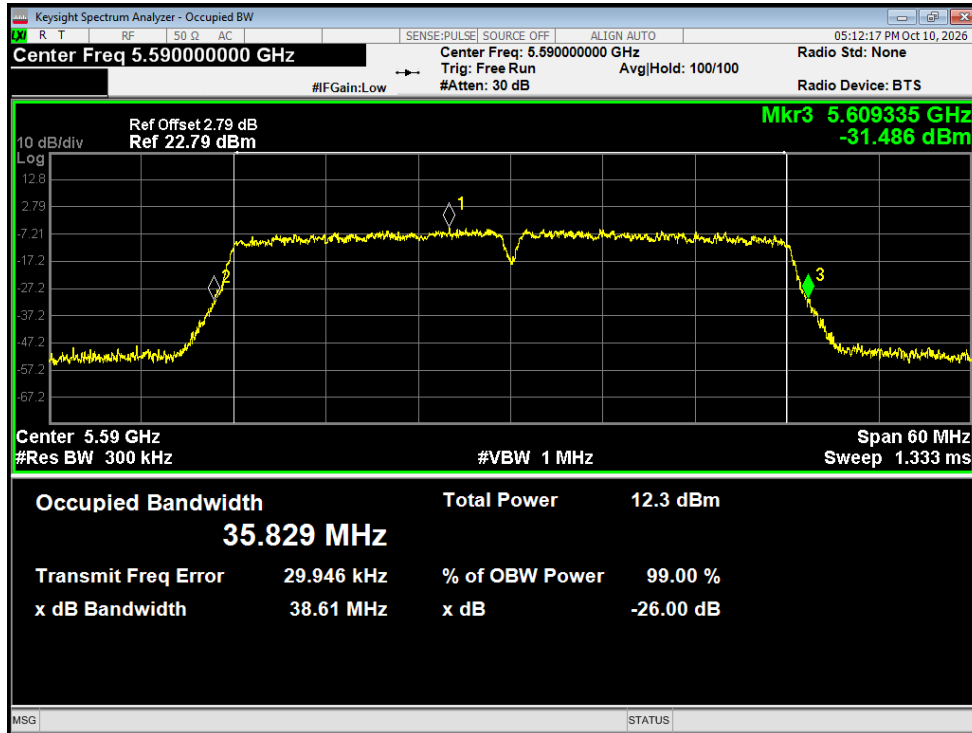
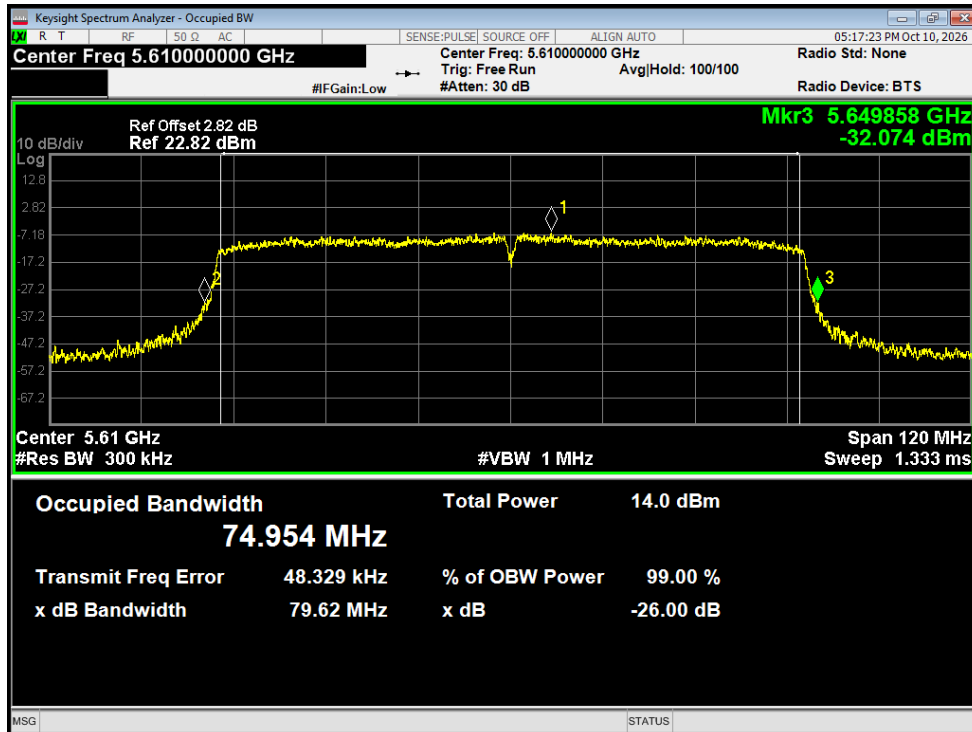


-26dB Bandwidth NVNT ac40 5590MHz Ant1

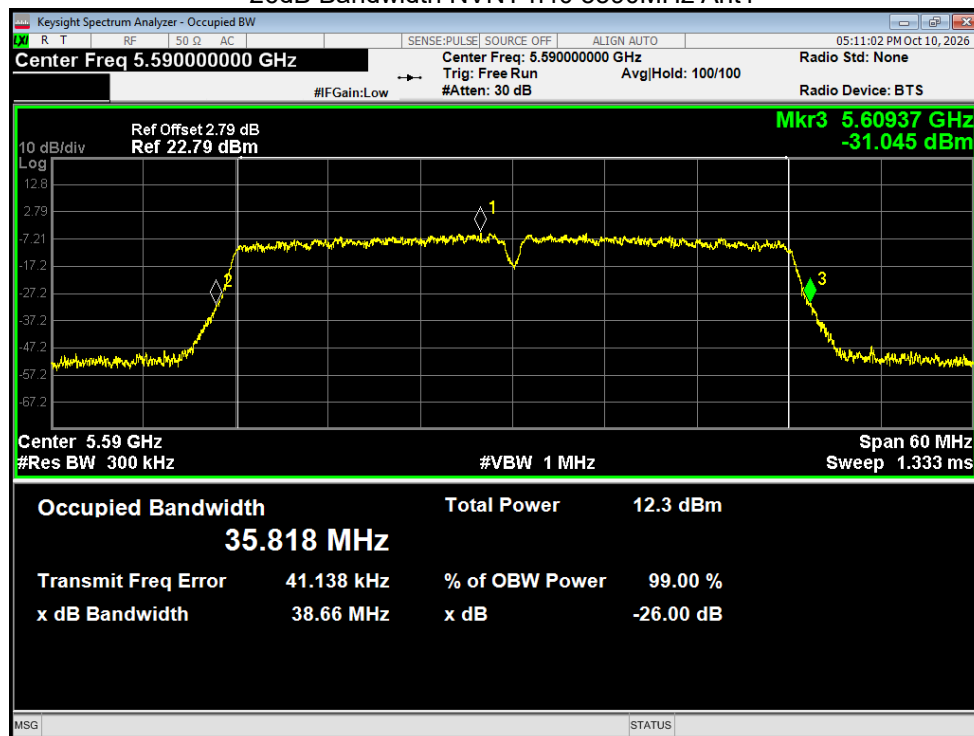


-26dB Bandwidth NVNT ac80 5610MHz Ant1





-26dB Bandwidth NVNT n40 5590MHz Ant1





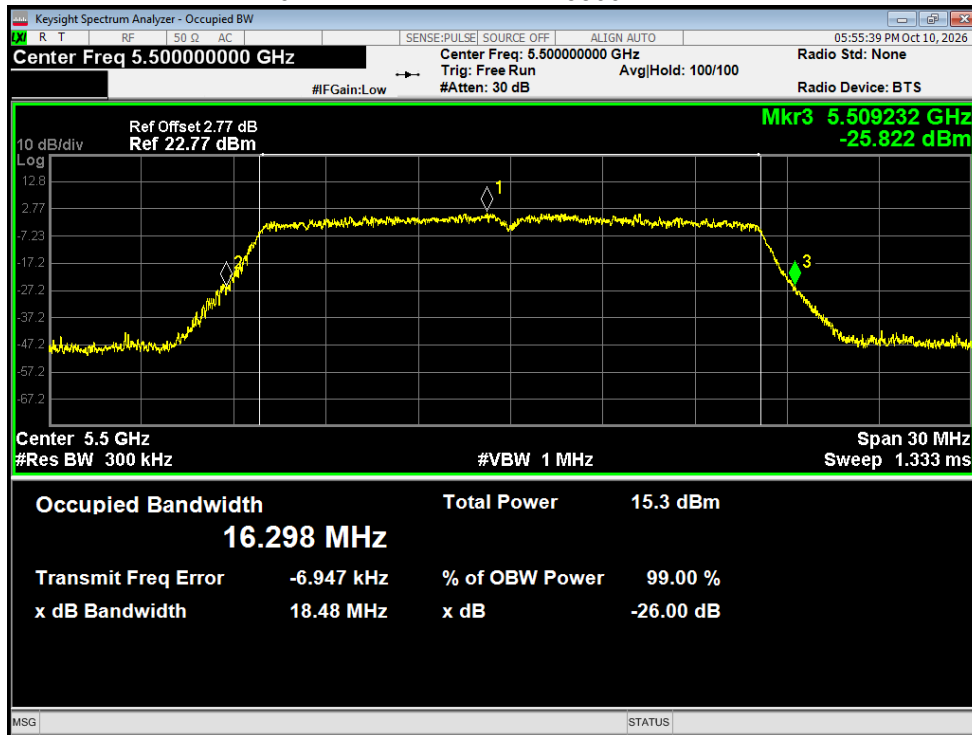
ANT2

5500-5700MHz

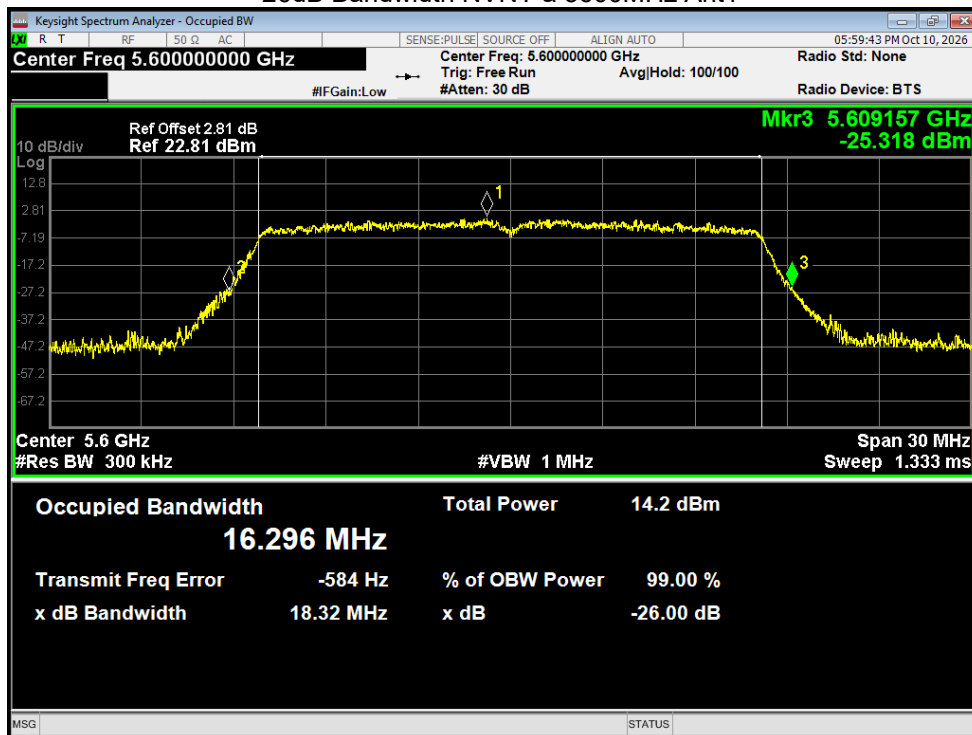
Test CH	-26dB Channel Bandwidth (MHz)						Result
	802.11a	802.11n20	802.11ac20	802.11n40	802.11ac40	802.11ac80	
Lowest	18.48	19.36	19.44	38.50	38.53	79.54	Pass
Middle	18.32	19.30	19.33	38.69	38.59	--	
Highest	18.47	19.33	19.39	38.63	38.54	79.44	

