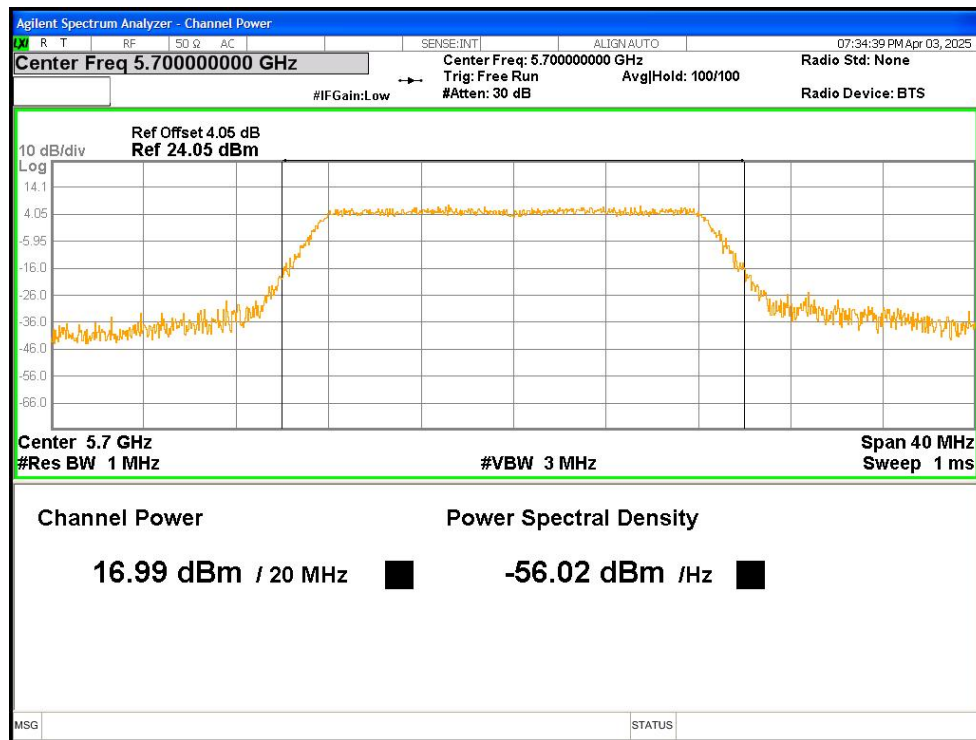
Power NVNT a 5500MHz Ant1



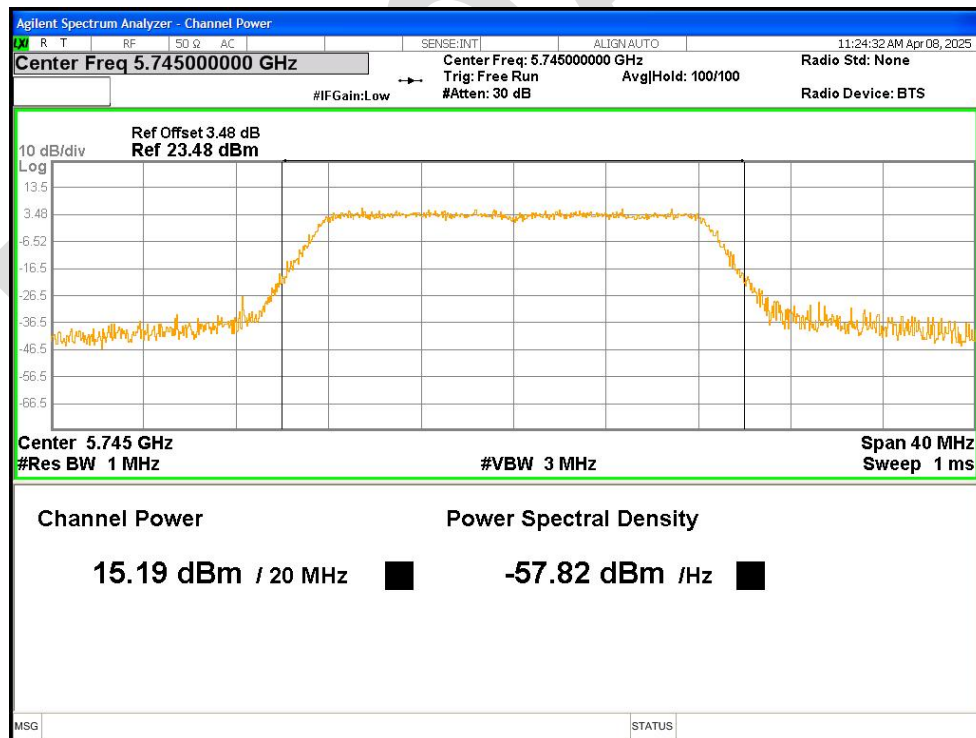
Power NVNT a 5600MHz Ant1



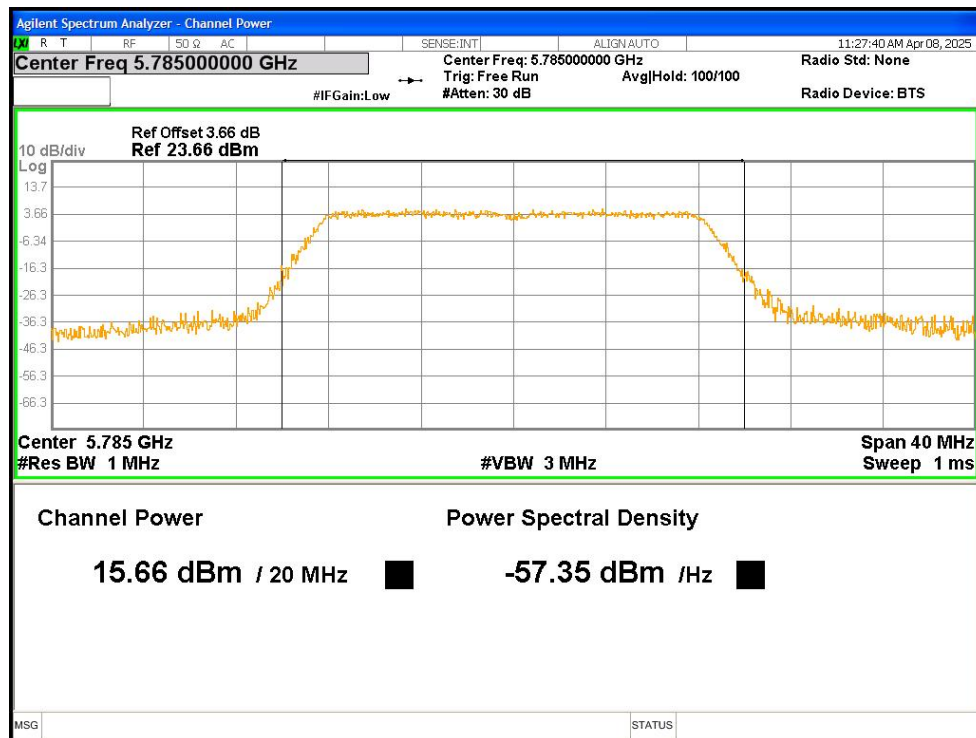
Power NVNT a 5700MHz Ant1



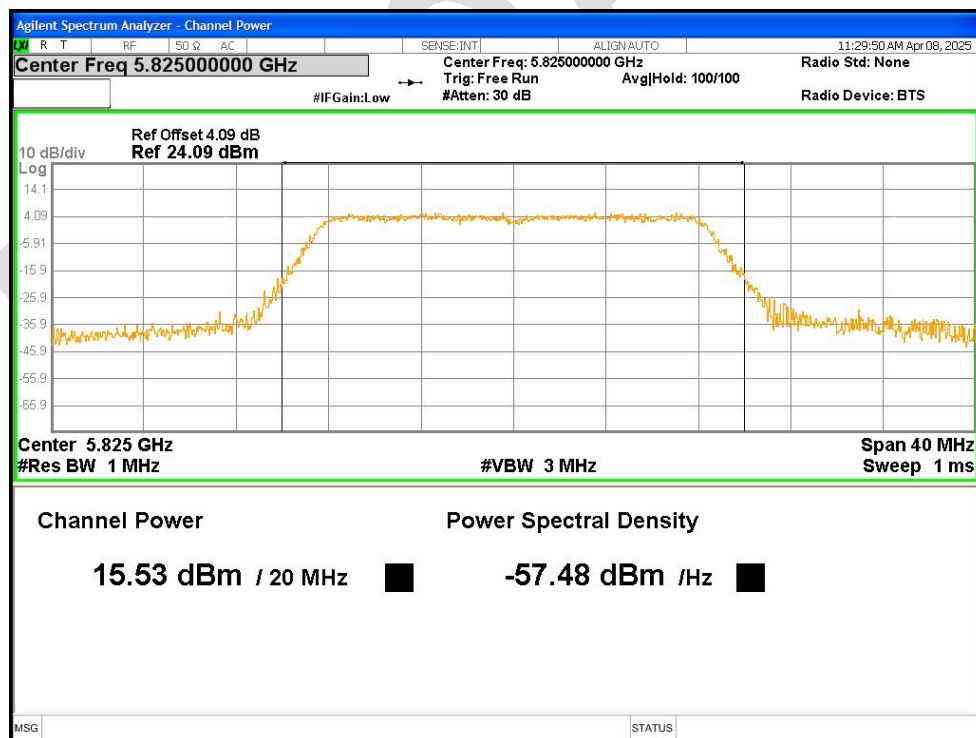
Power NVNT a 5745MHz Ant1



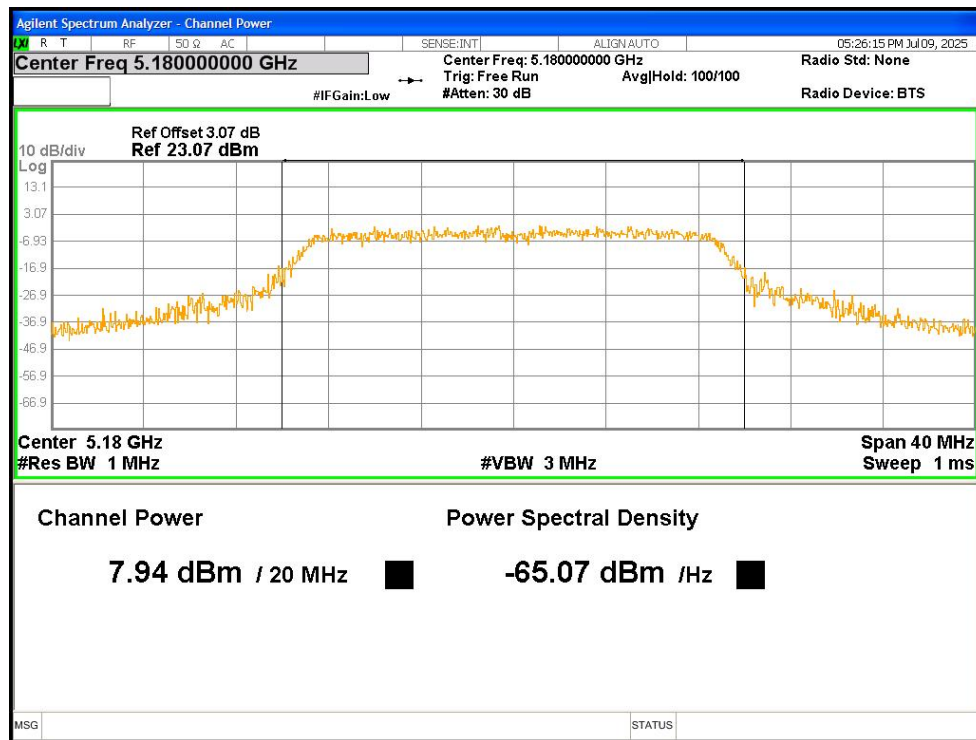
Power NVNT a 5785MHz Ant1



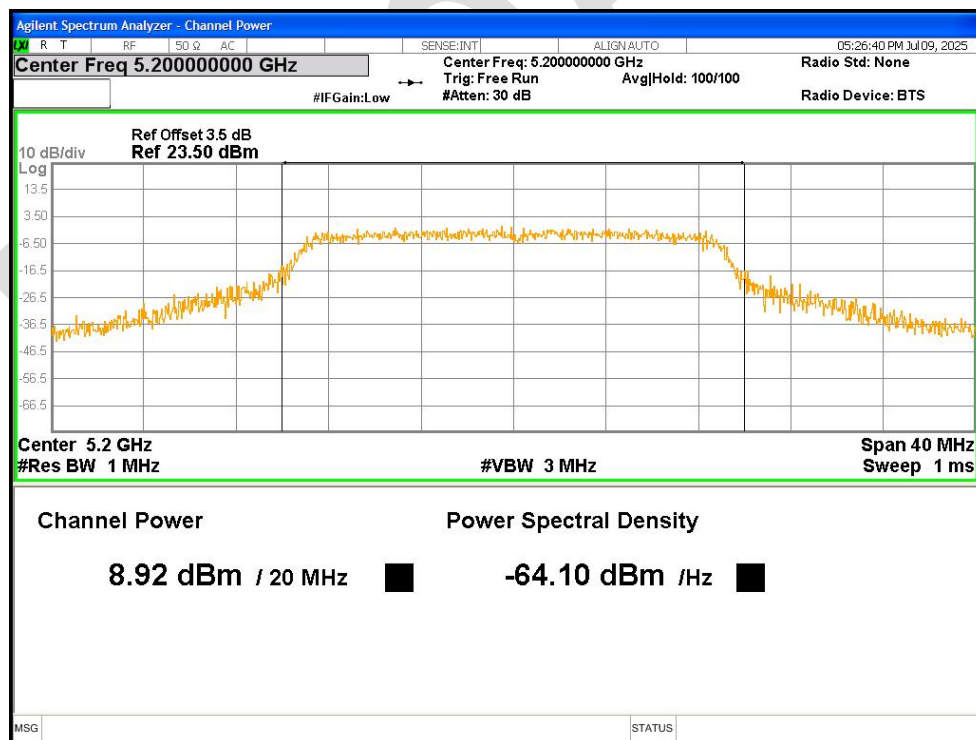
Power NVNT a 5825MHz Ant1



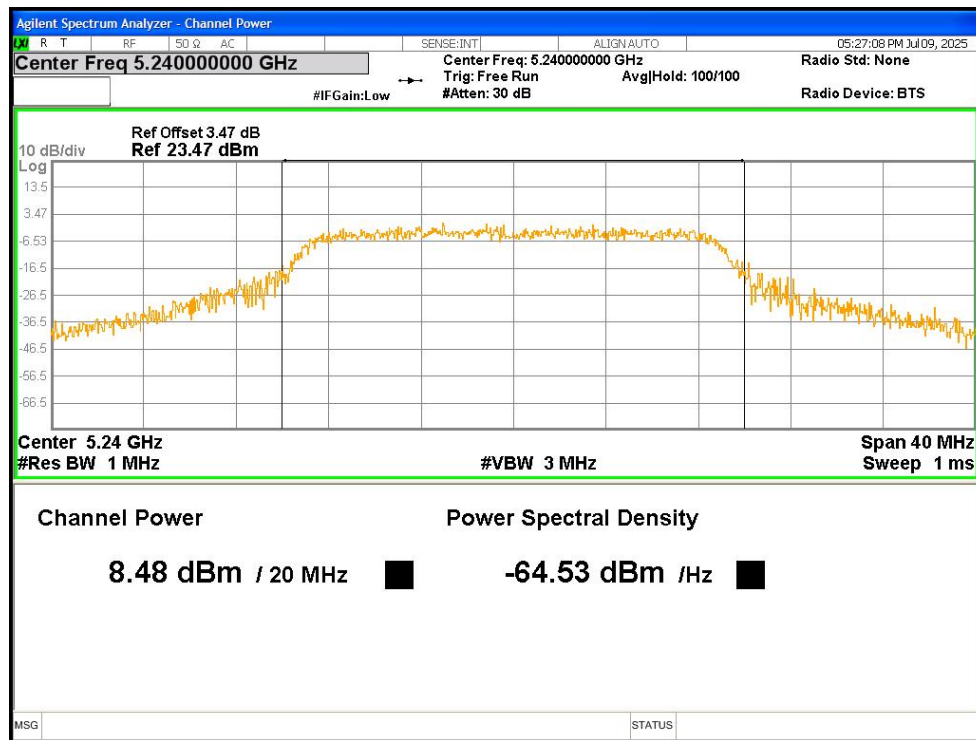
Power NVNT n20 5180MHz Ant1



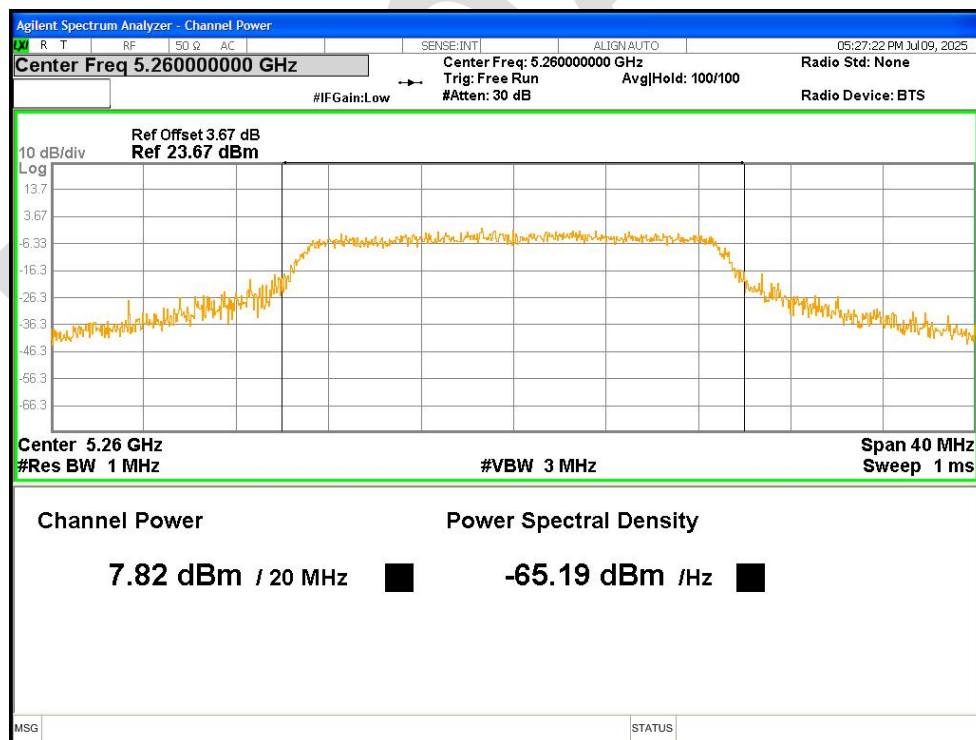
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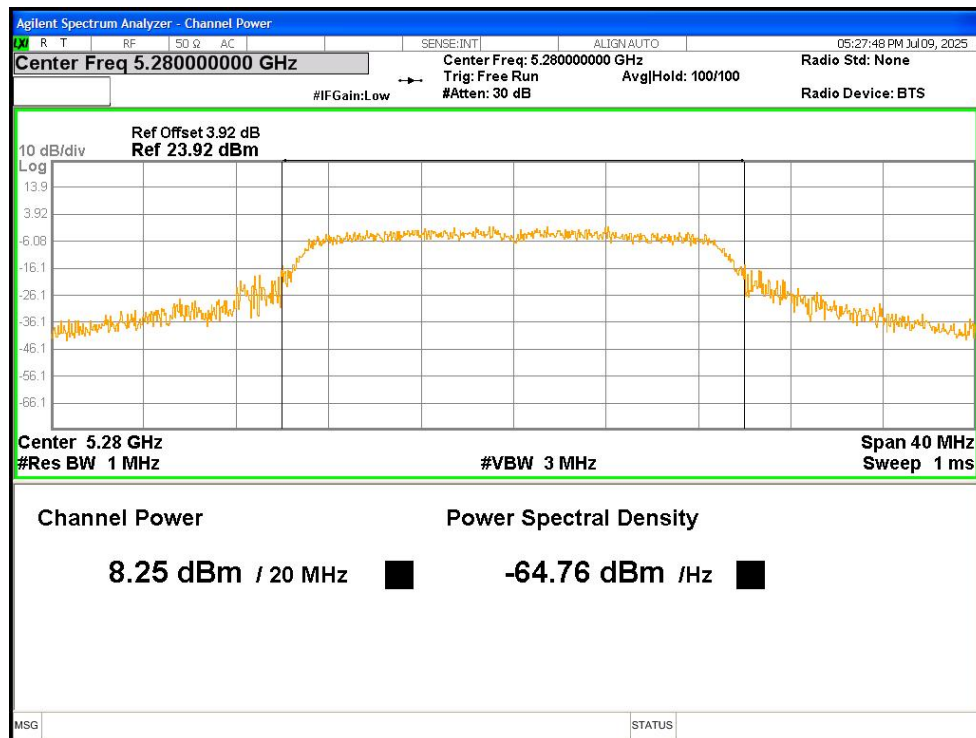
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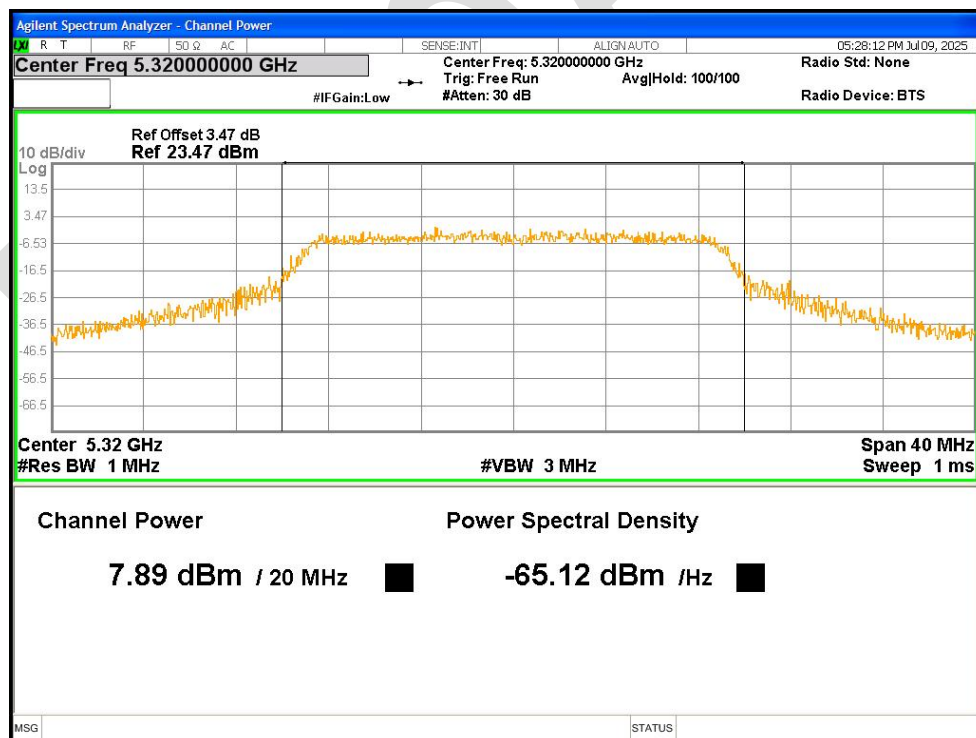
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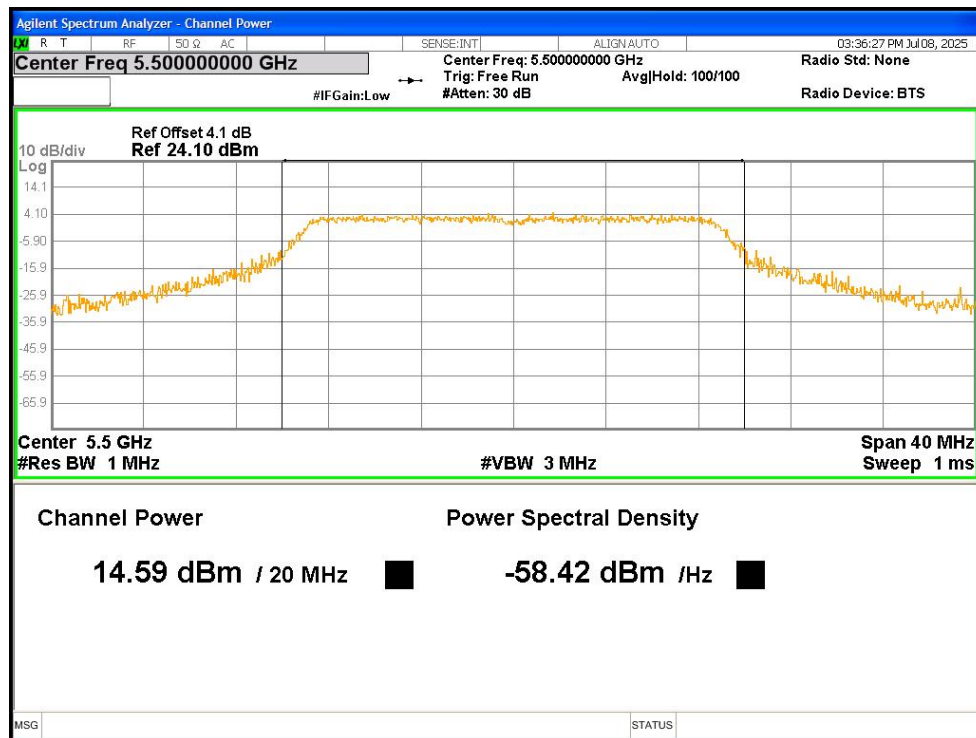
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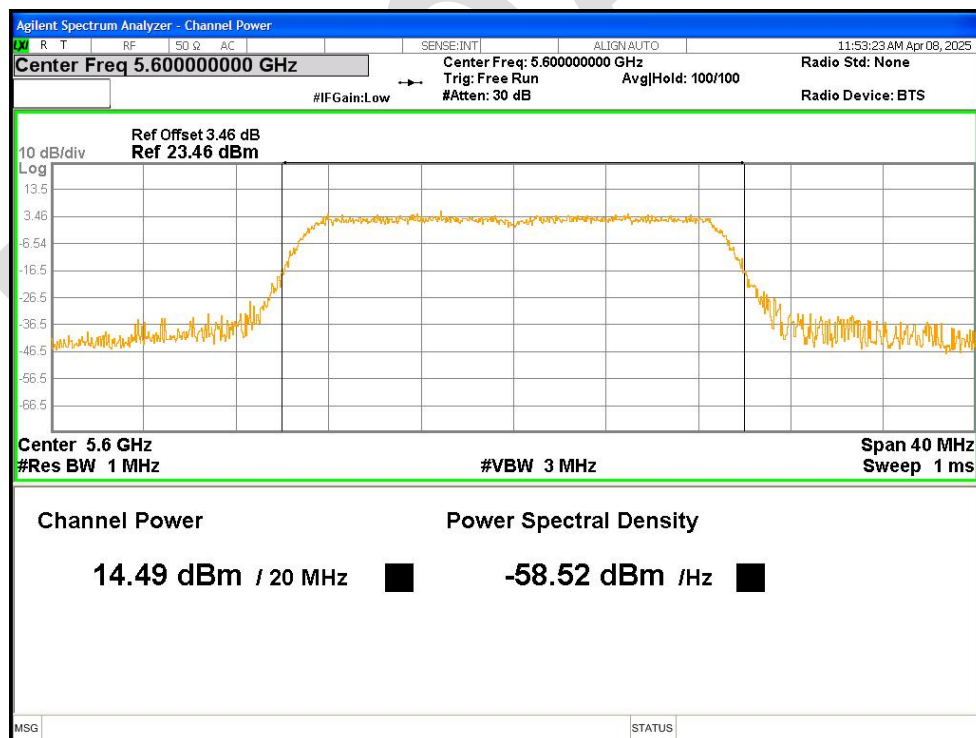
Power NVNT n20 5320MHz Ant1