Remark: "---" is not applicable

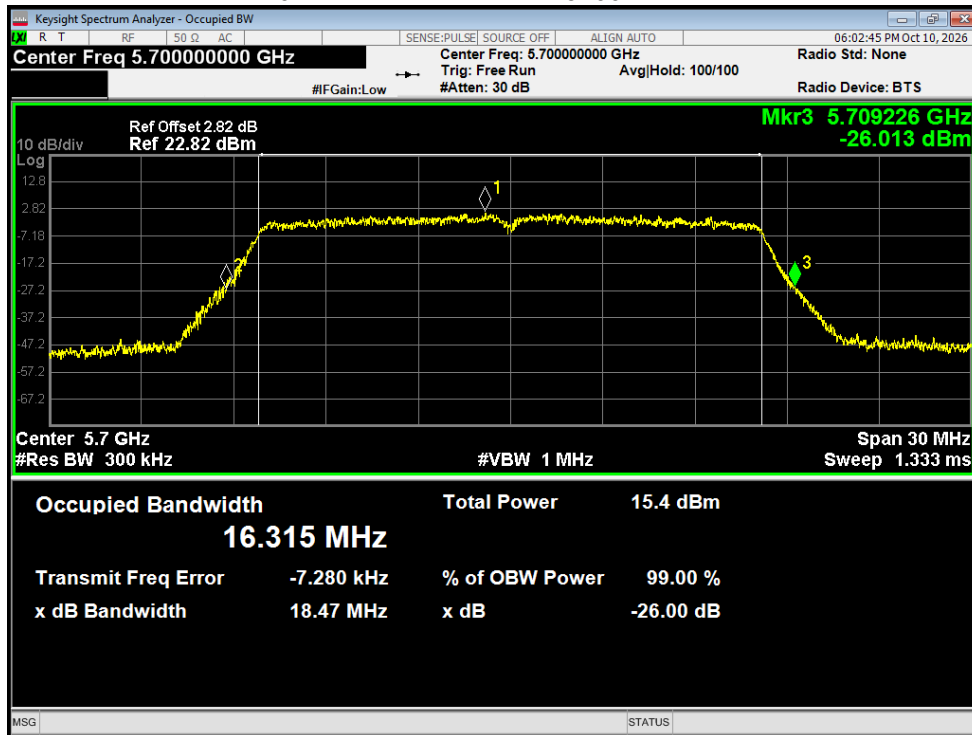
-26dB Bandwidth NVNT a 5500MHz Ant1



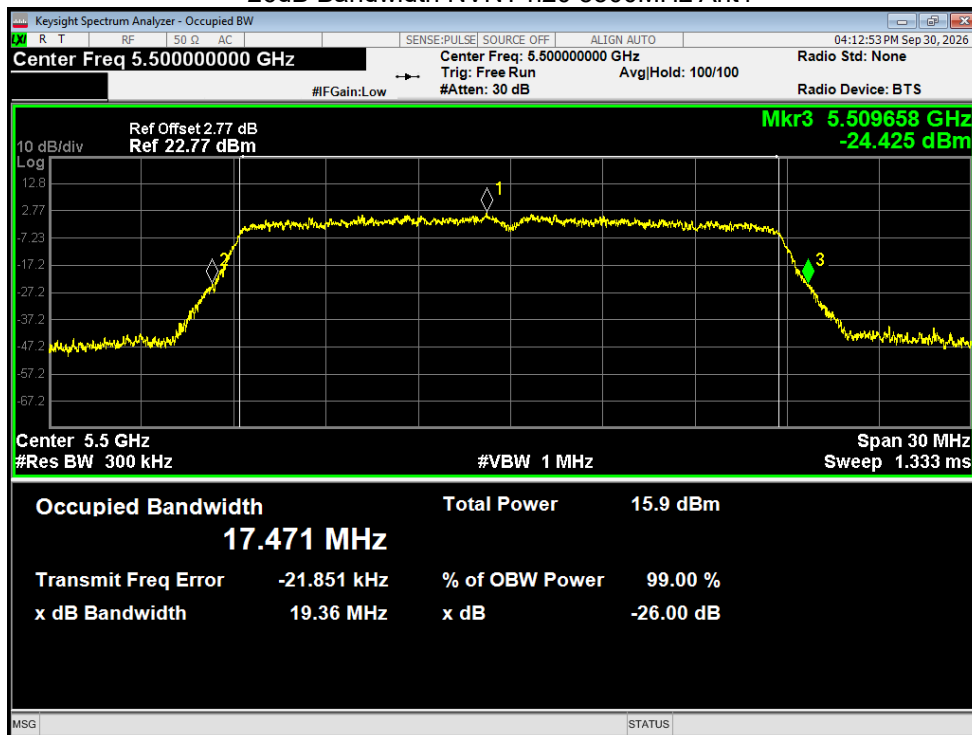
-26dB Bandwidth NVNT a 5600MHz Ant1



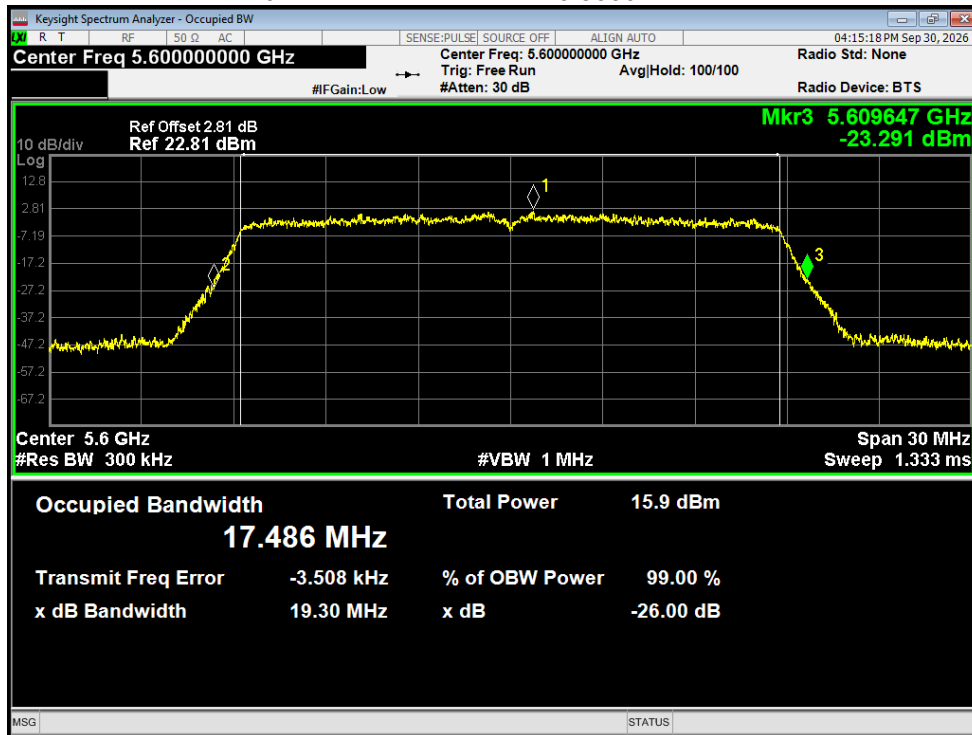
-26dB Bandwidth NVNT a 5700MHz Ant1



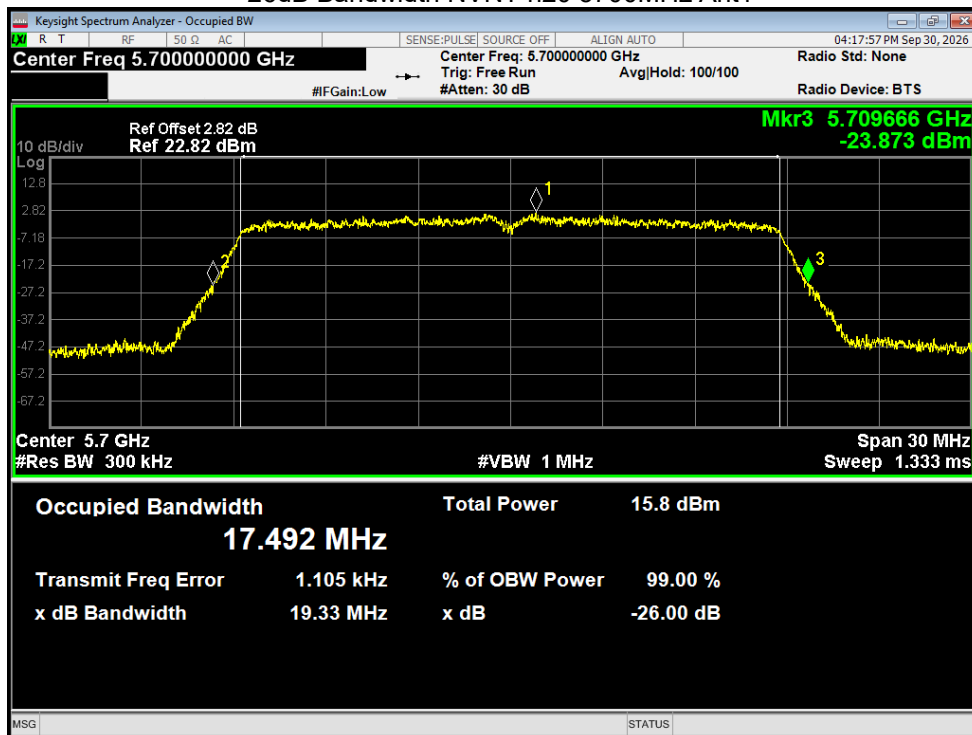
-26dB Bandwidth NVNT n20 5500MHz Ant1



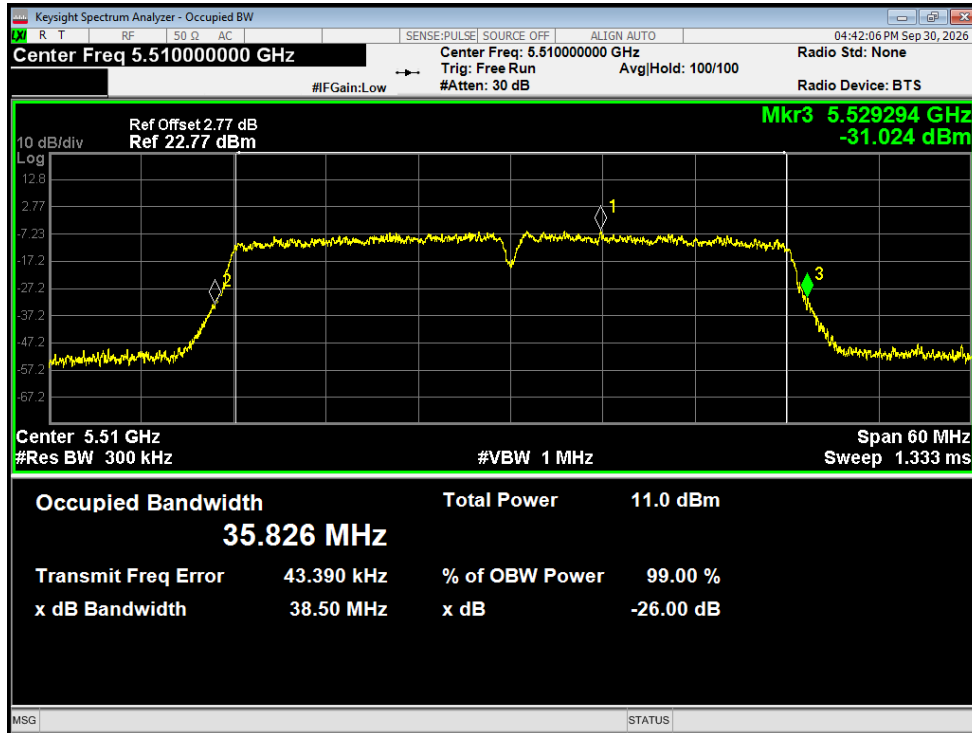
-26dB Bandwidth NVNT n20 5600MHz Ant1



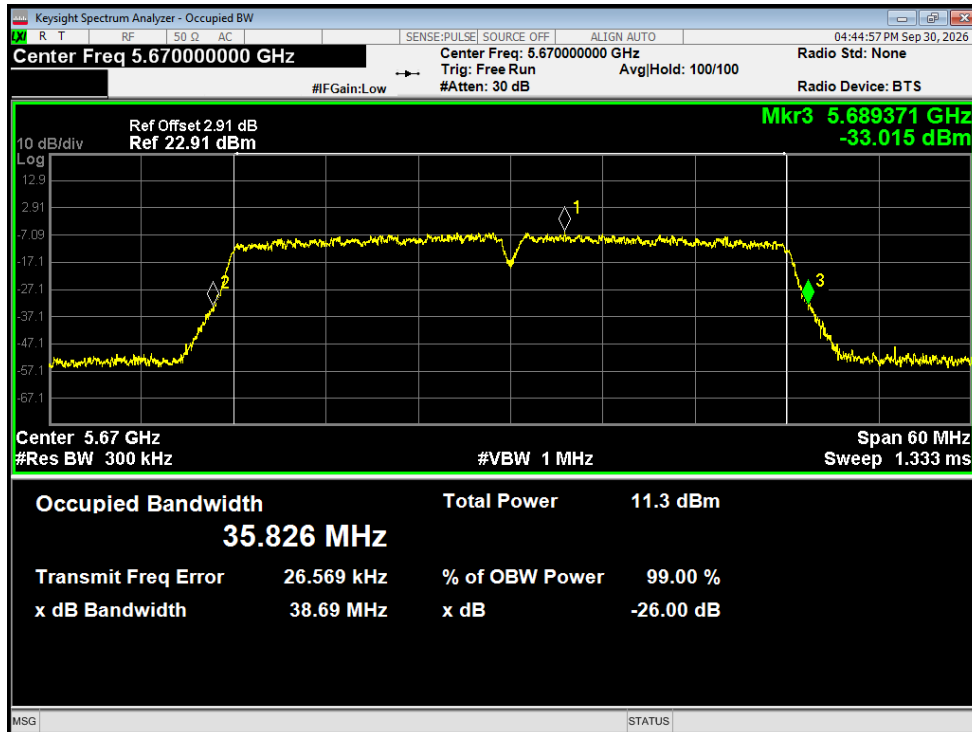
-26dB Bandwidth NVNT n20 5700MHz Ant1



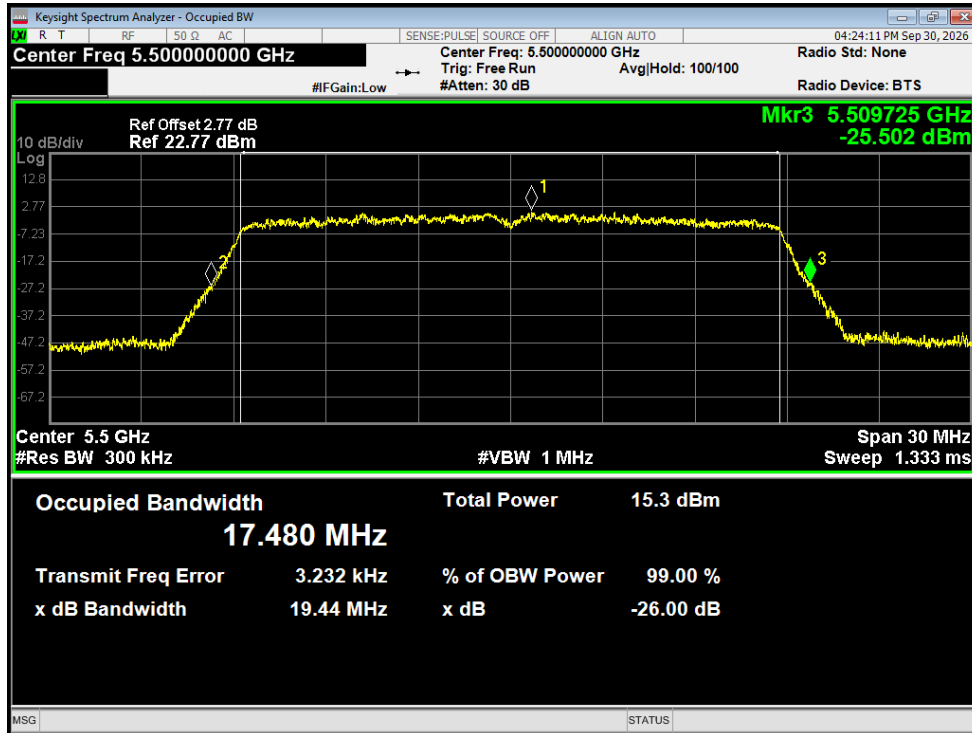
-26dB Bandwidth NVNT n40 5510MHz Ant1



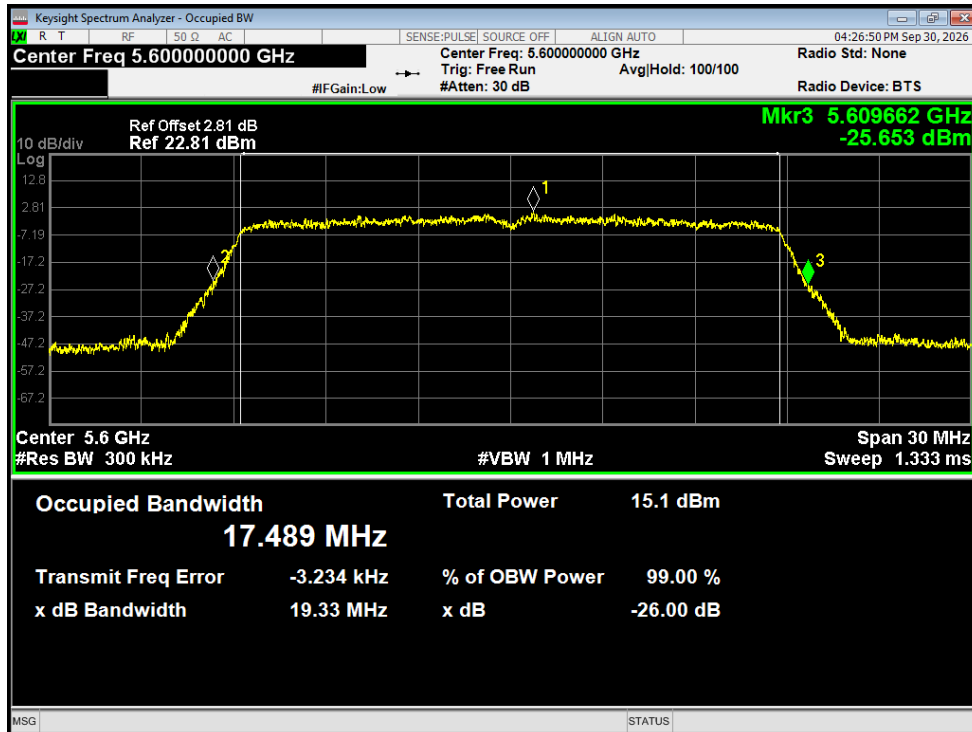
-26dB Bandwidth NVNT n40 5670MHz Ant1



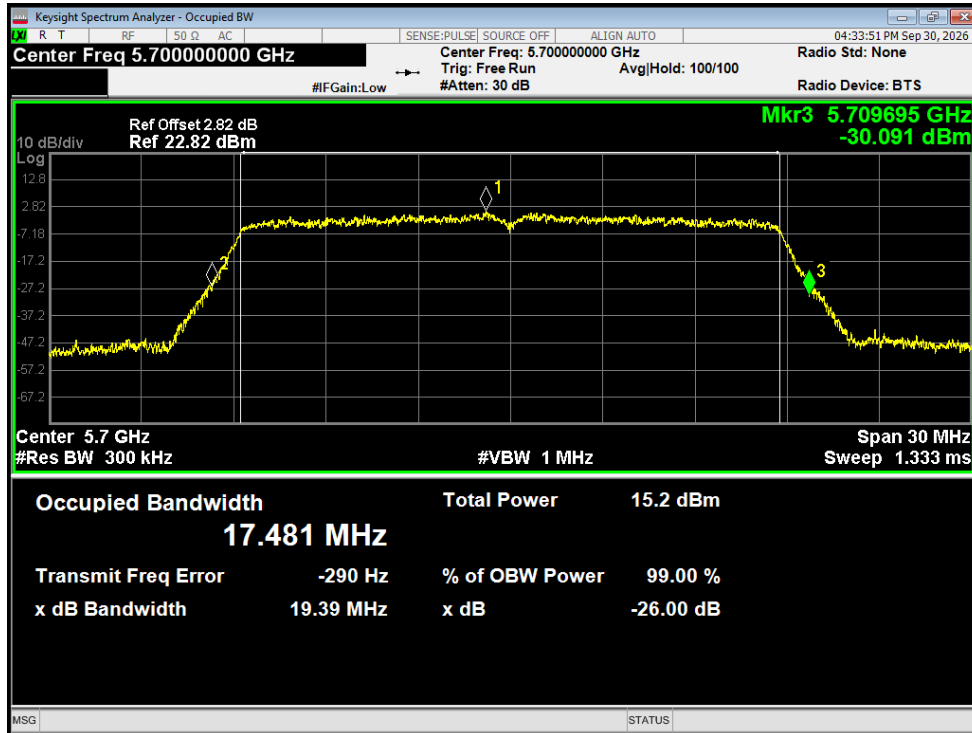
-26dB Bandwidth NVNT ac20 5500MHz Ant1



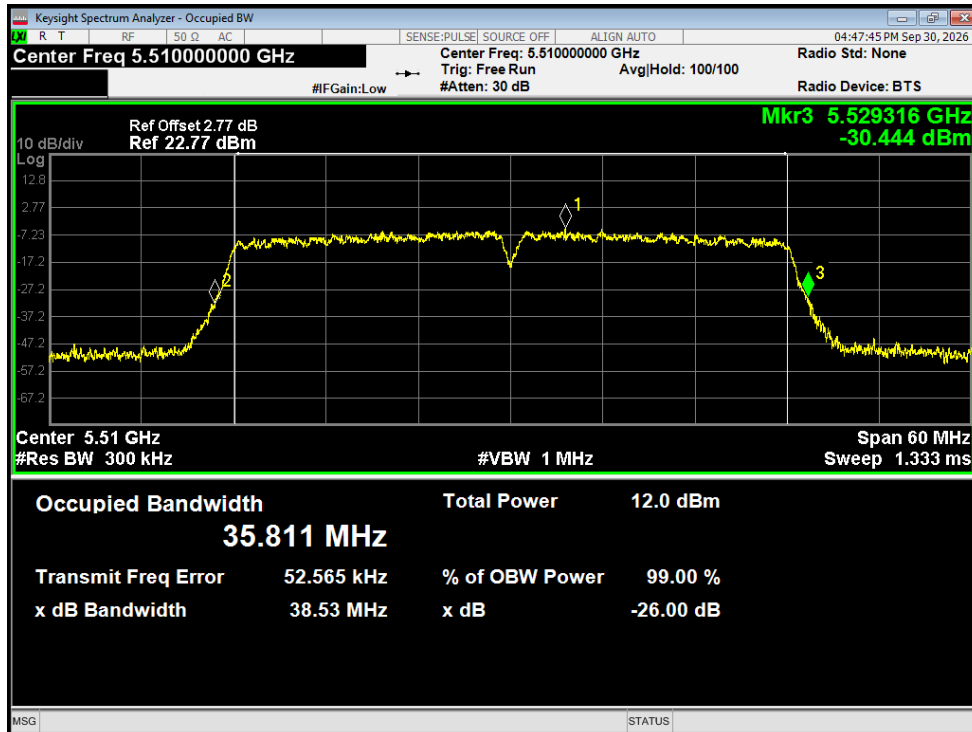
-26dB Bandwidth NVNT ac20 5600MHz Ant1



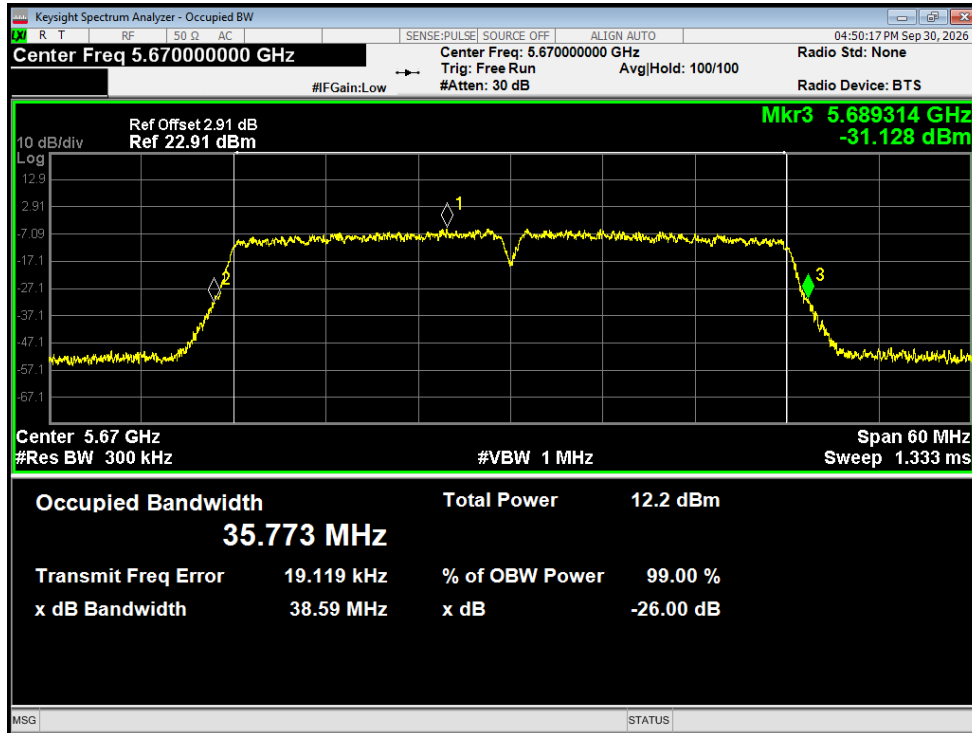
-26dB Bandwidth NVNT ac20 5700MHz Ant1



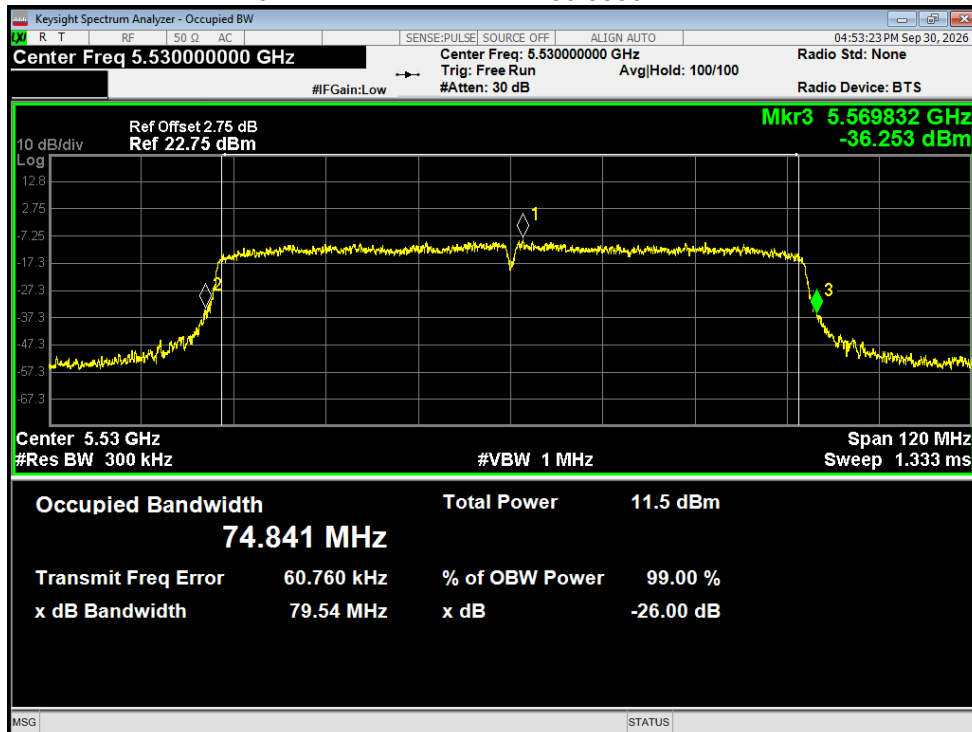
-26dB Bandwidth NVNT ac40 5510MHz Ant1



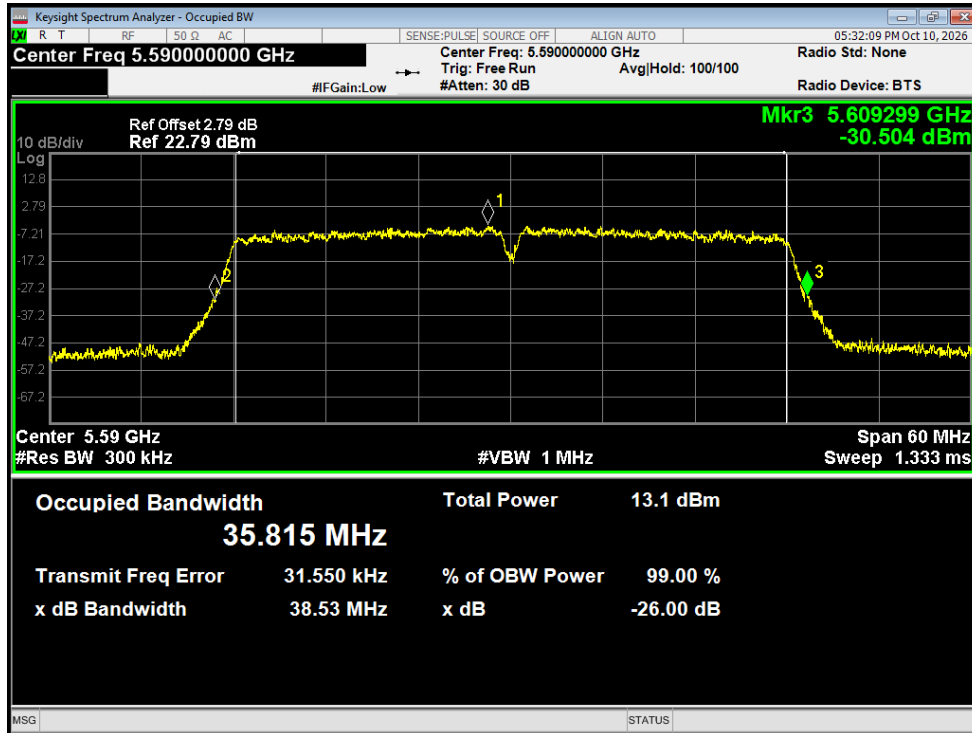
-26dB Bandwidth NVNT ac40 5670MHz Ant1



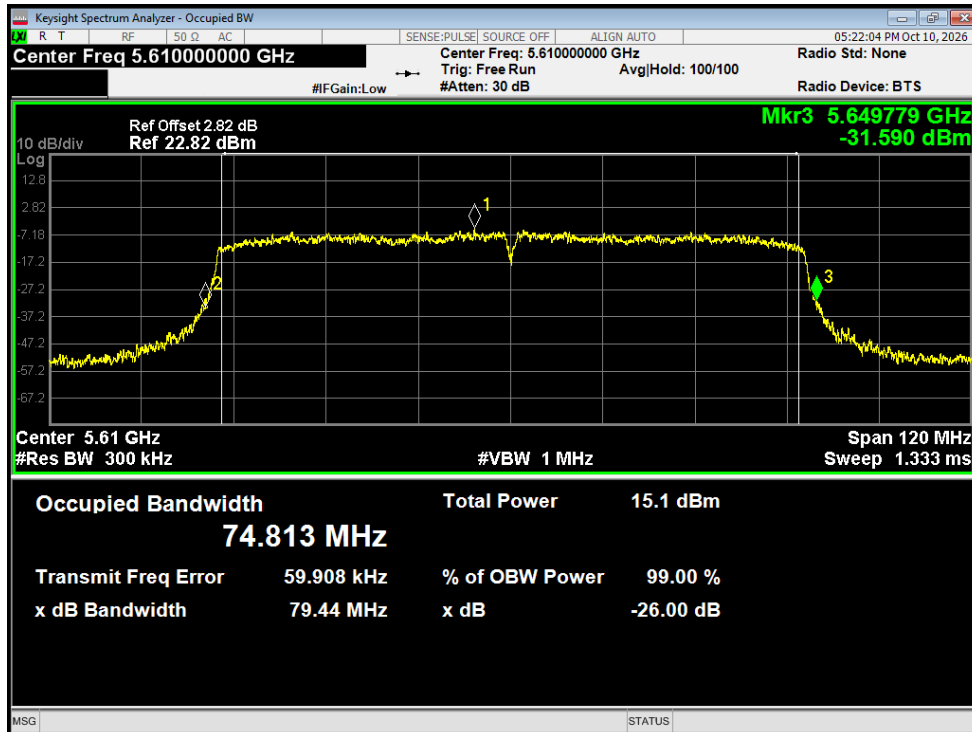
-26dB Bandwidth NVNT ac80 5530MHz Ant1



-26dB Bandwidth NVNT ac40 5590MHz Ant1

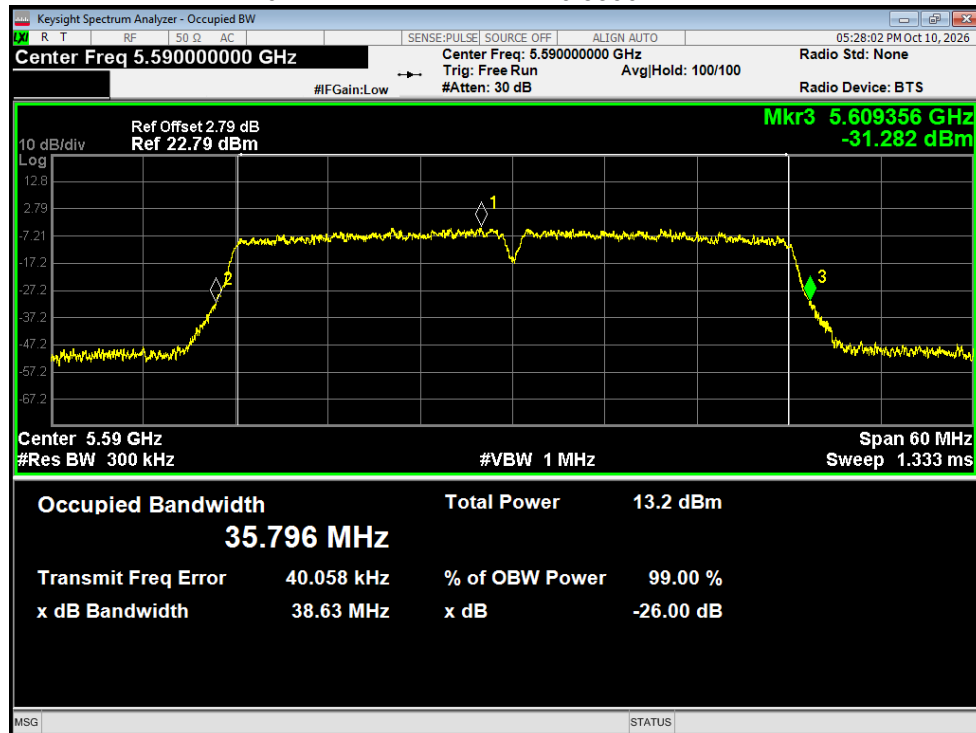


-26dB Bandwidth NVNT ac80 5610MHz Ant1





-26dB Bandwidth NVNT n40 5590MHz Ant1





ANT1

5745-5825MHz

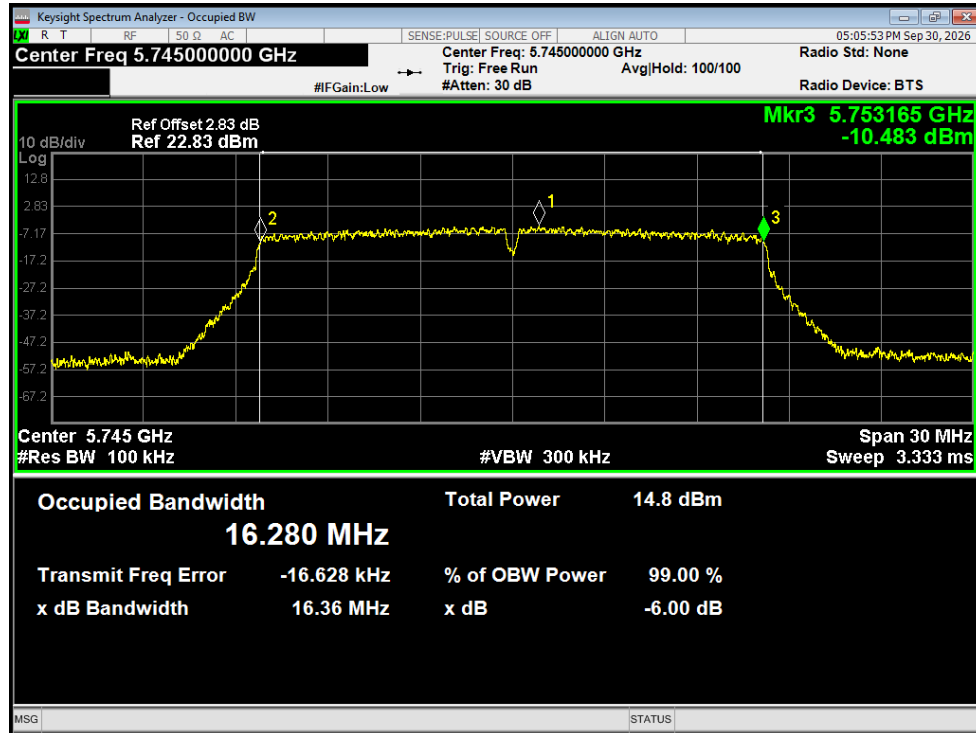
Test CH	-6dB Channel Bandwidth (MHz)						Limit (KHz)	Result
	802.11a	802.11n 20	802.11ac 20	802.11n 40	802.11ac 40	802.11ac 80		
Lowest	16.36	17.61	17.61	36.34	36.34	--	>500	Pass
Middle	16.37	17.59	17.59	--	--	75.94		
Highest	16.37	17.58	17.60	36.30	36.33	--		

Test CH	99% Bandwidth (MHz)						Limit	Result
	802.11a	802.11n 20	802.11ac 20	802.11n 40	802.11ac 40	802.11ac 80		
Lowest	16.2757	17.4740	17.4754	35.8346	35.8343	--	/	Pass
Middle	16.2776	17.4802	17.4731	--	--	75.0390		
Highest	16.2754	17.4739	17.4763	35.7462	35.8809	--		