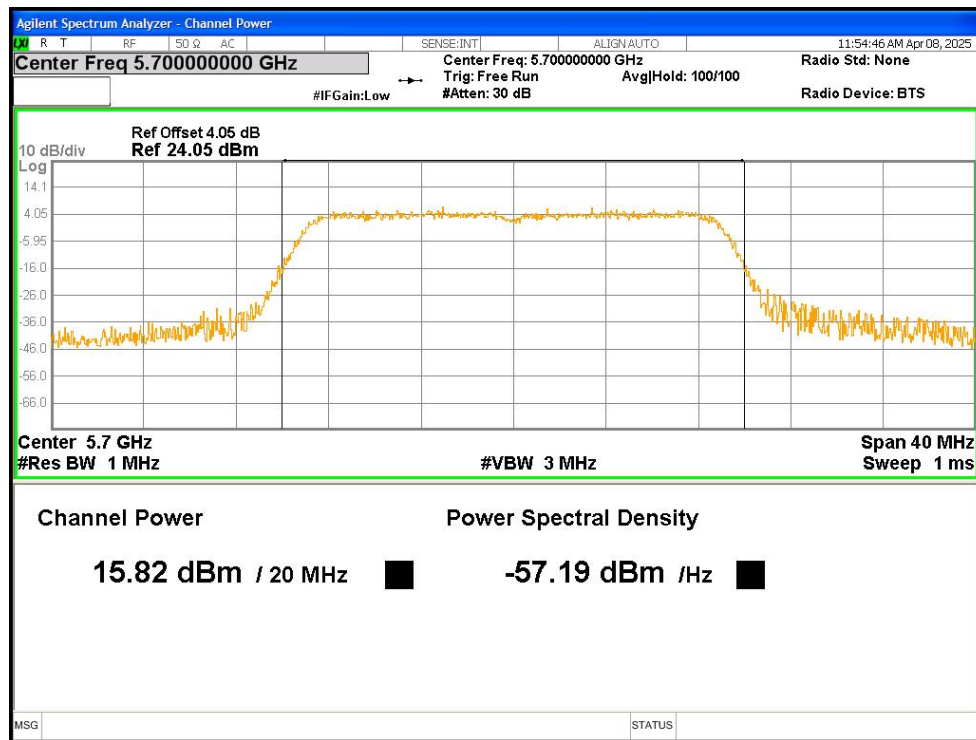
Power NVNT n20 5500MHz Ant1



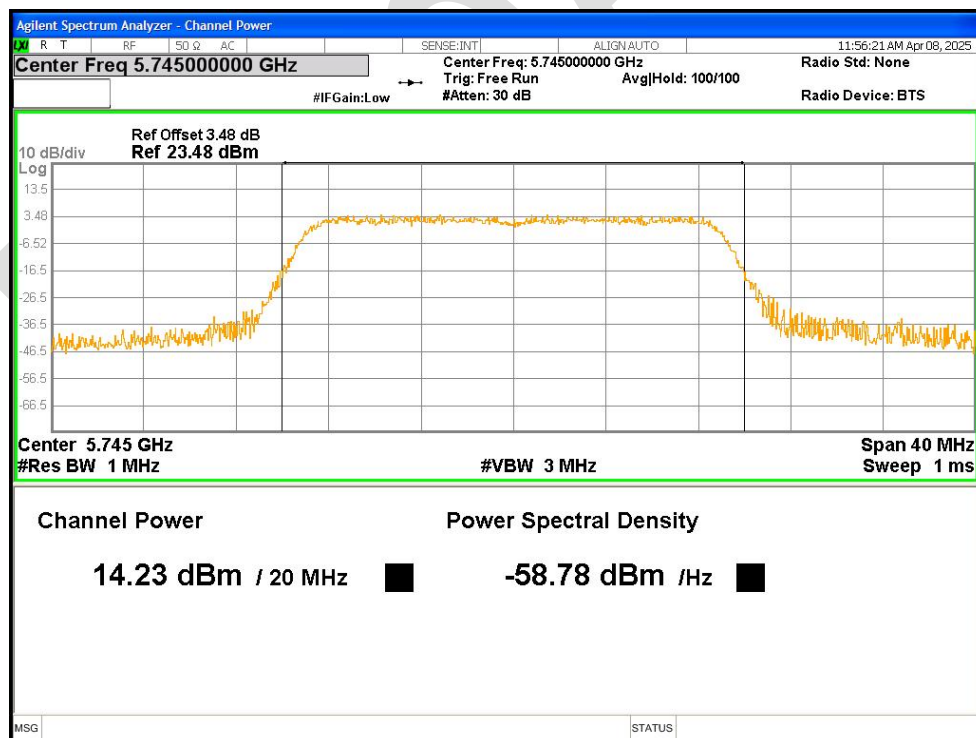
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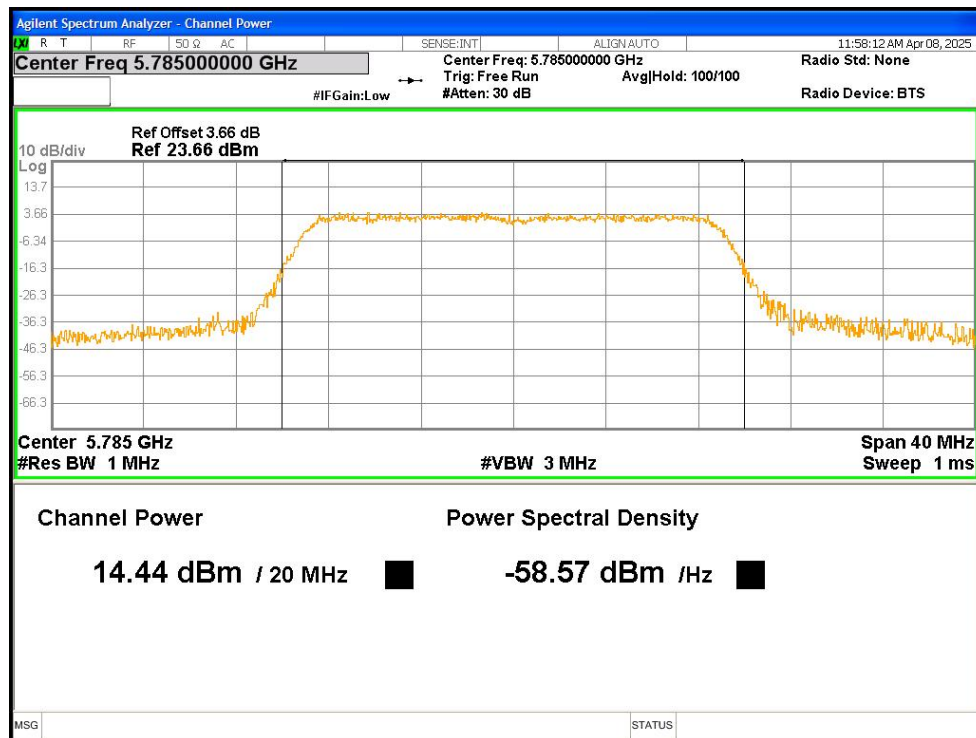
Power NVNT n20 5700MHz Ant1



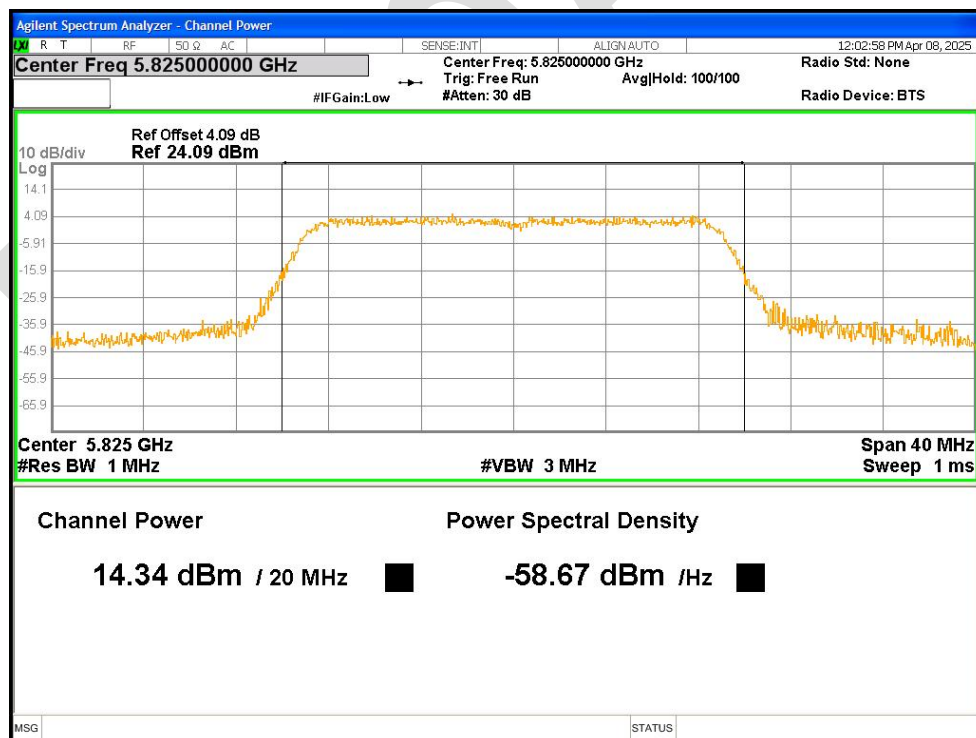
Power NVNT n20 5745MHz Ant1



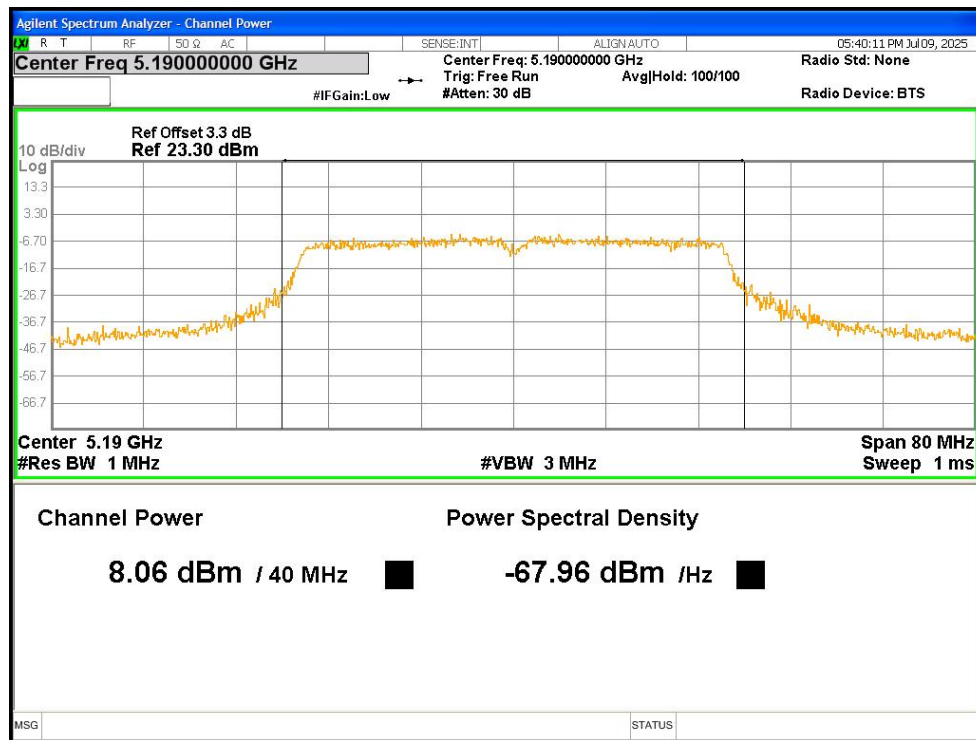
Power NVNT n20 5785MHz Ant1



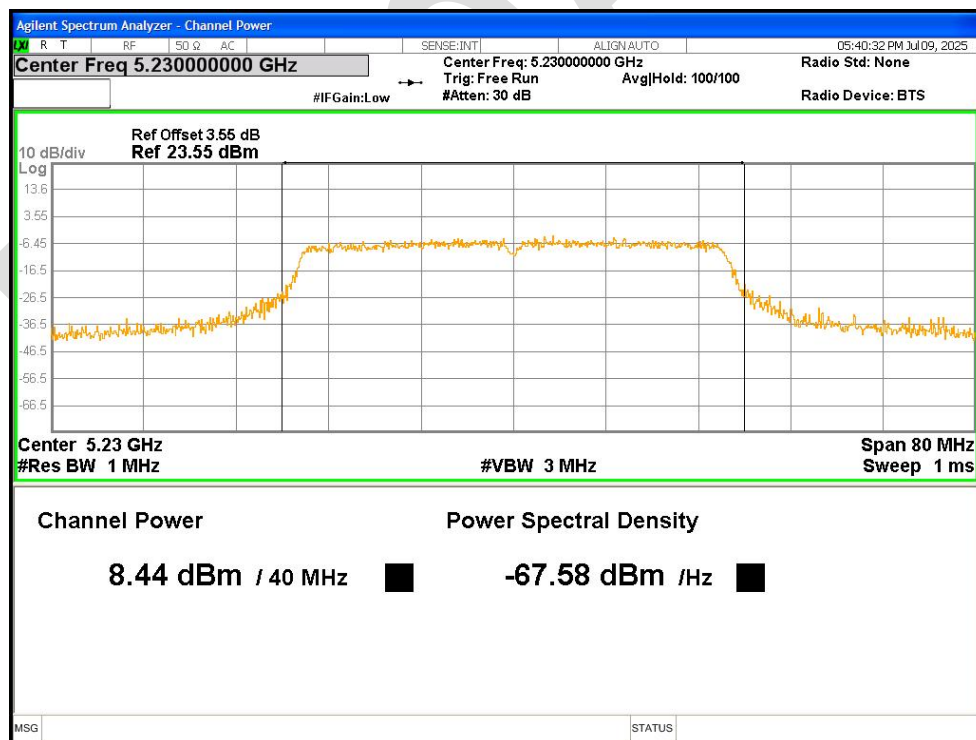
Power NVNT n20 5825MHz Ant1



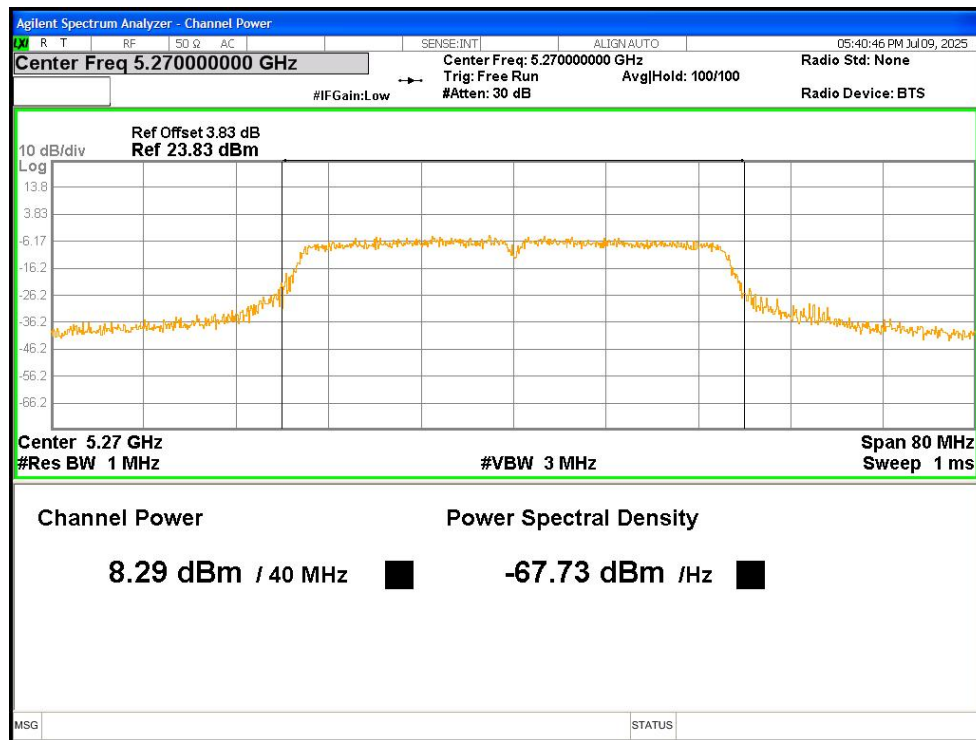
Power NVNT n40 5190MHz Ant1



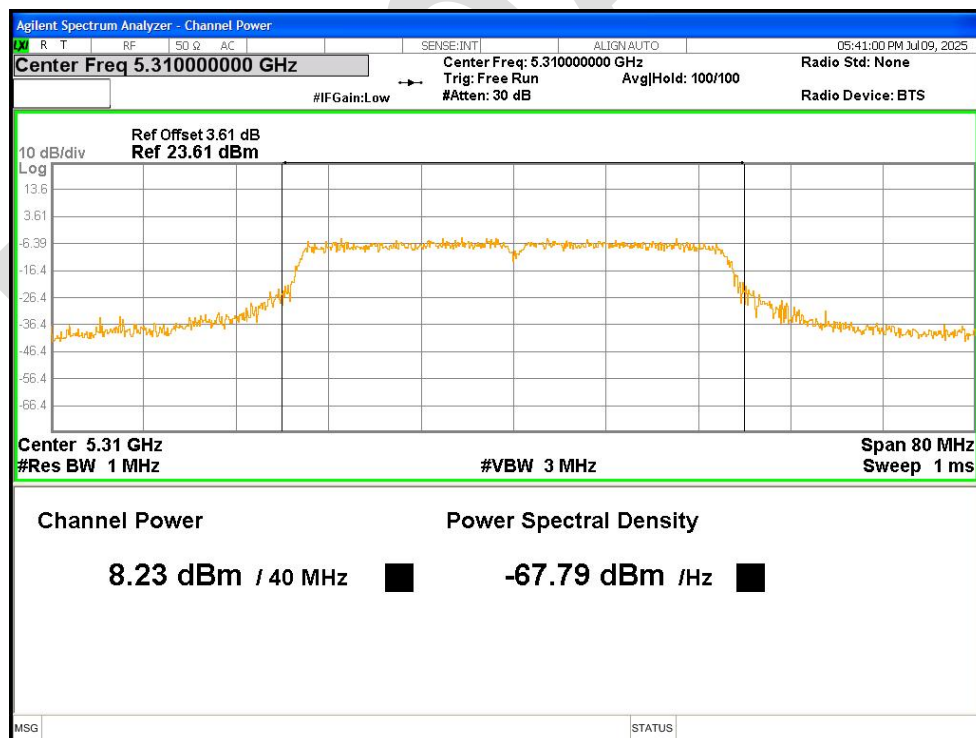