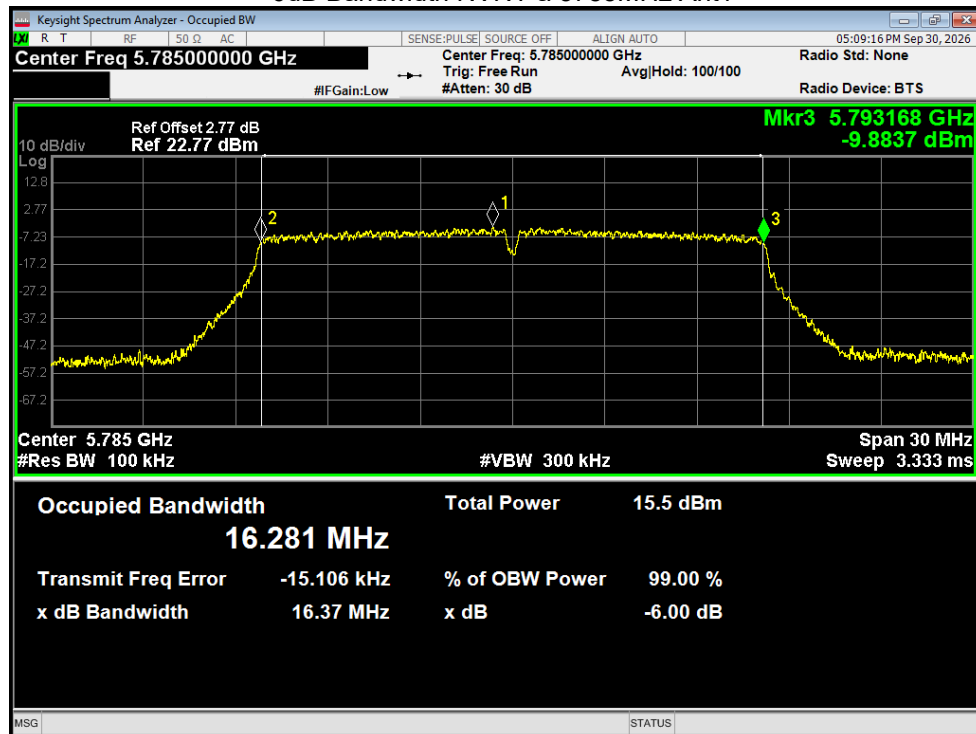
Remark: "---" is not applicable

Test plot -6dB Channel Bandwidth

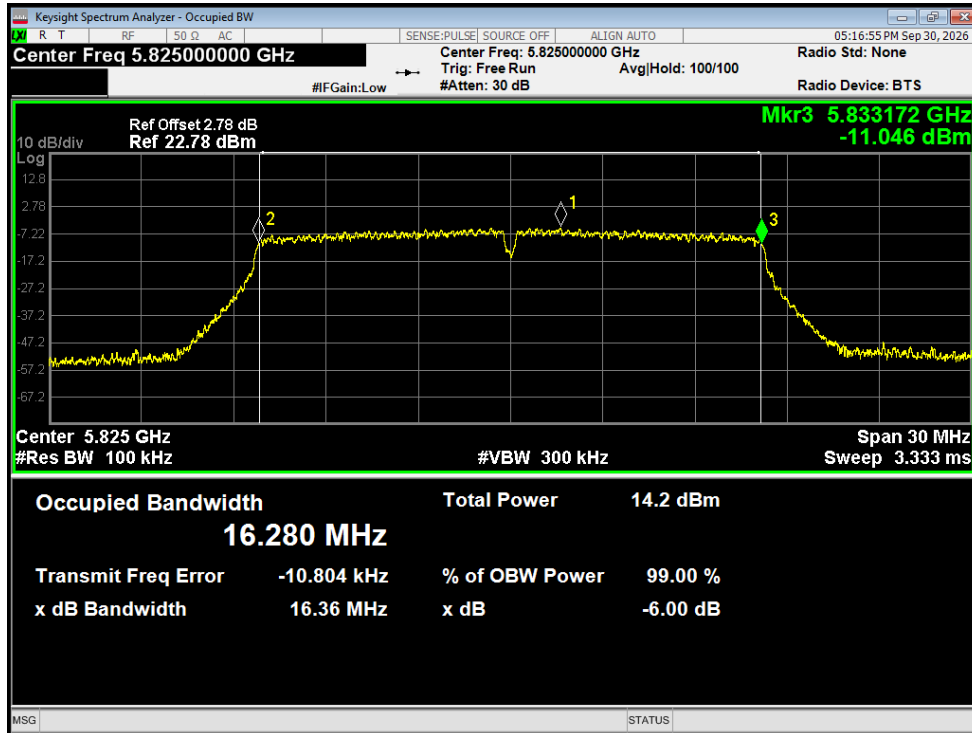
-6dB Bandwidth NVNT a 5745MHz Ant1



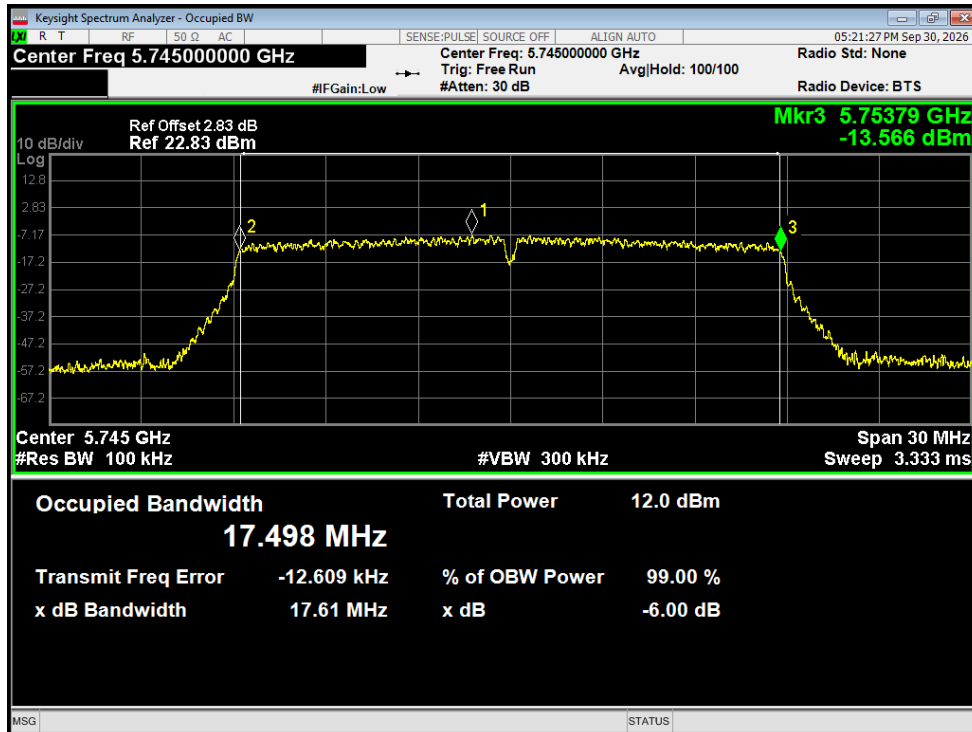
-6dB Bandwidth NVNT a 5785MHz Ant1



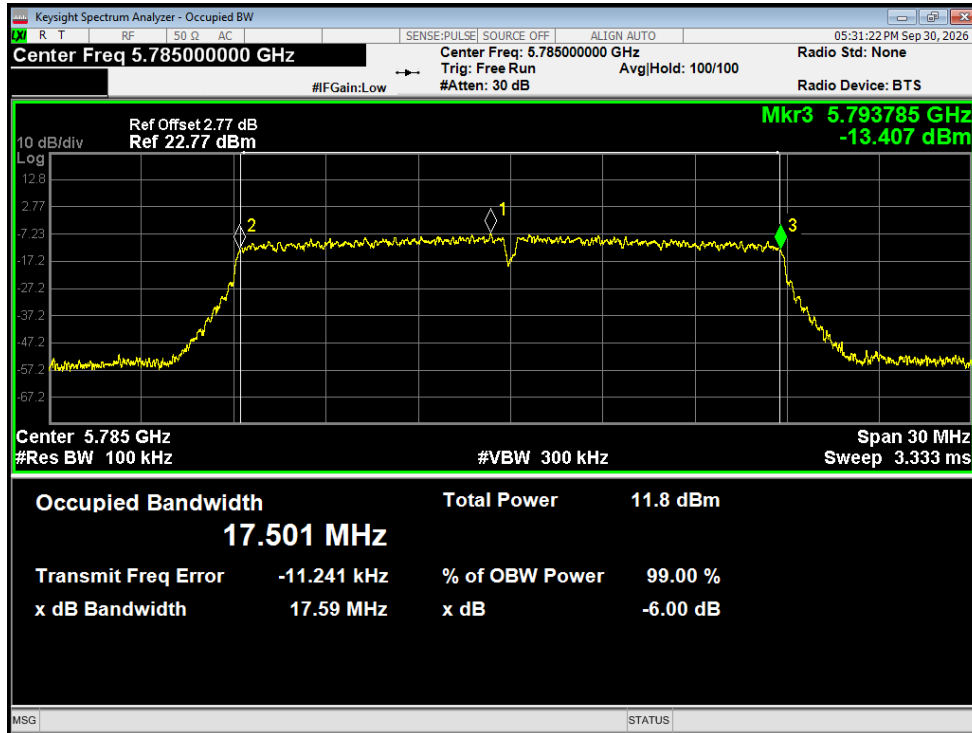
-6dB Bandwidth NVNT a 5825MHz Ant1



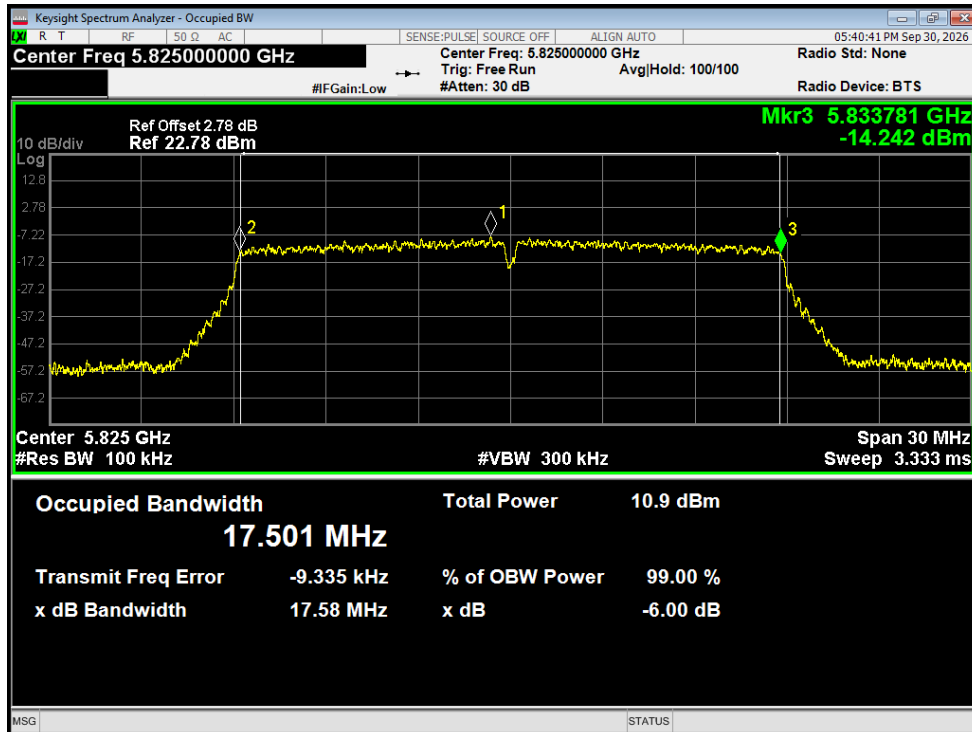
-6dB Bandwidth NVNT n20 5745MHz Ant1



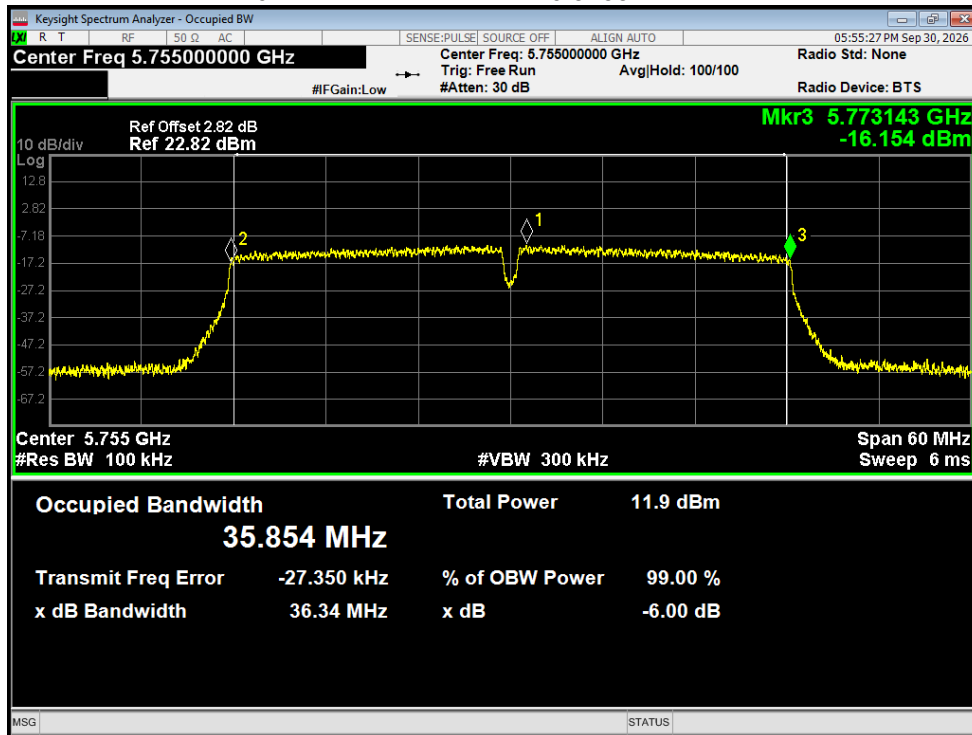
-6dB Bandwidth NVNT n20 5785MHz Ant1



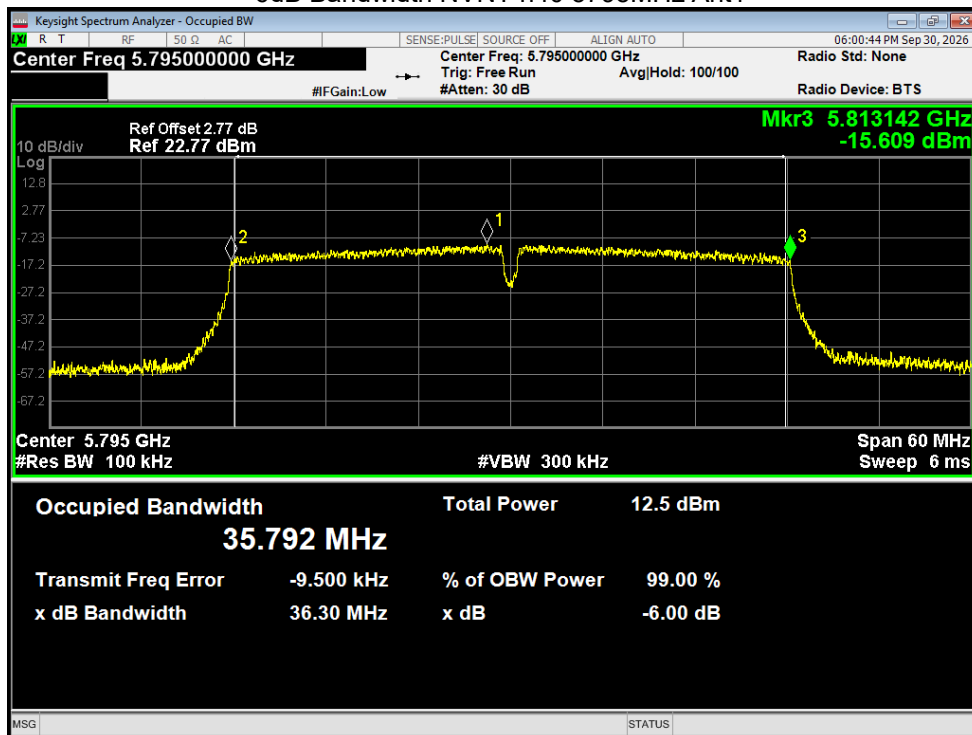
-6dB Bandwidth NVNT n20 5825MHz Ant1



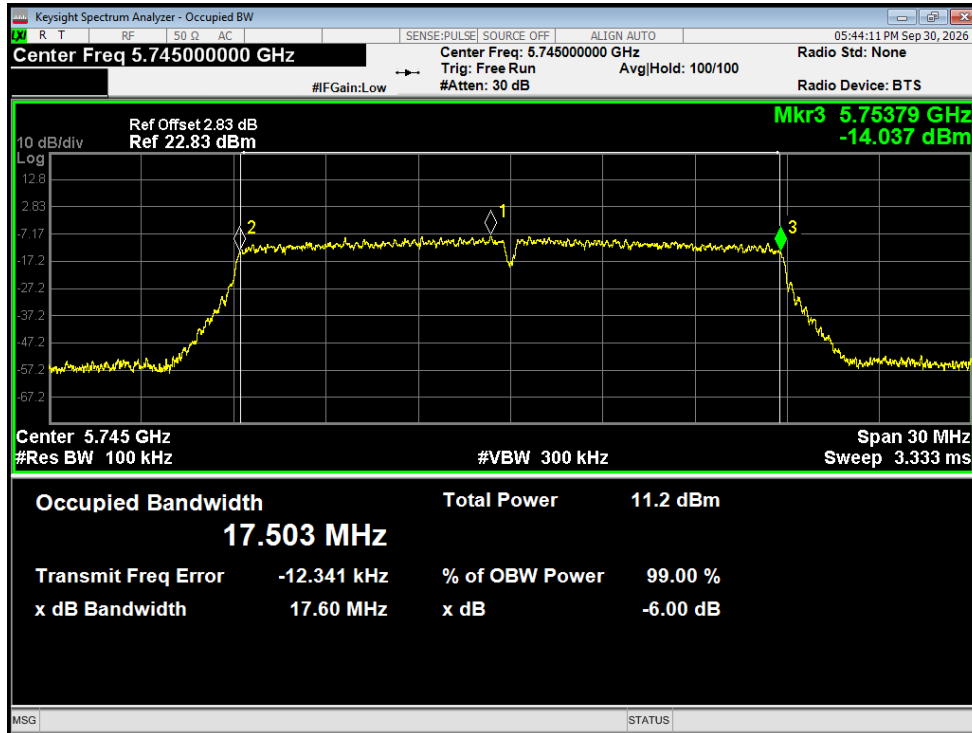
-6dB Bandwidth NVNT n40 5755MHz Ant1



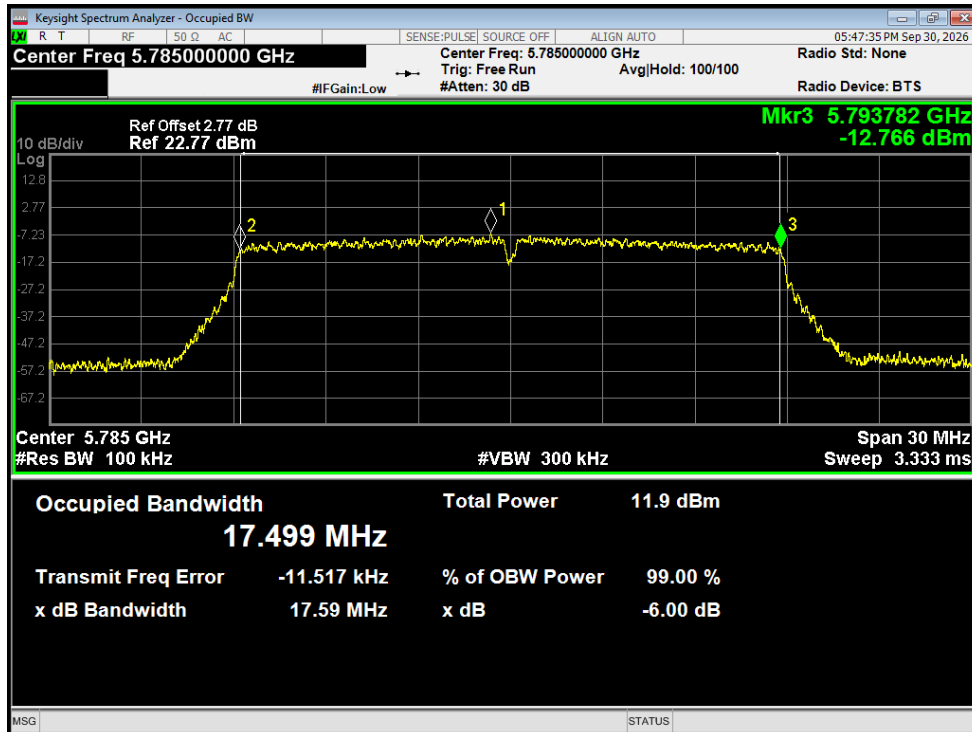
-6dB Bandwidth NVNT n40 5795MHz Ant1



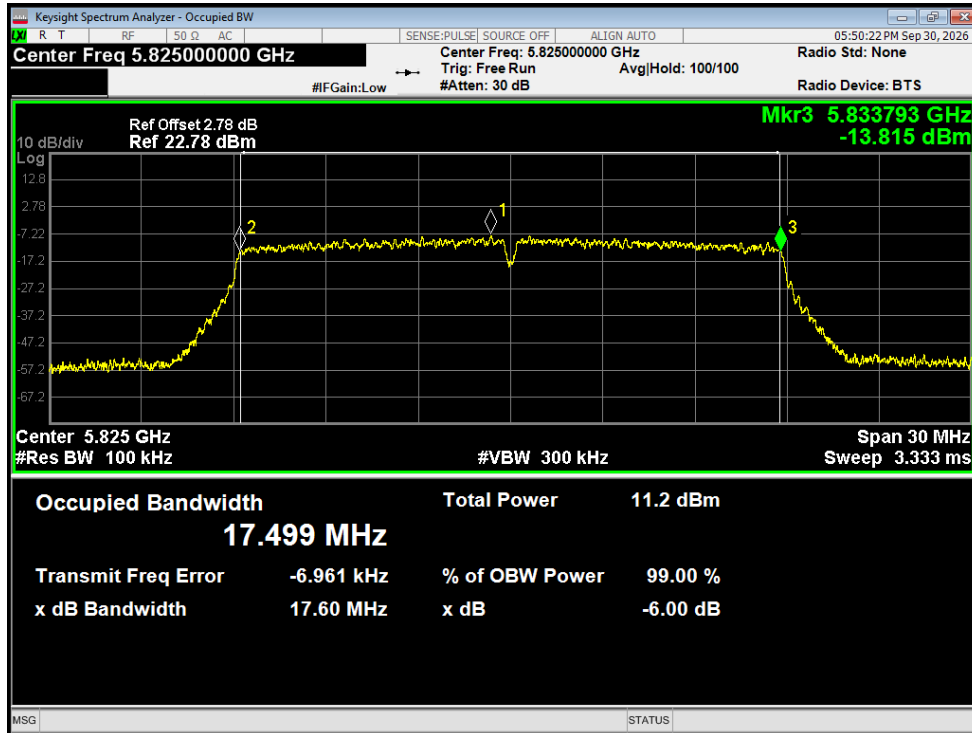
-6dB Bandwidth NVNT ac20 5745MHz Ant1



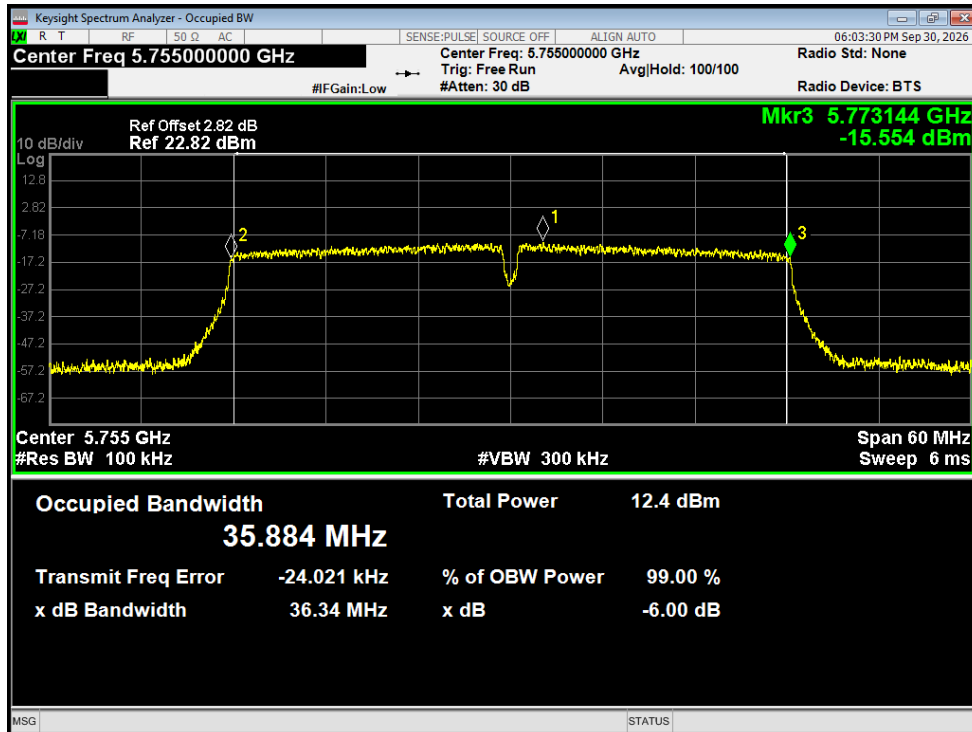
-6dB Bandwidth NVNT ac20 5785MHz Ant1