Power NVNT n40 5230MHz Ant1



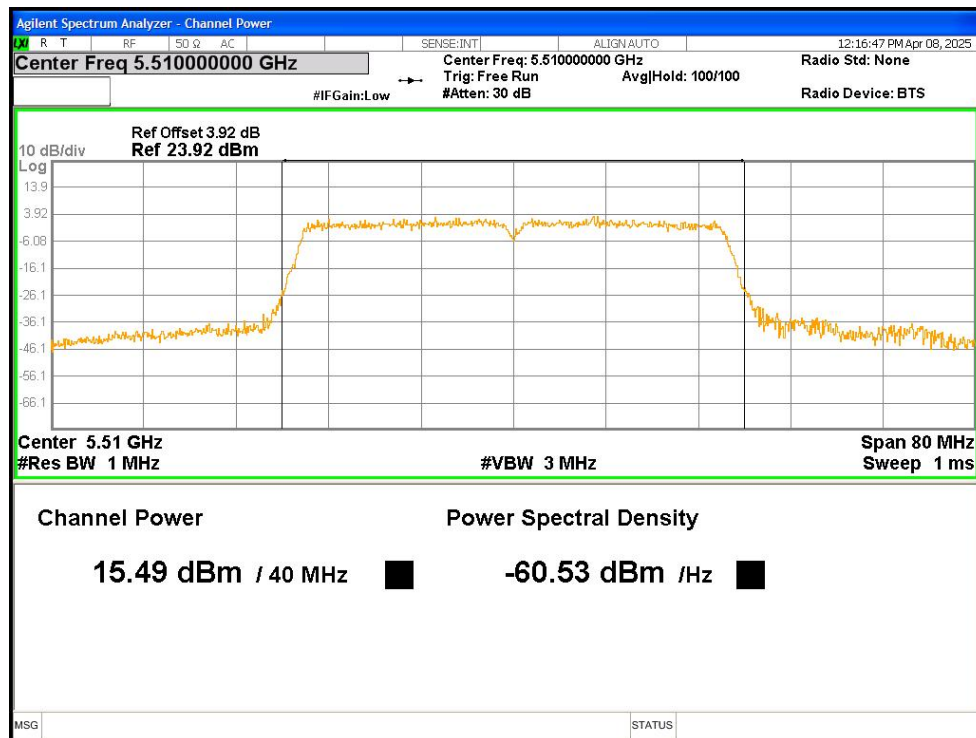
Power NVNT n40 5270MHz Ant1



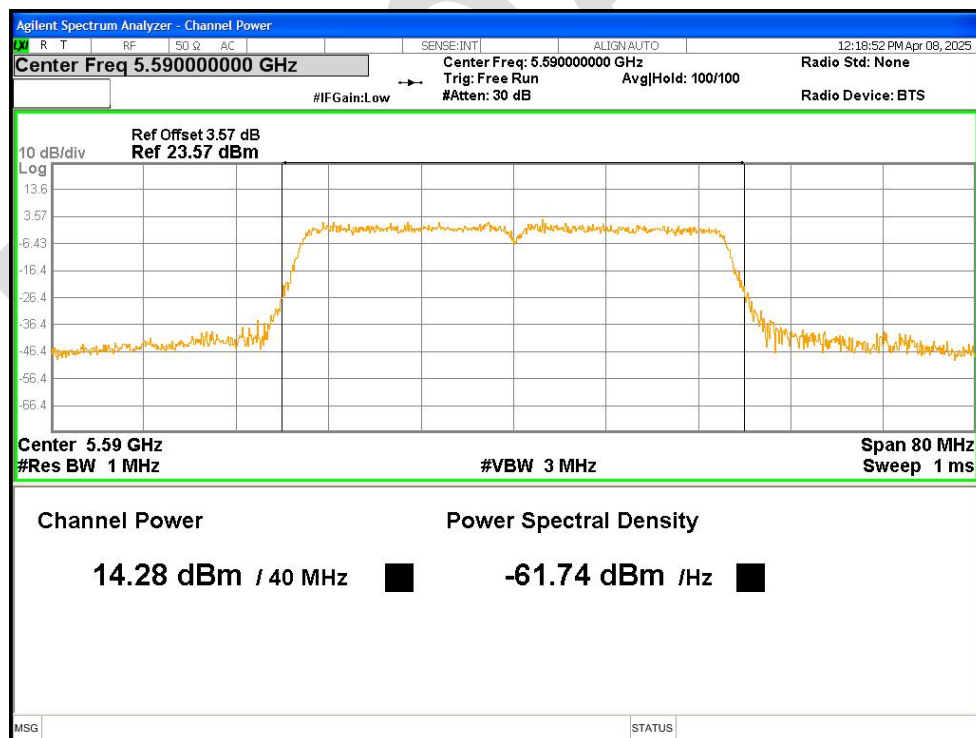
Power NVNT n40 5310MHz Ant1



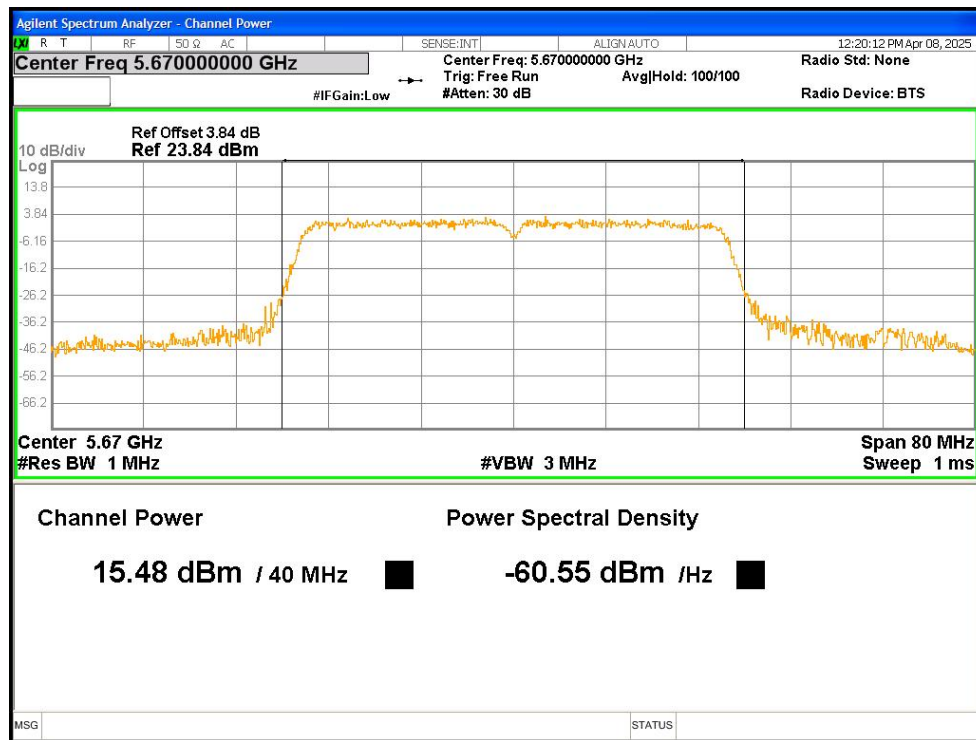
Power NVNT n40 5510MHz Ant1



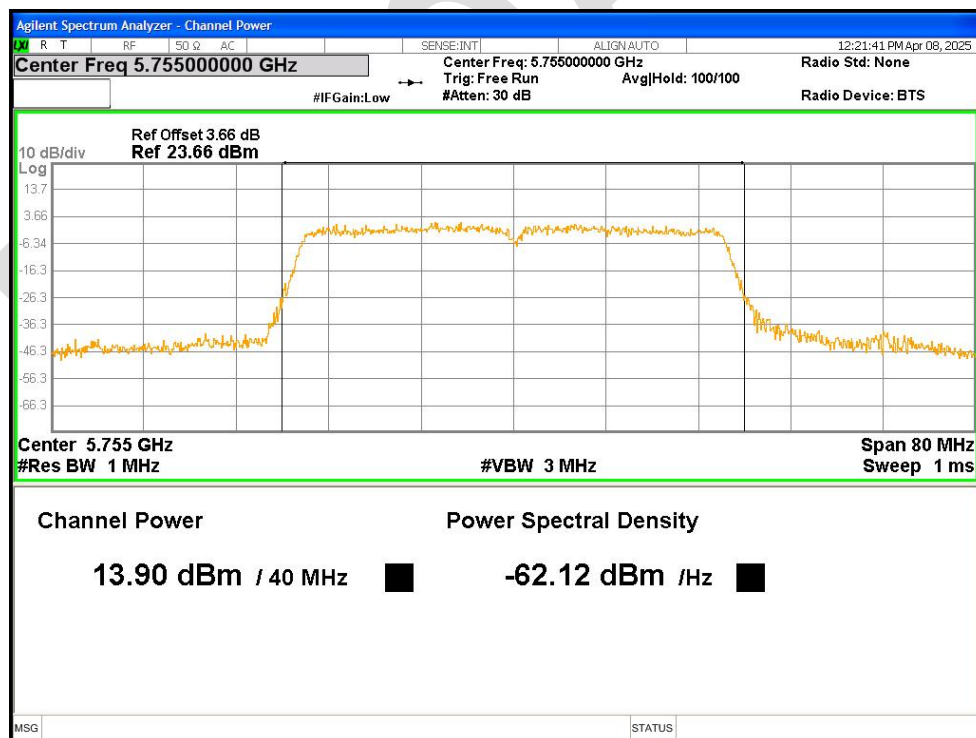
Power NVNT n40 5590MHz Ant1