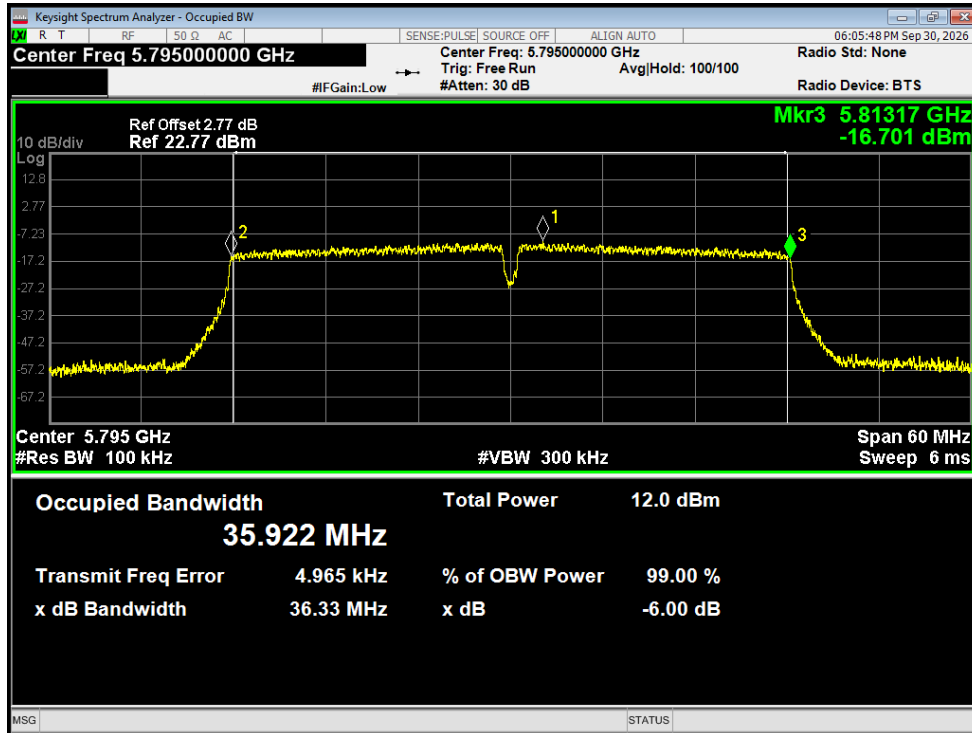
-6dB Bandwidth NVNT ac20 5825MHz Ant1



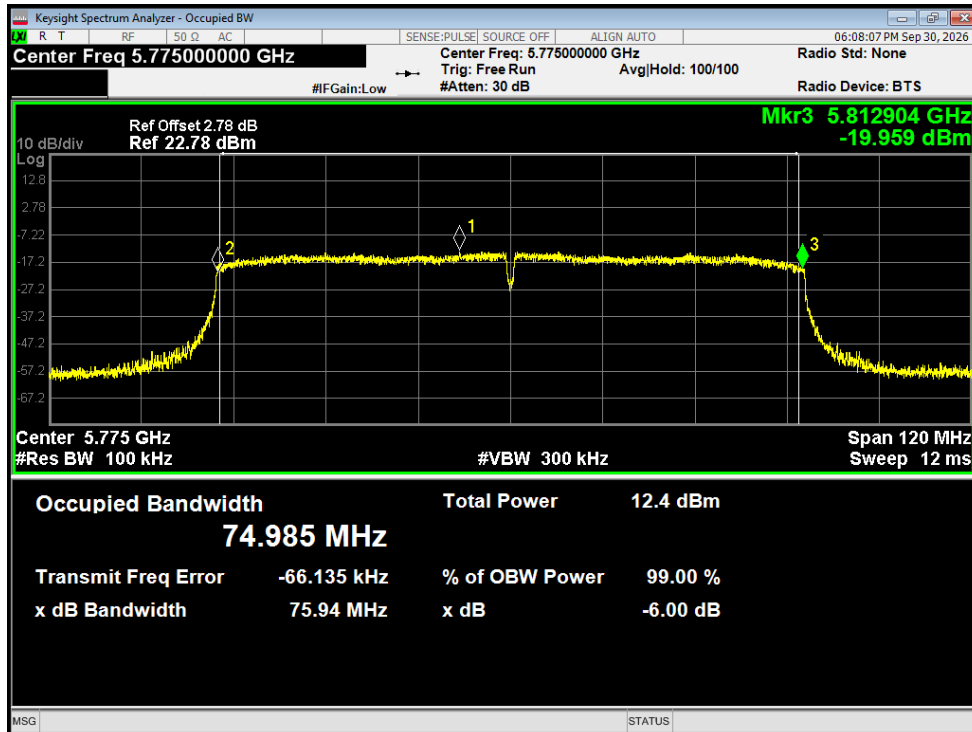
-6dB Bandwidth NVNT ac40 5755MHz Ant1



-6dB Bandwidth NVNT ac40 5795MHz Ant1

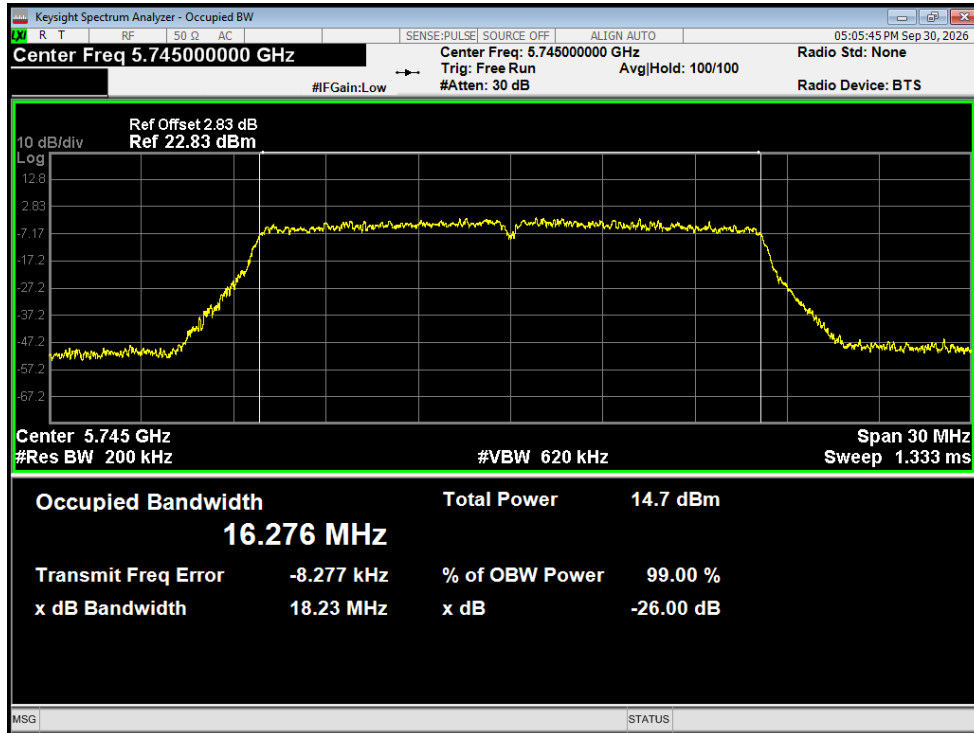


-6dB Bandwidth NVNT ac80 5775MHz Ant1

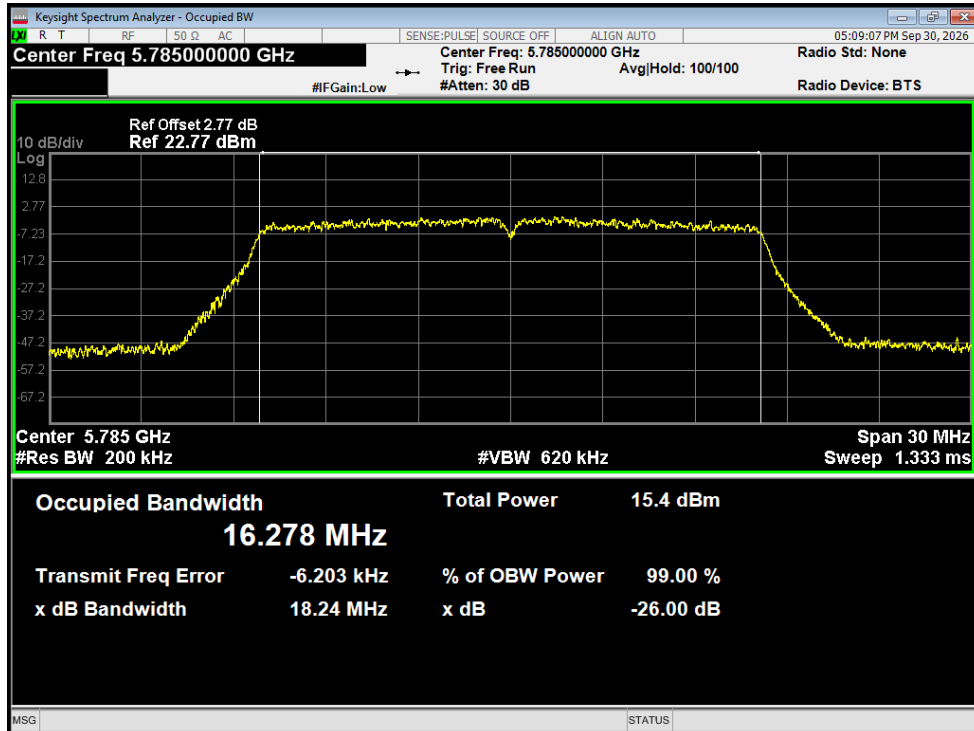


Test plot 99% Bandwidth

OBW NVNT a 5745MHz Ant1

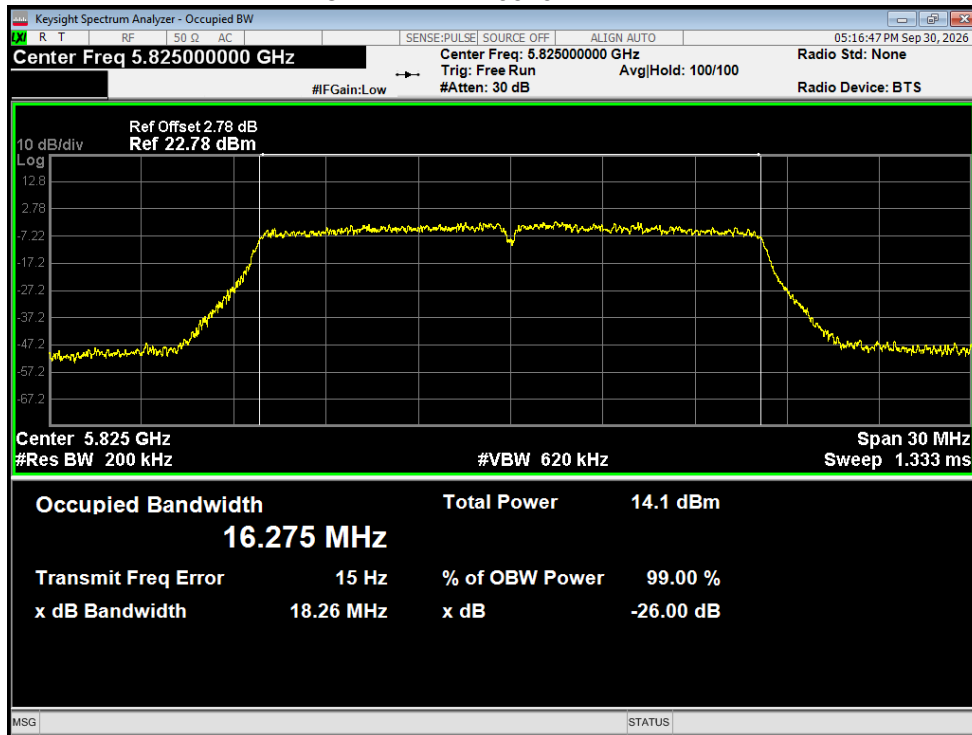


OBW NVNT a 5785MHz Ant1

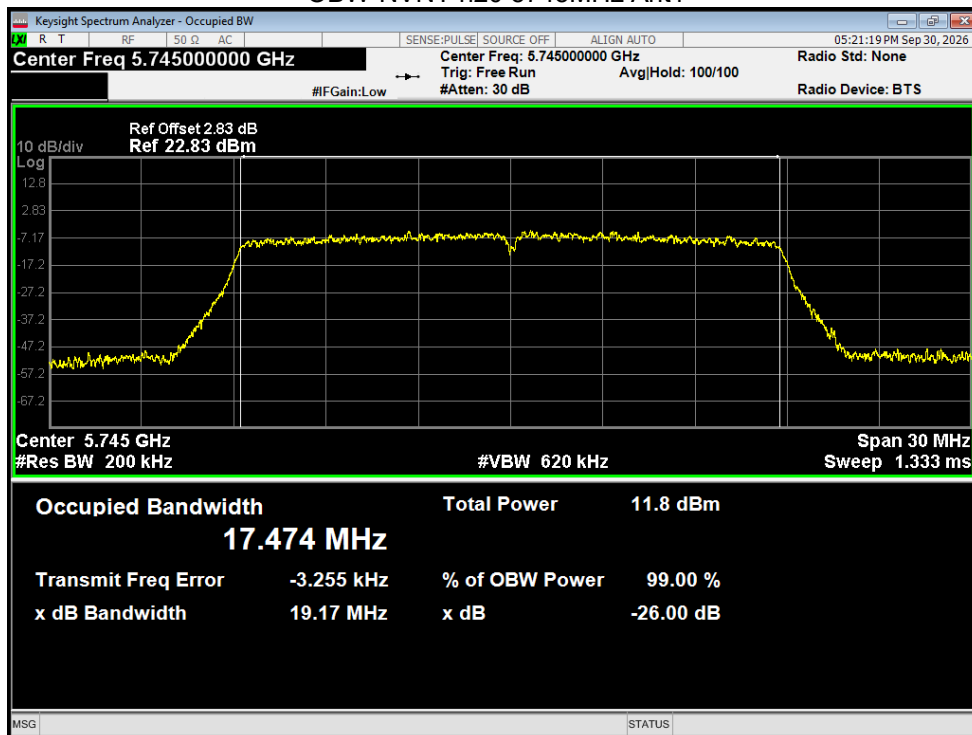




OBW NVNT a 5825MHz Ant1

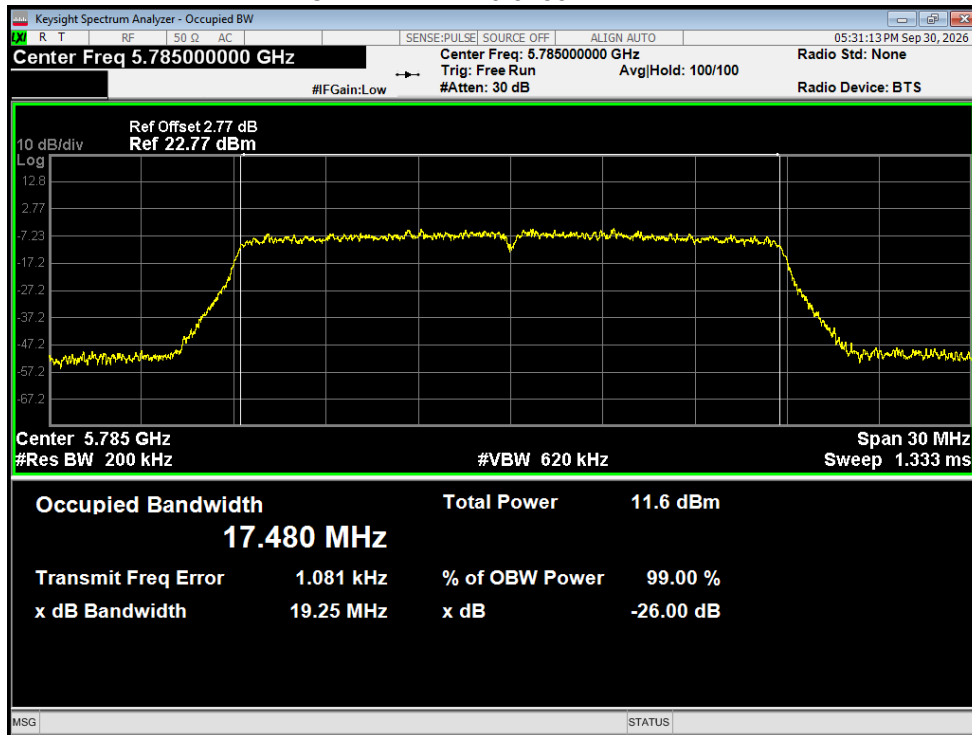


OBW NVNT n20 5745MHz Ant1

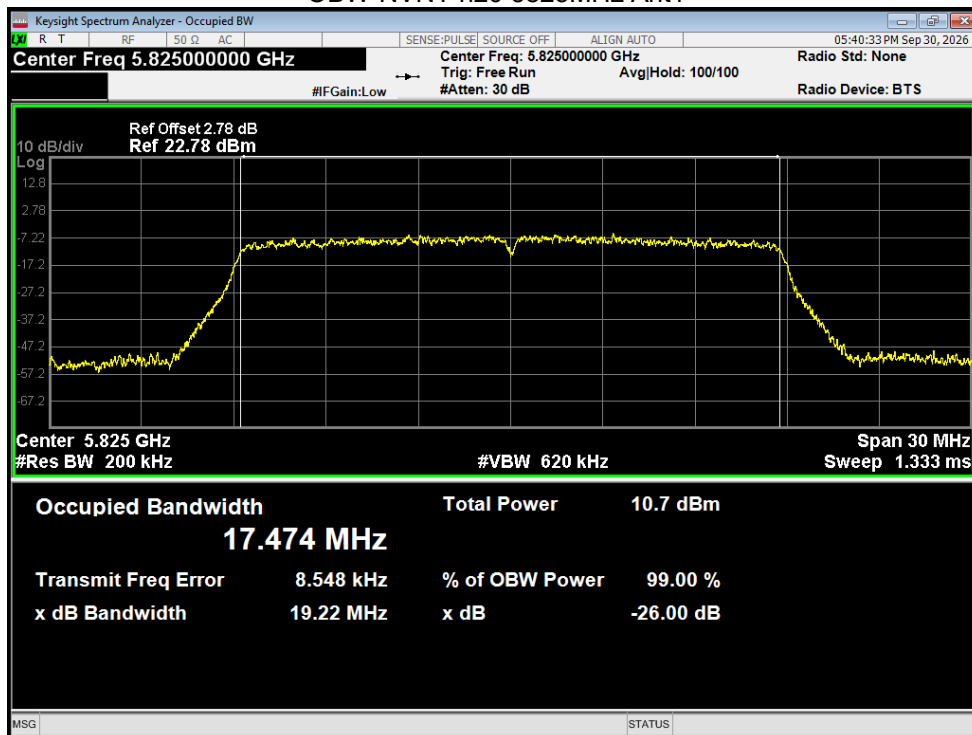




OBW NVNT n20 5785MHz Ant1

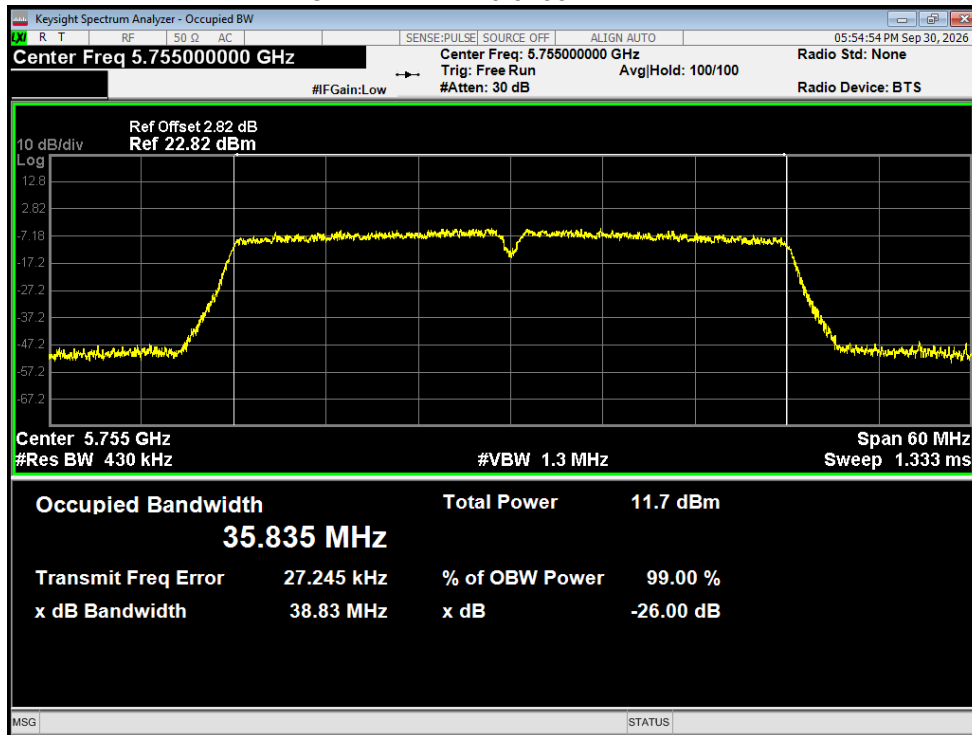


OBW NVNT n20 5825MHz Ant1

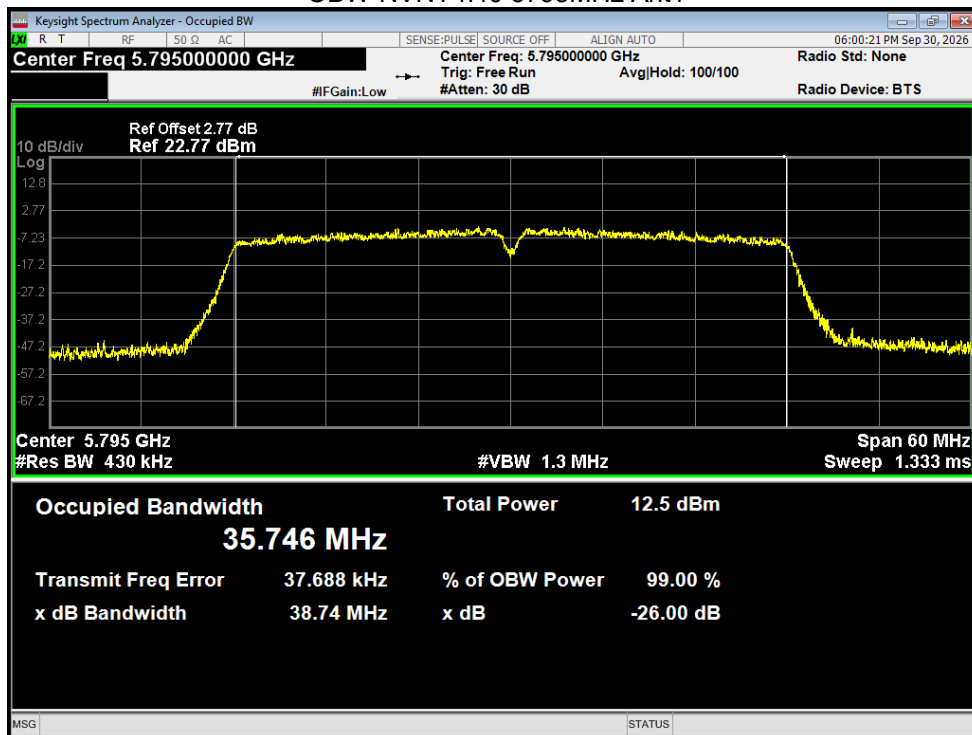




OBW NVNT n40 5755MHz Ant1

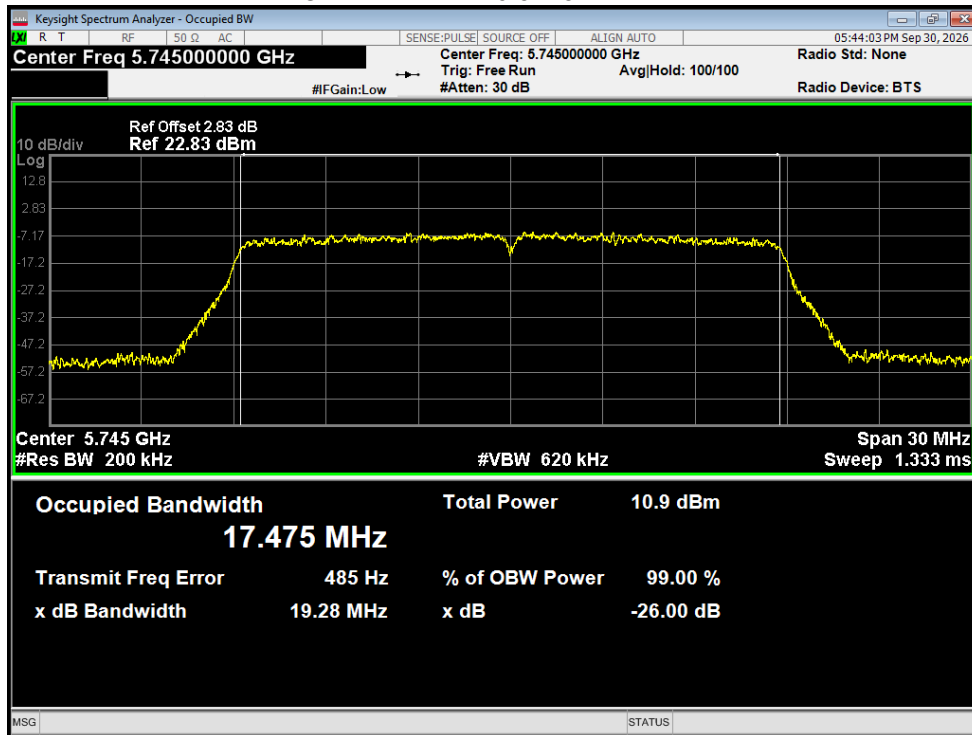


OBW NVNT n40 5795MHz Ant1

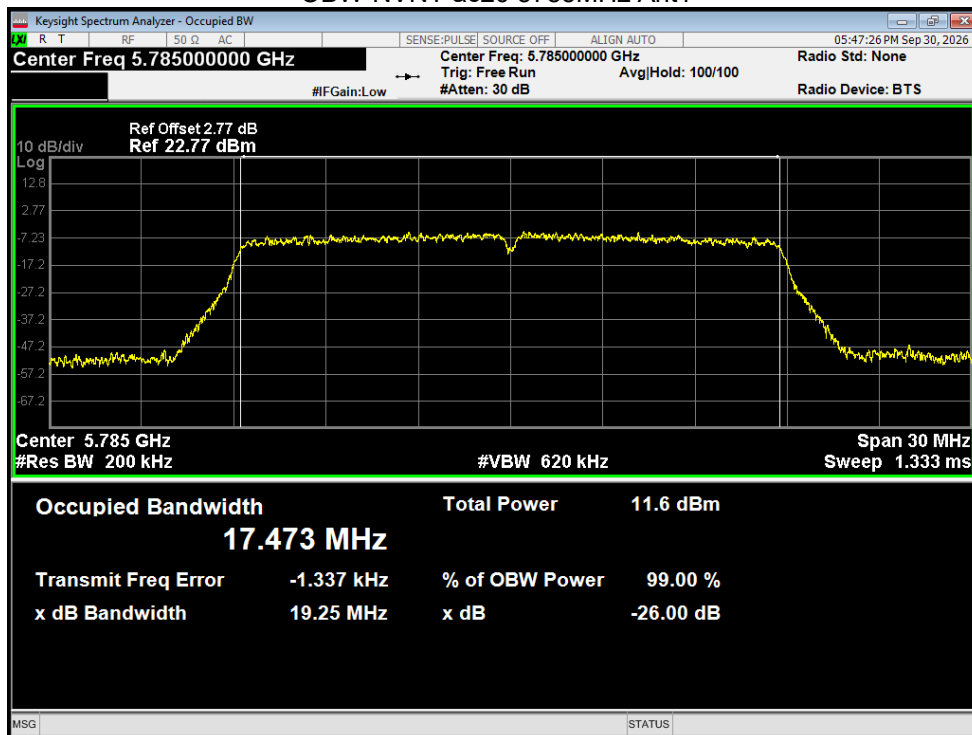