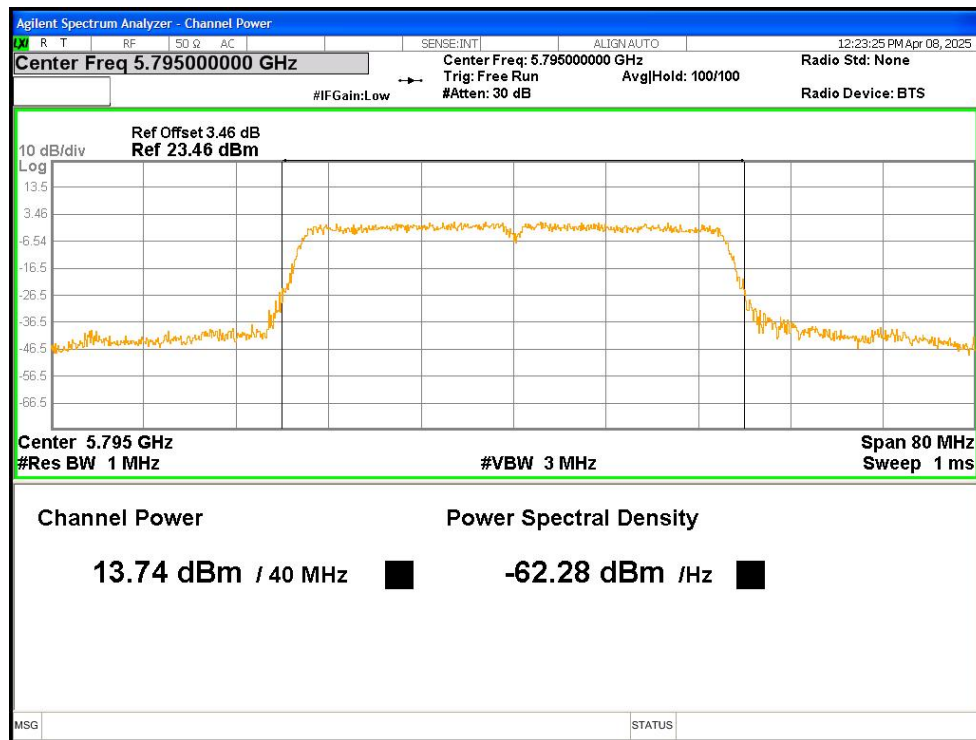
Power NVNT n40 5670MHz Ant1



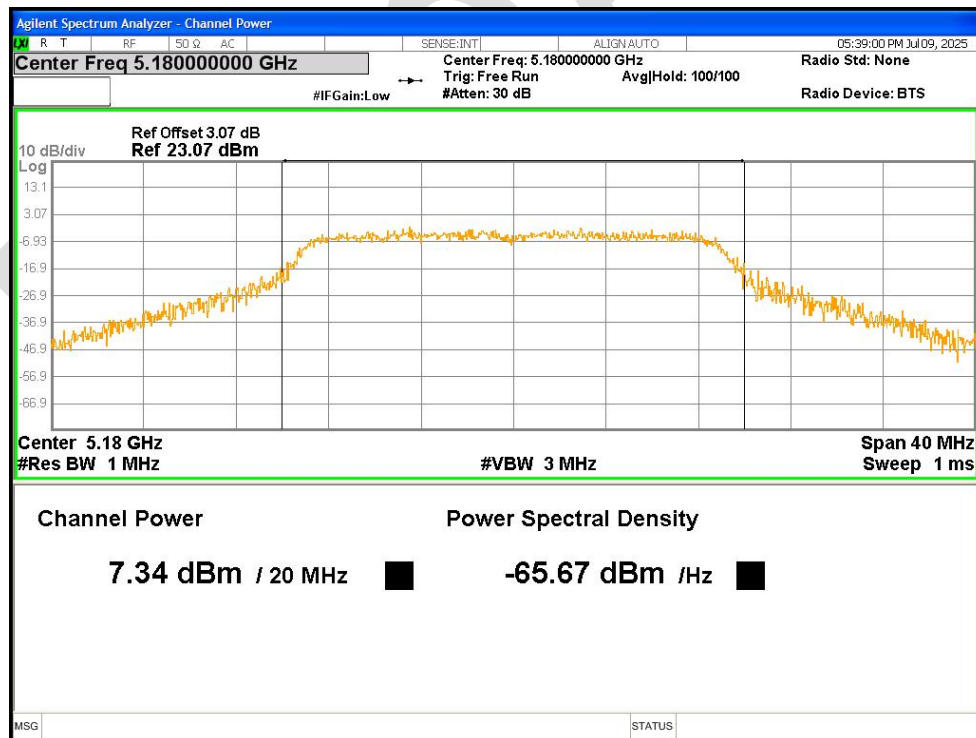
Power NVNT n40 5755MHz Ant1



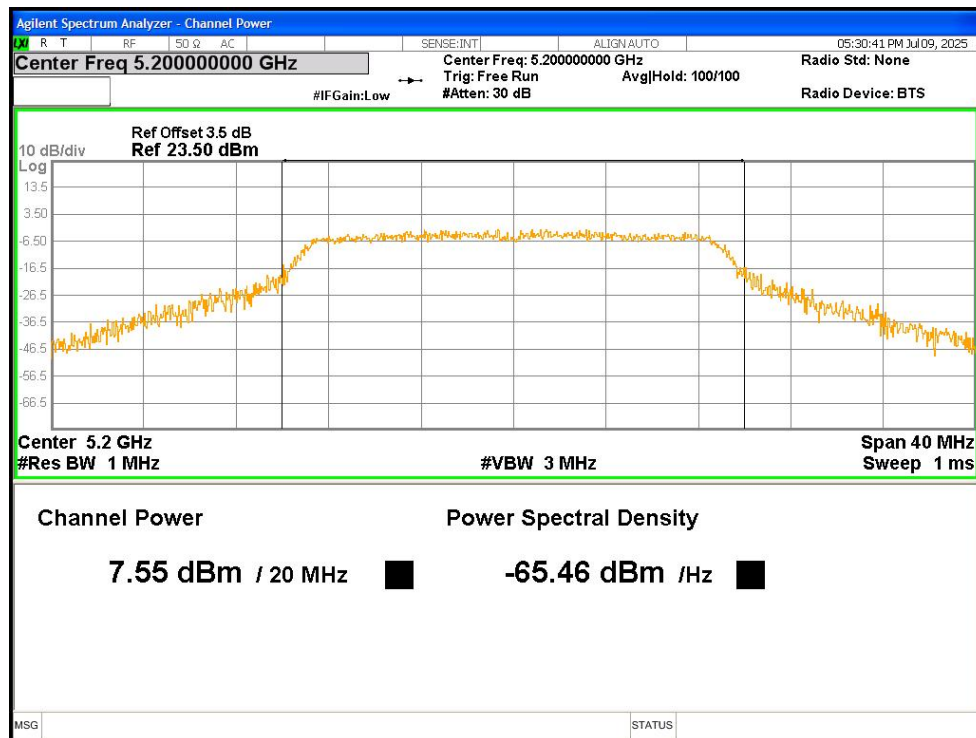
Power NVNT n40 5795MHz Ant1



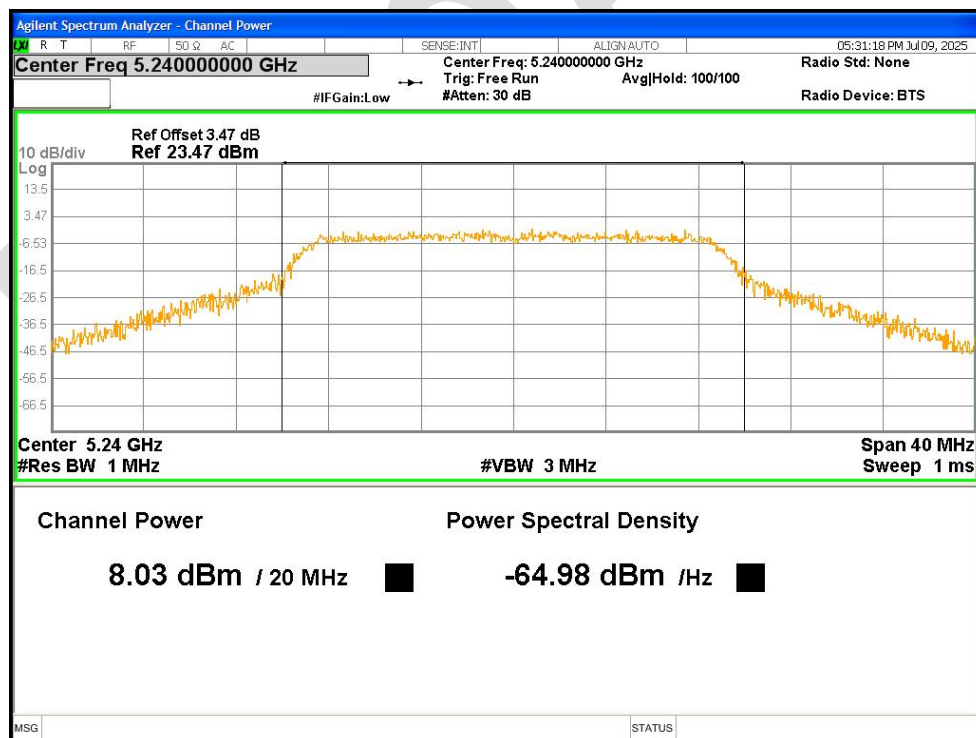
Power NVNT ac20 5180MHz Ant1



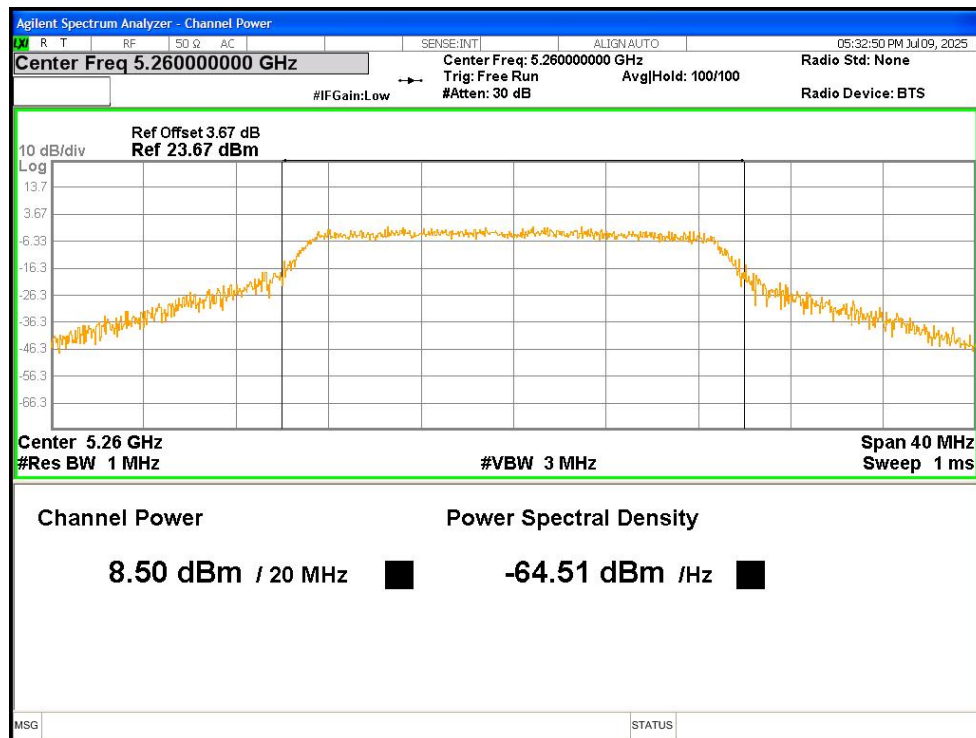
Power NVNT ac20 5200MHz Ant1



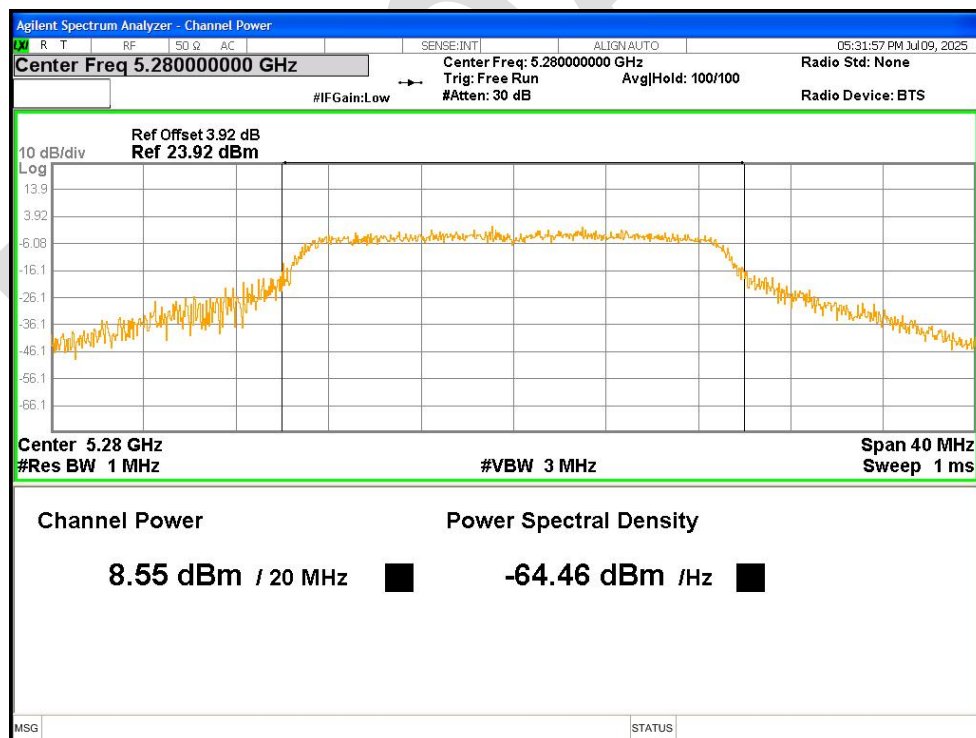
Power NVNT ac20 5240MHz Ant1



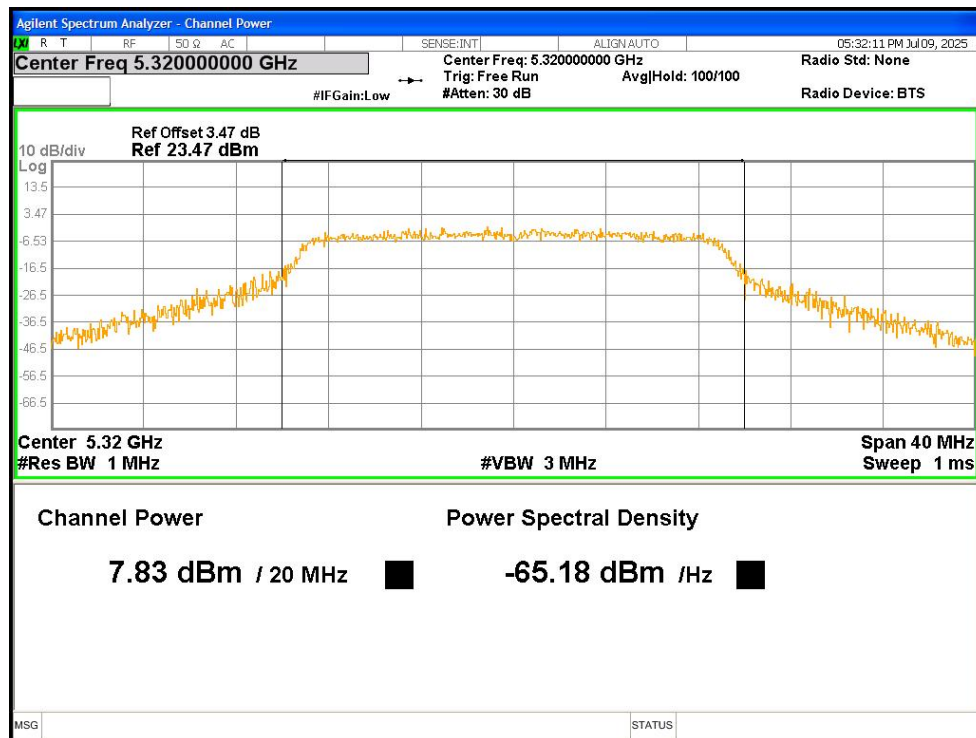
Power NVNT ac20 5260MHz Ant1



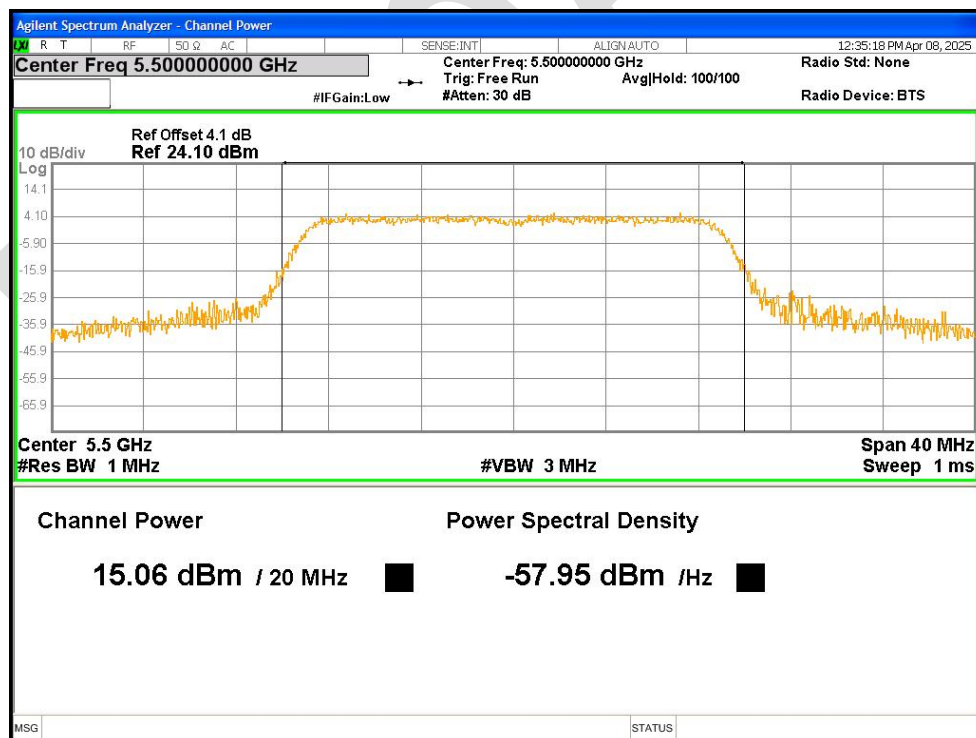
Power NVNT ac20 5280MHz Ant1



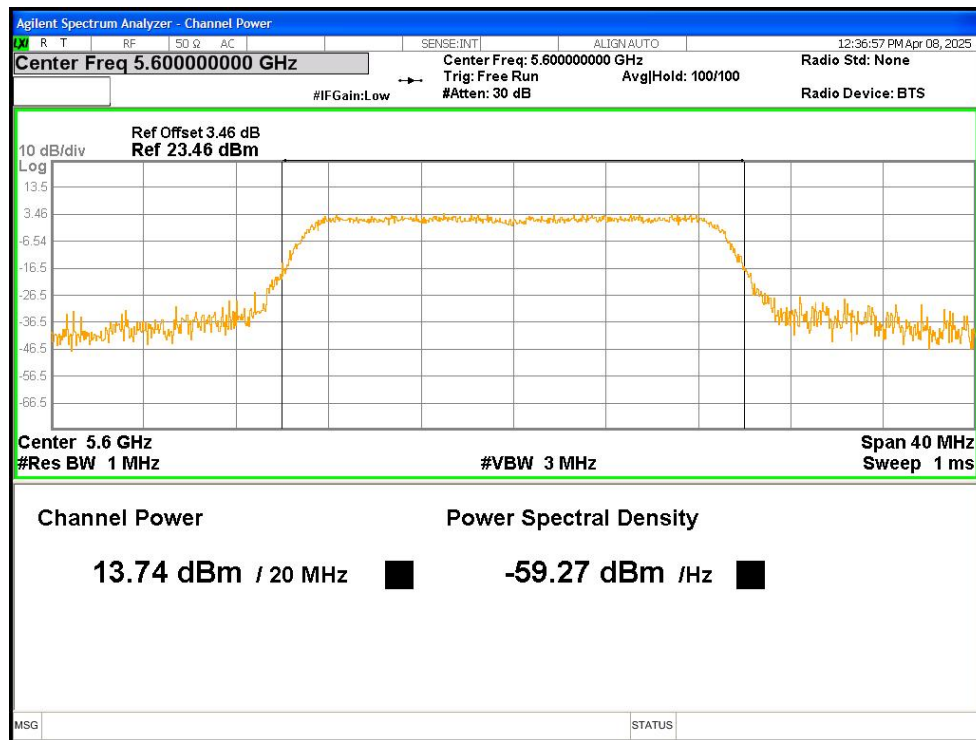
Power NVNT ac20 5320MHz Ant1