OBW NVNT ac20 5745MHz Ant1

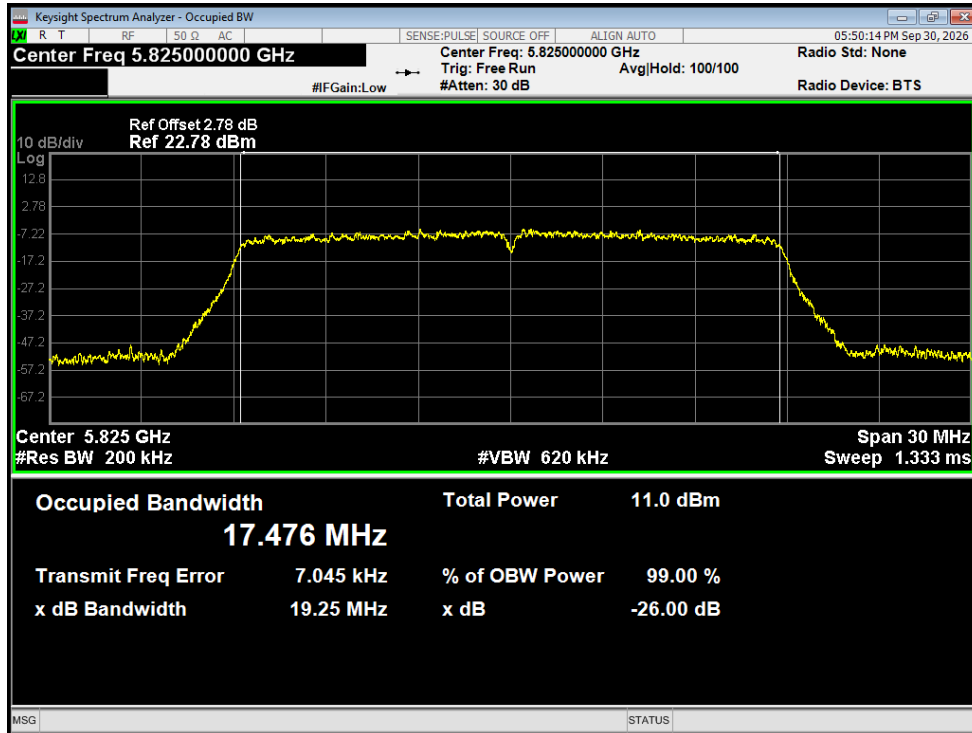


OBW NVNT ac20 5785MHz Ant1

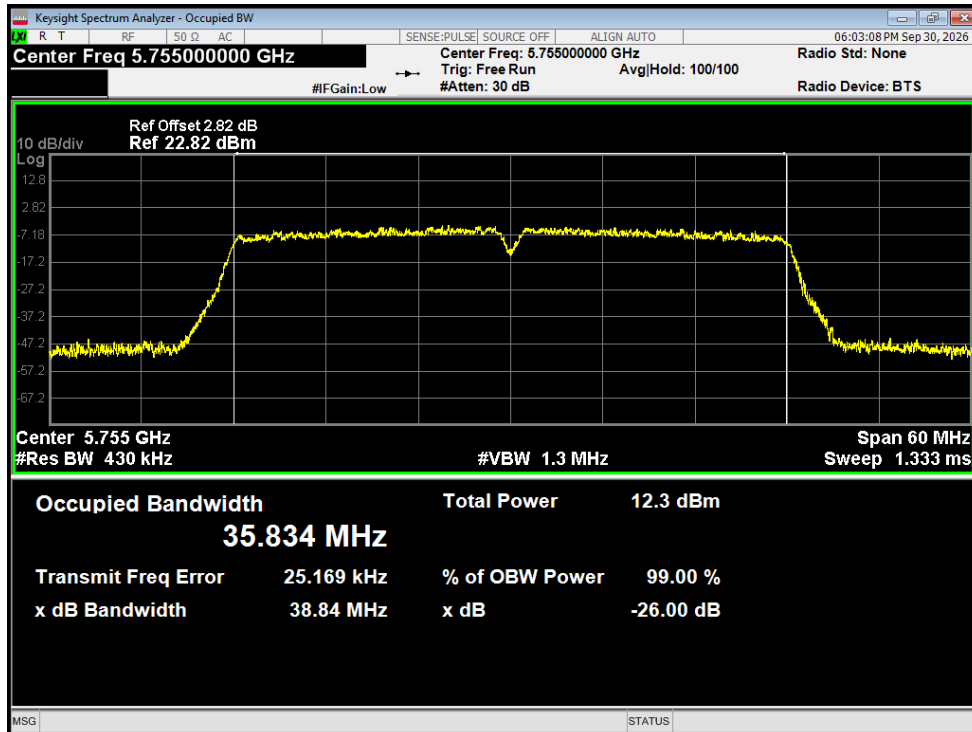




OBW NVNT ac20 5825MHz Ant1

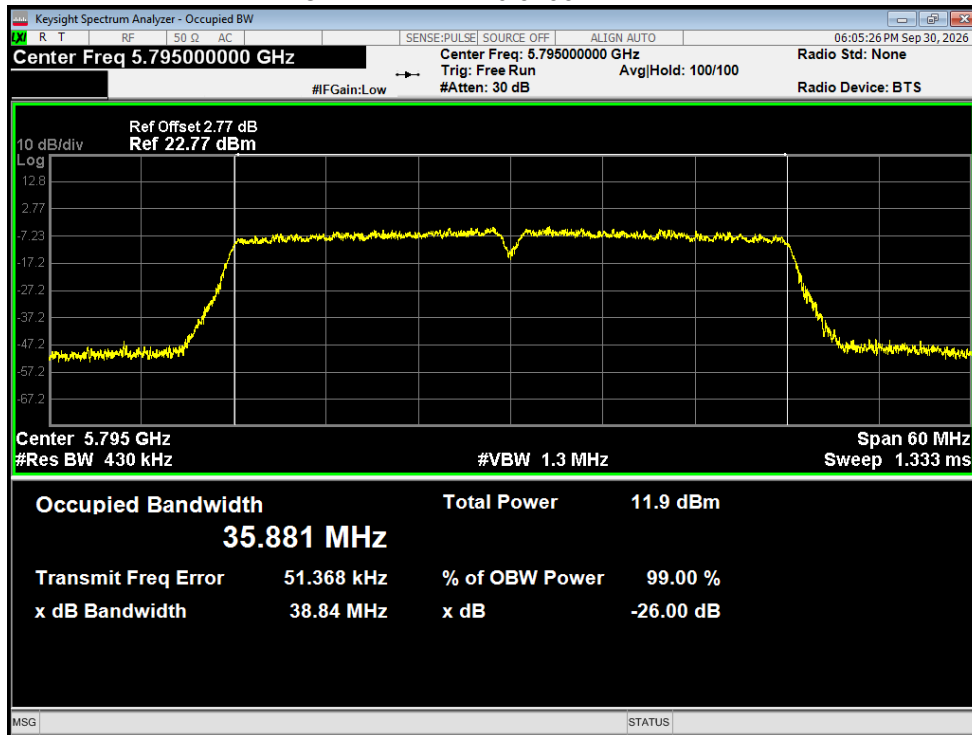


OBW NVNT ac40 5755MHz Ant1

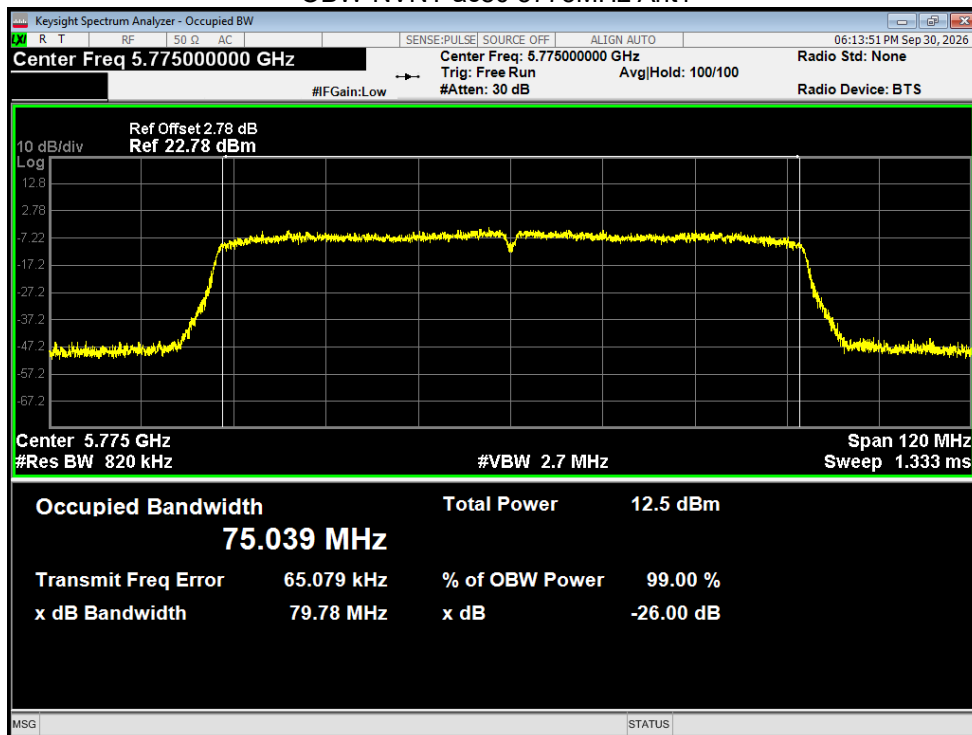




OBW NVNT ac40 5795MHz Ant1



OBW NVNT ac80 5775MHz Ant1





ANT2

5745-5825MHz

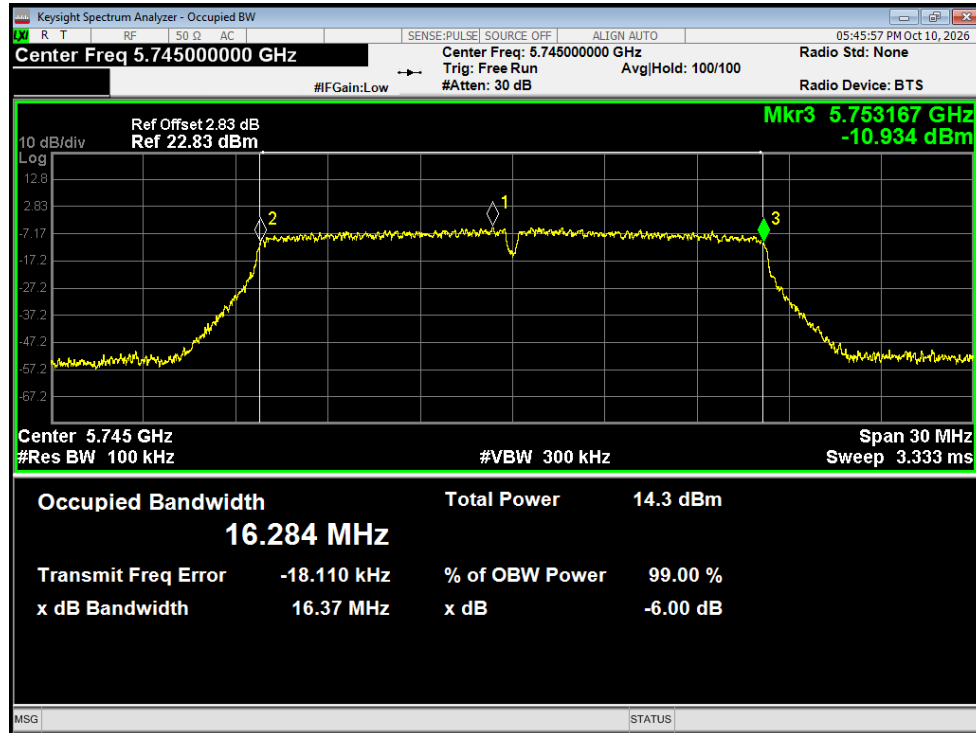
Test CH	-6dB Channel Bandwidth (MHz)						Limit (KHz)	Result
	802.11a	802.11n 20	802.11ac 20	802.11n 40	802.11ac 40	802.11ac 80		
Lowest	16.37	17.59	17.60	36.35	36.34	--	>500	Pass
Middle	16.37	17.60	17.59	--	--	75.08		
Highest	16.37	17.59	17.60	36.34	36.35	--		

Test CH	99% Bandwidth (MHz)						Limit	Result
	802.11a	802.11n 20	802.11ac 20	802.11n 40	802.11ac 40	802.11ac 80		
Lowest	16.265	17.478	17.477	35.846	35.852	--	/	Pass
Middle	16.268	17.475	17.485	--	--	74.988		
Highest	16.266	17.470	17.489	35.864	35.865	--		