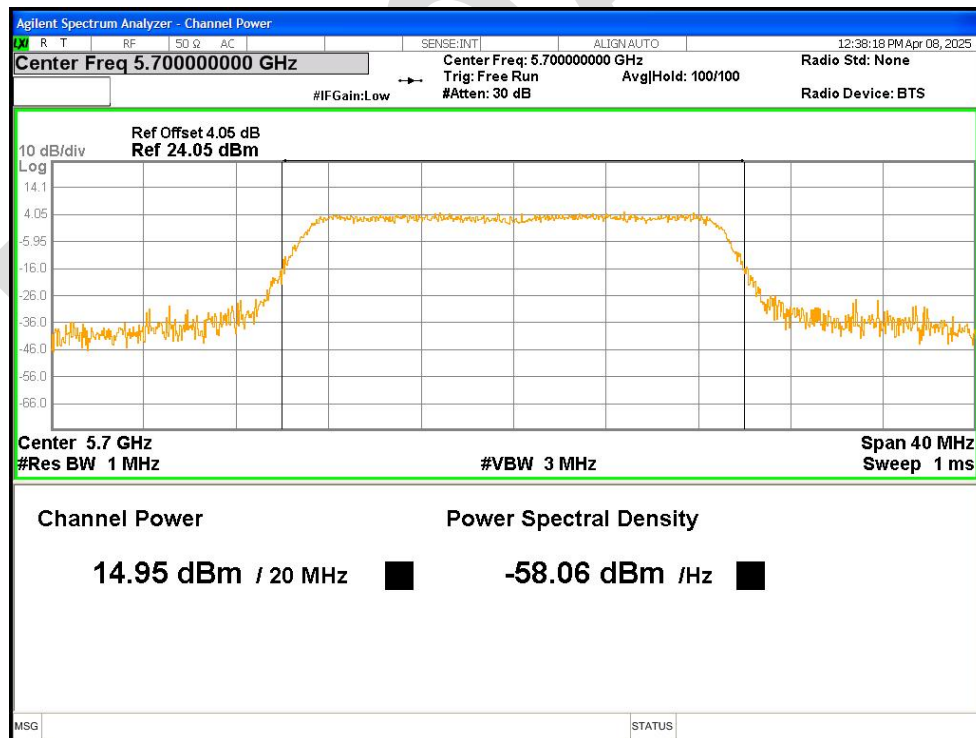
Power NVNT ac20 5500MHz Ant1



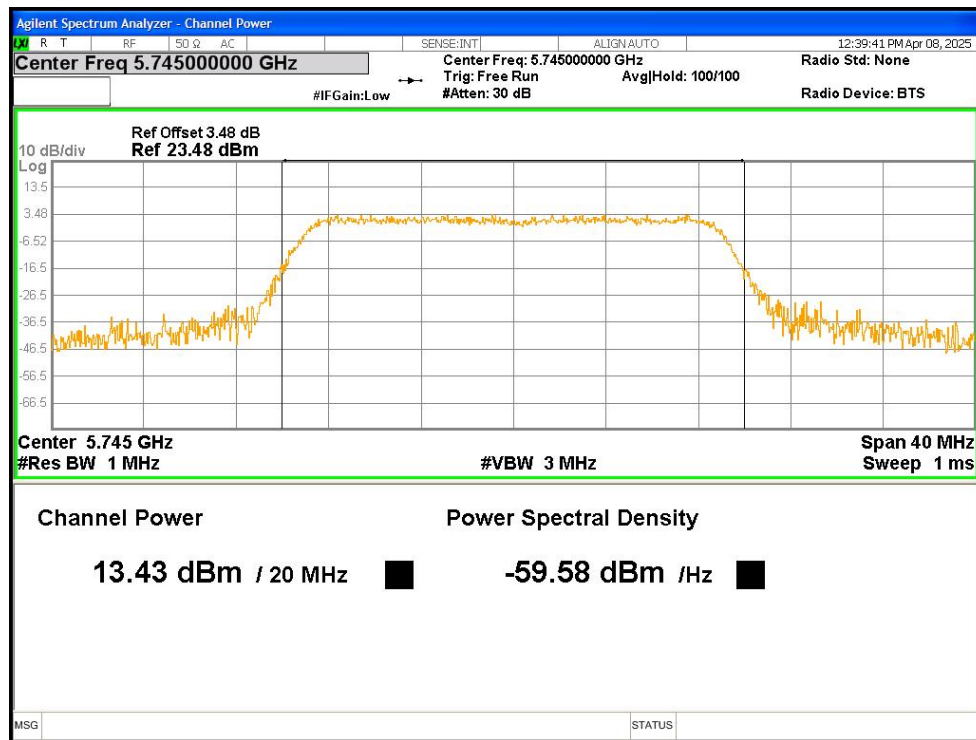
Power NVNT ac20 5600MHz Ant1



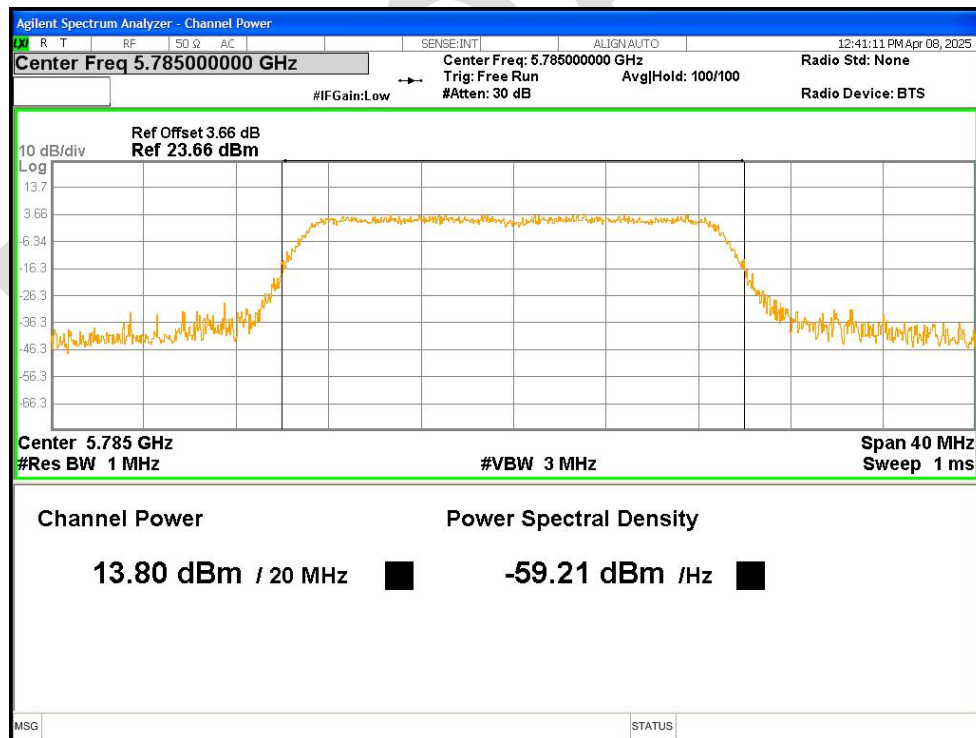
Power NVNT ac20 5700MHz Ant1



Power NVNT ac20 5745MHz Ant1



Power NVNT ac20 5785MHz Ant1



Power NVNT ac20 5825MHz Ant1