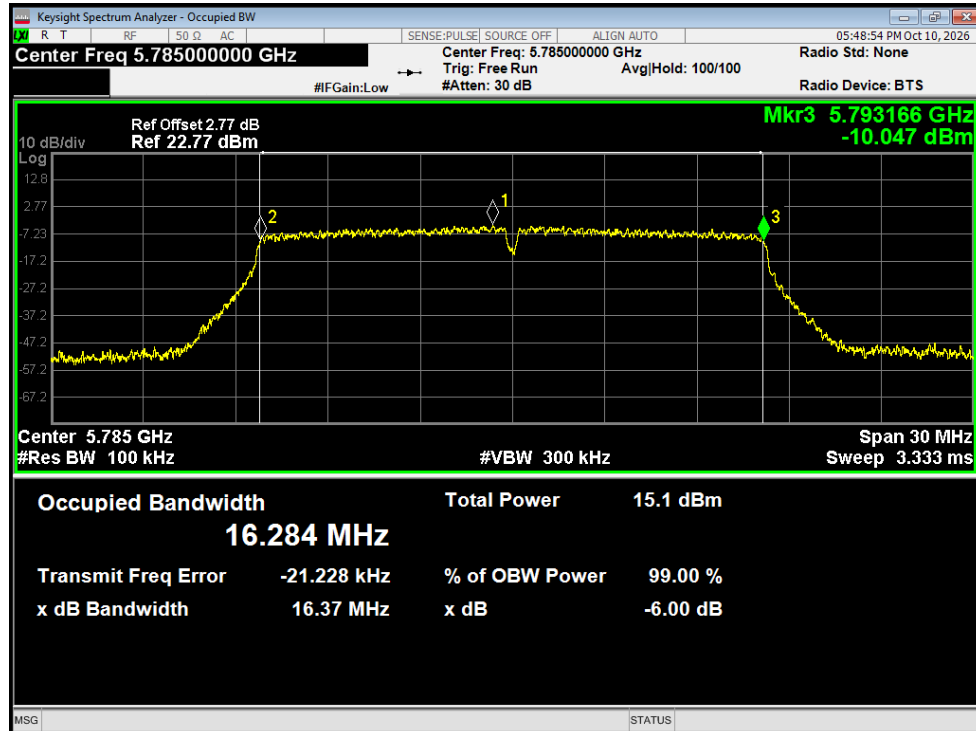
Remark: "---" is not applicable

Test plot -6dB Channel Bandwidth

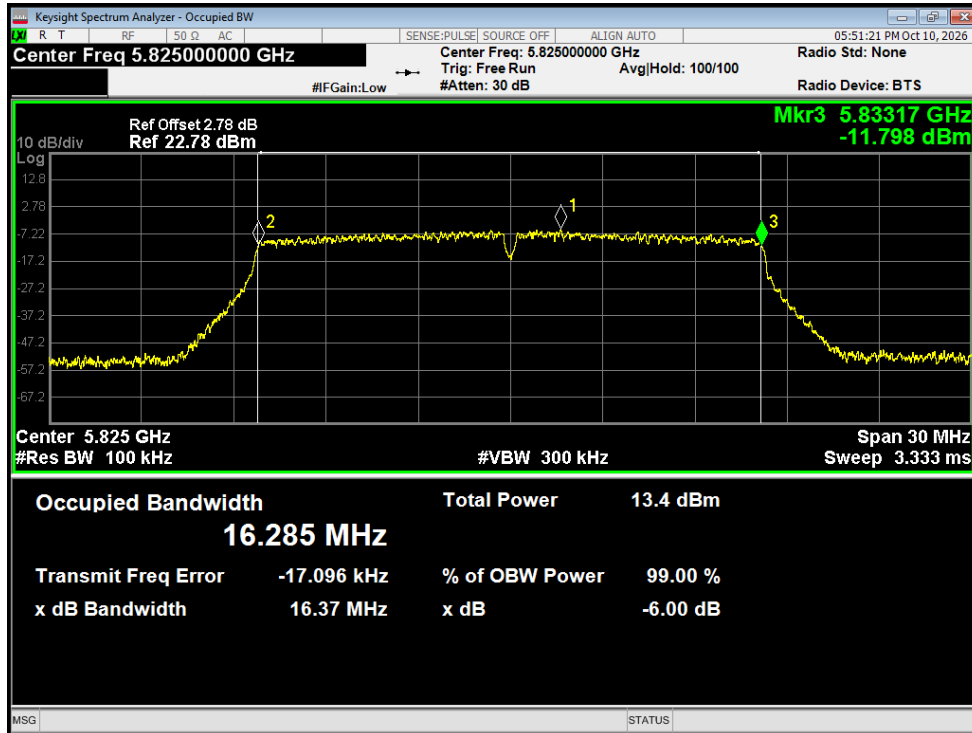
-6dB Bandwidth NVNT a 5745MHz Ant1



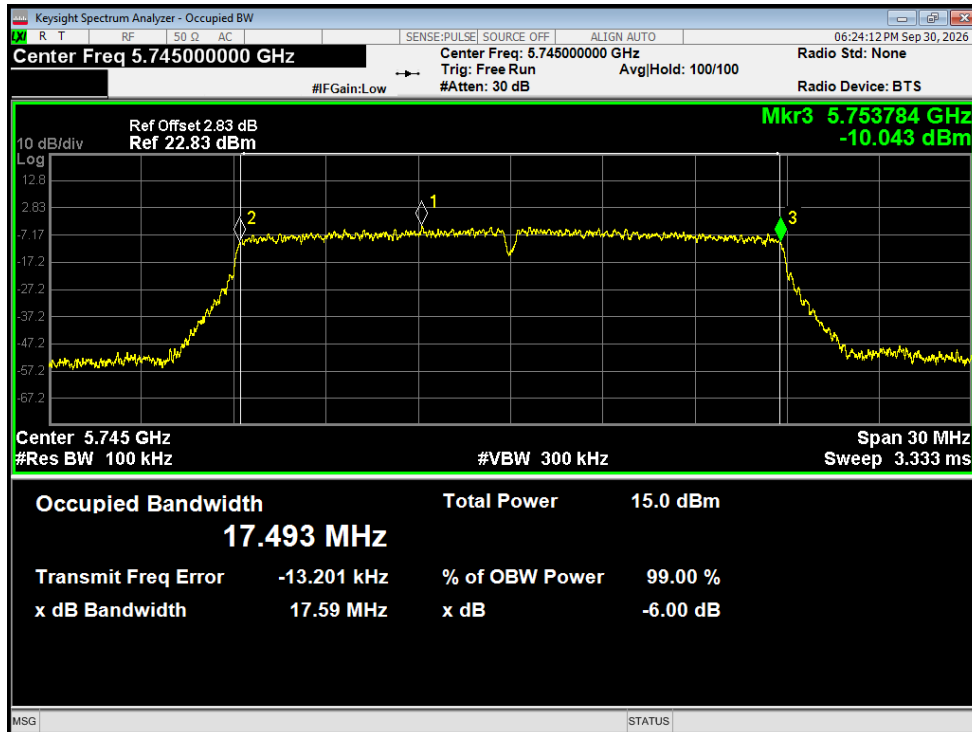
-6dB Bandwidth NVNT a 5785MHz Ant1



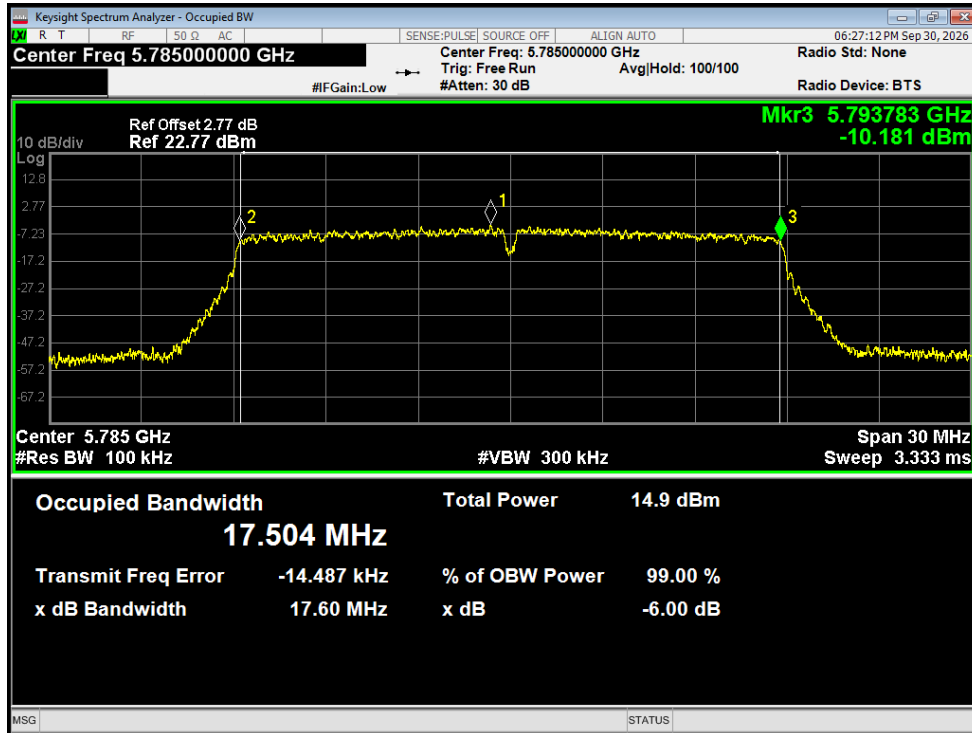
-6dB Bandwidth NVNT a 5825MHz Ant1



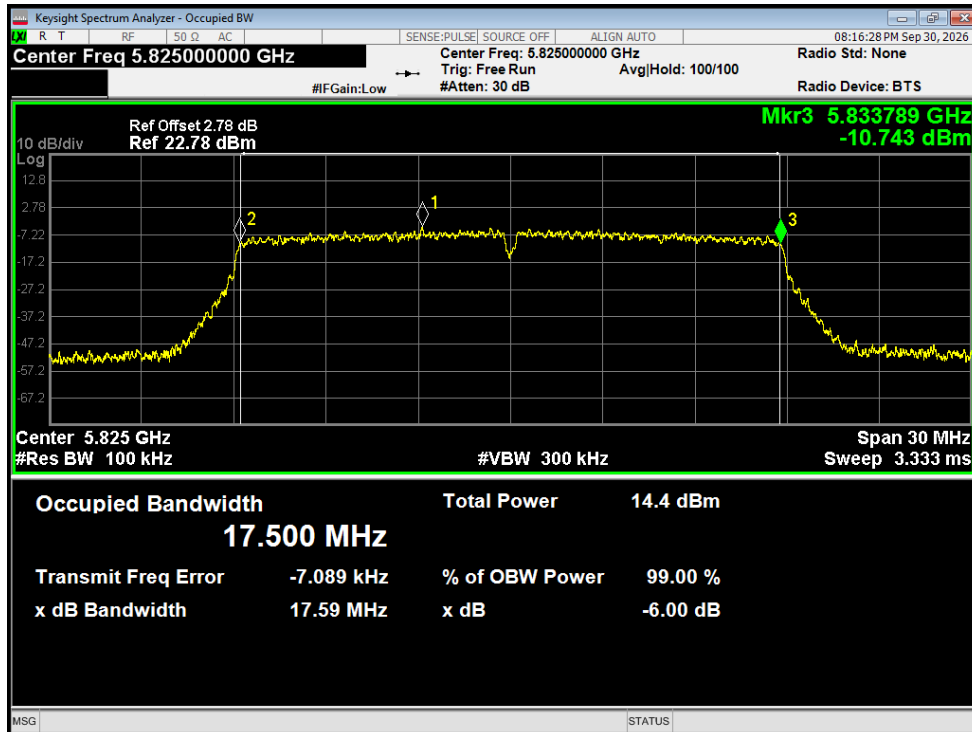
-6dB Bandwidth NVNT n20 5745MHz Ant1



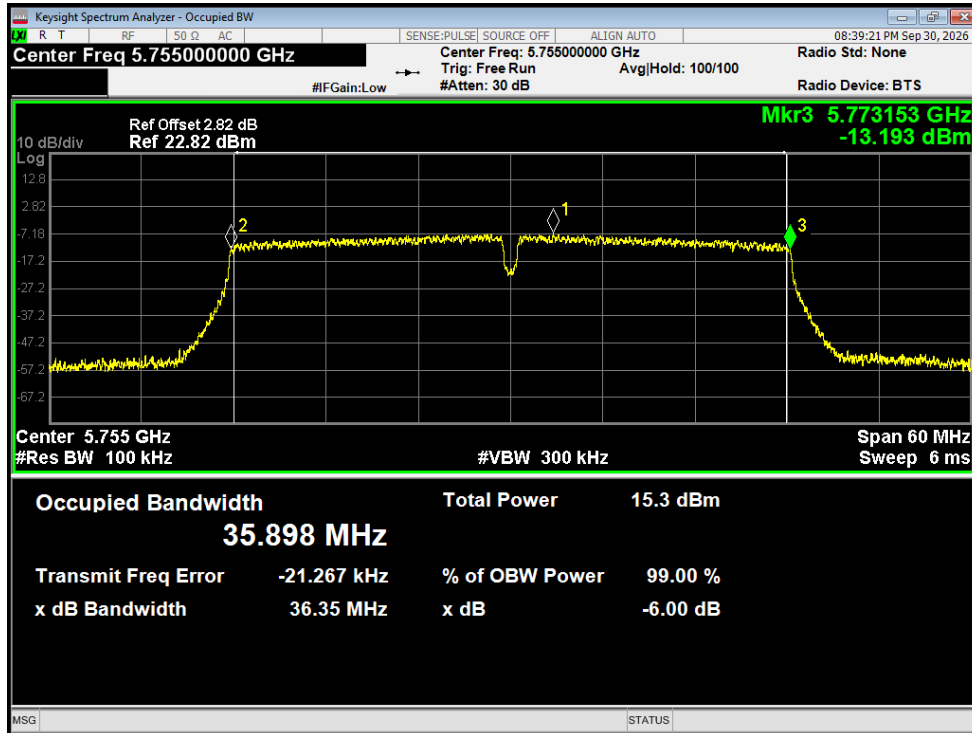
-6dB Bandwidth NVNT n20 5785MHz Ant1



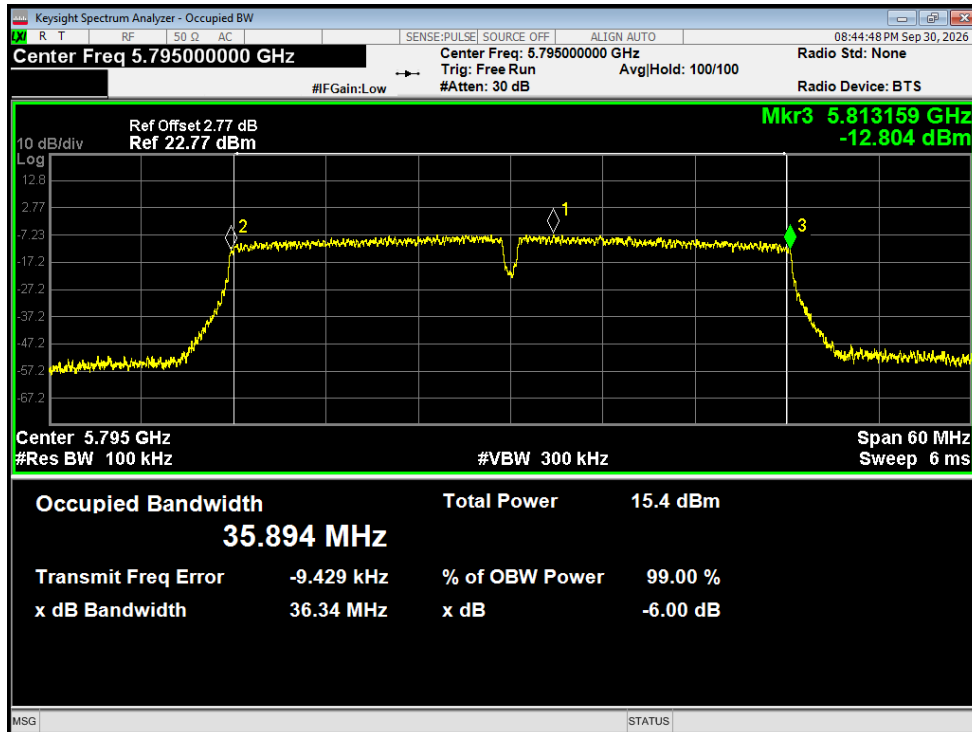
-6dB Bandwidth NVNT n20 5825MHz Ant1



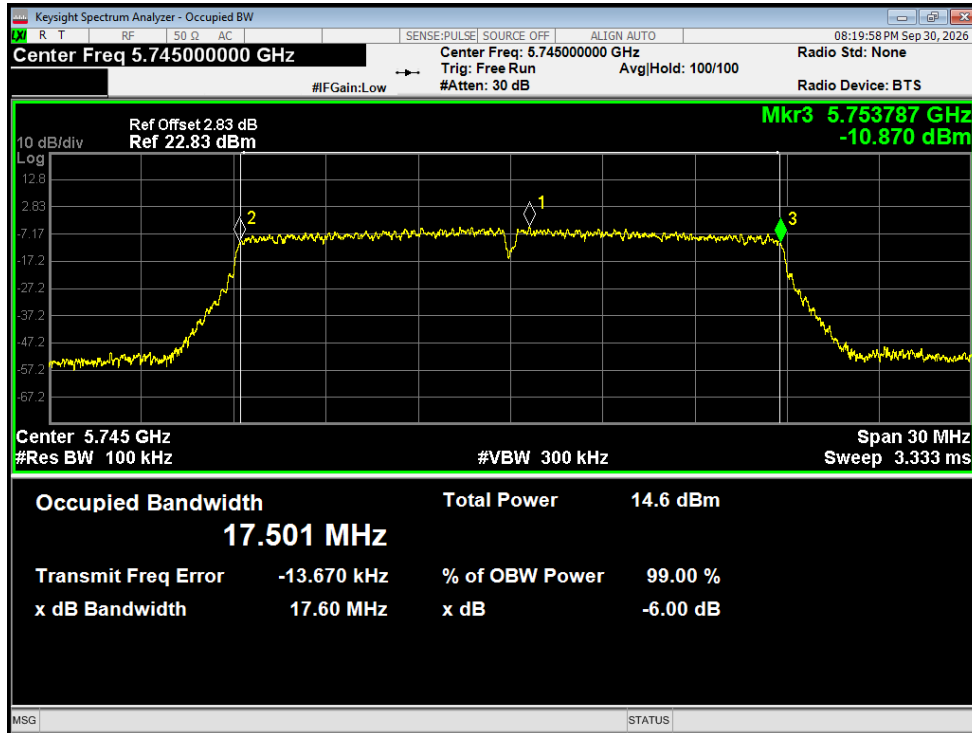
-6dB Bandwidth NVNT n40 5755MHz Ant1



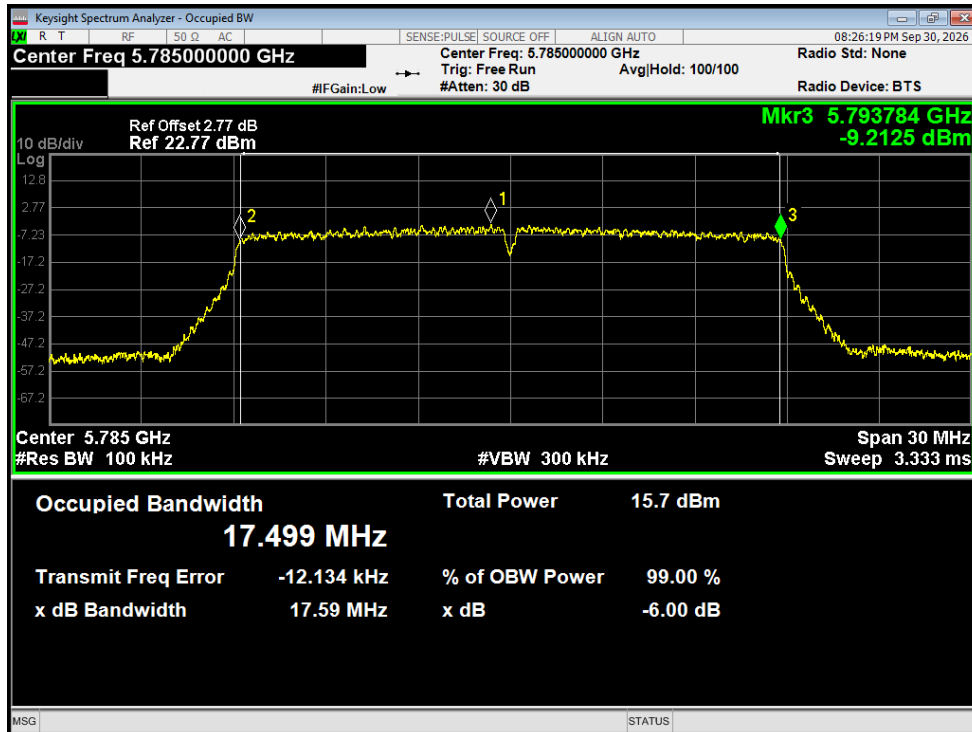
-6dB Bandwidth NVNT n40 5795MHz Ant1



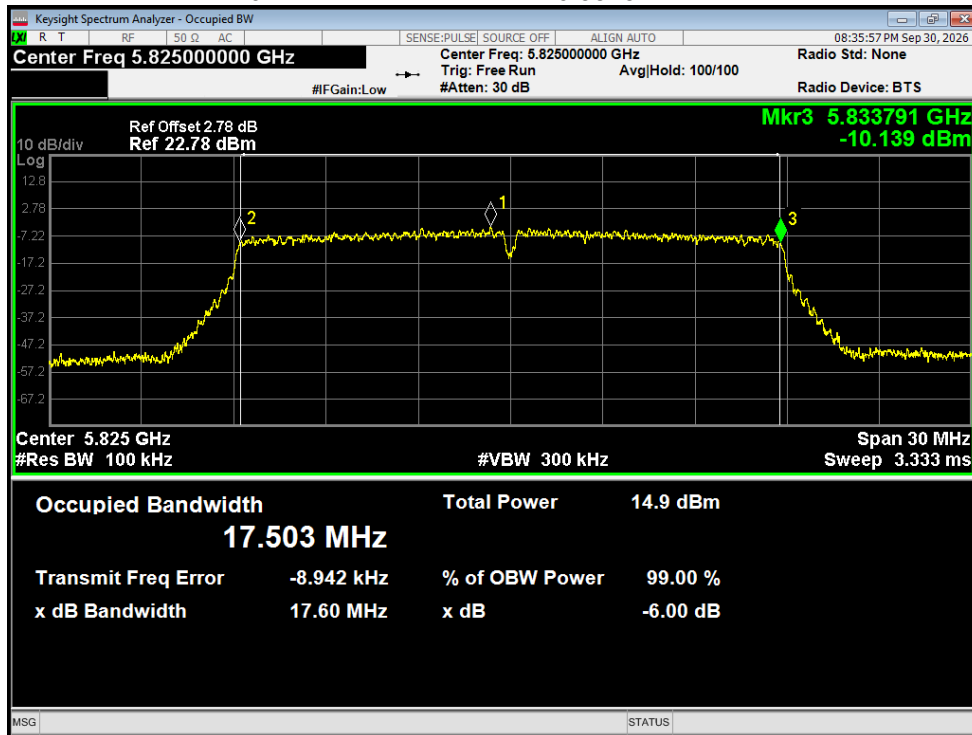
-6dB Bandwidth NVNT ac20 5745MHz Ant1



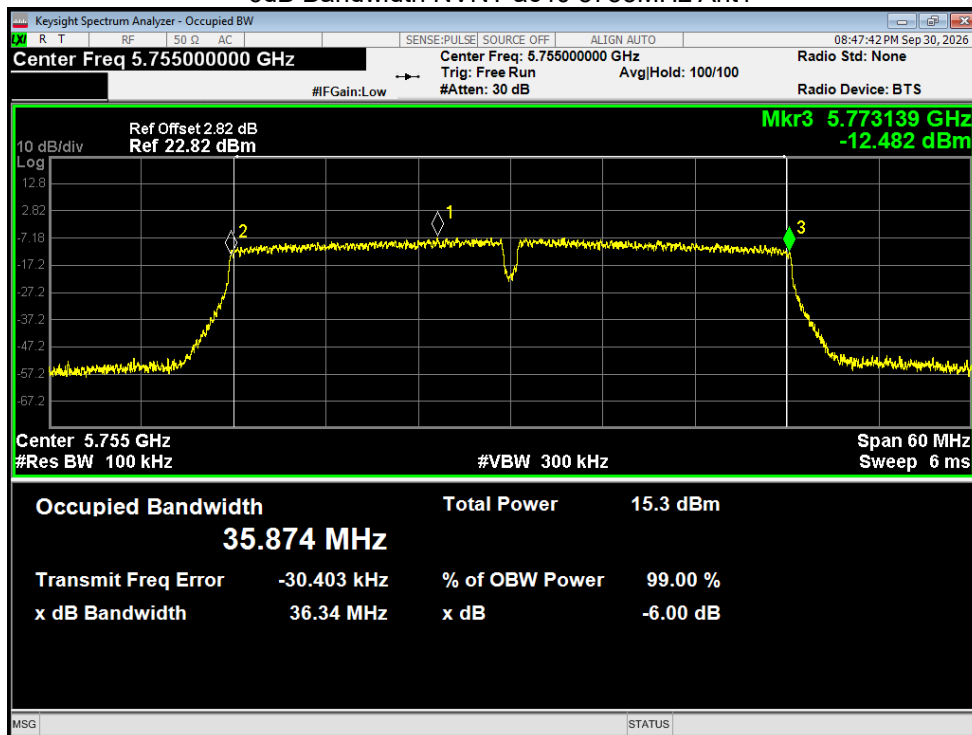
-6dB Bandwidth NVNT ac20 5785MHz Ant1



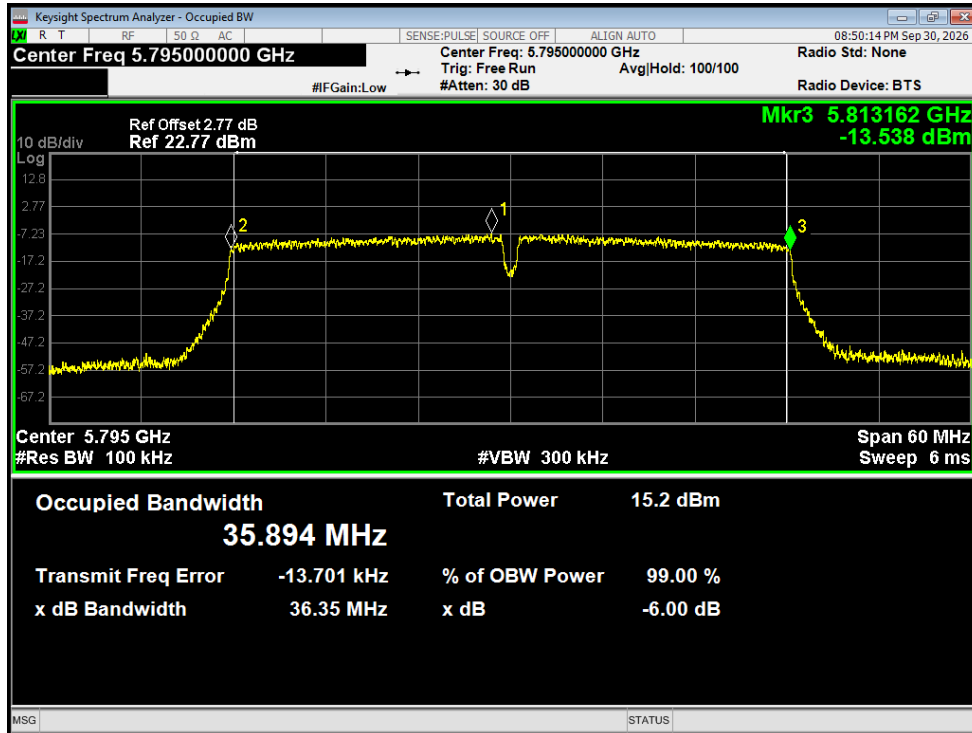
-6dB Bandwidth NVNT ac20 5825MHz Ant1



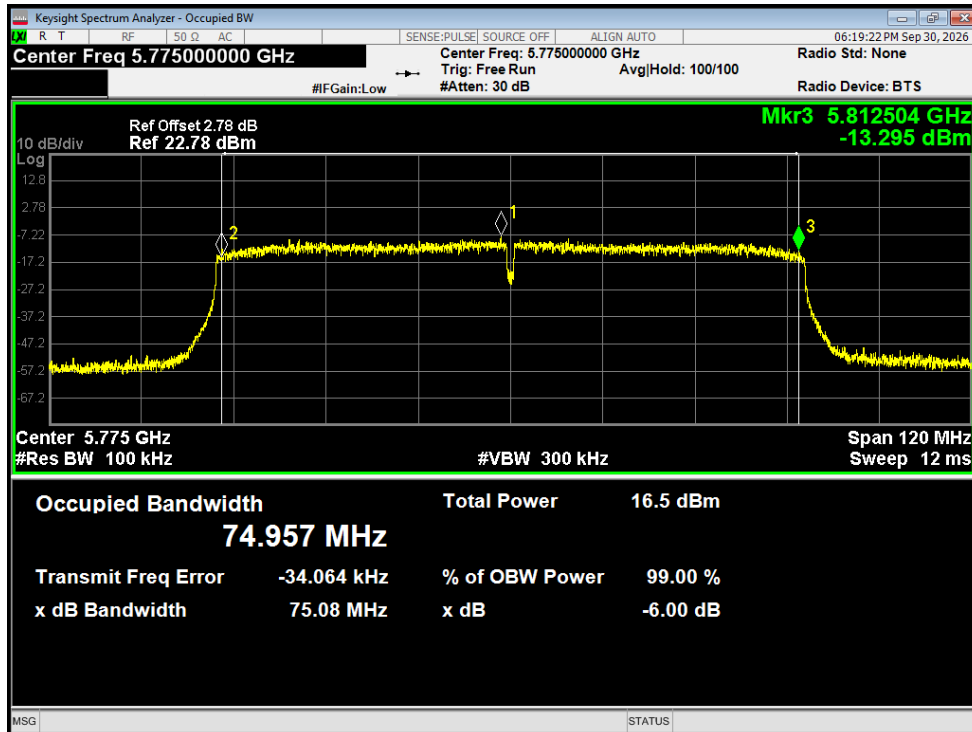
-6dB Bandwidth NVNT ac40 5755MHz Ant1



-6dB Bandwidth NVNT ac40 5795MHz Ant1

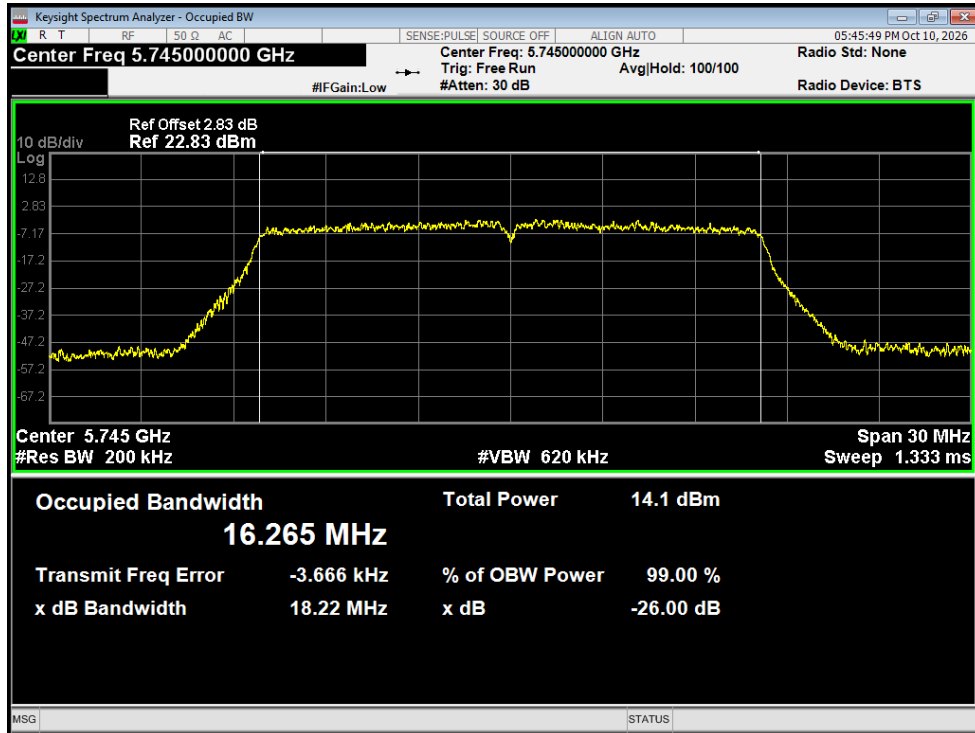


-6dB Bandwidth NVNT ac80 5775MHz Ant1

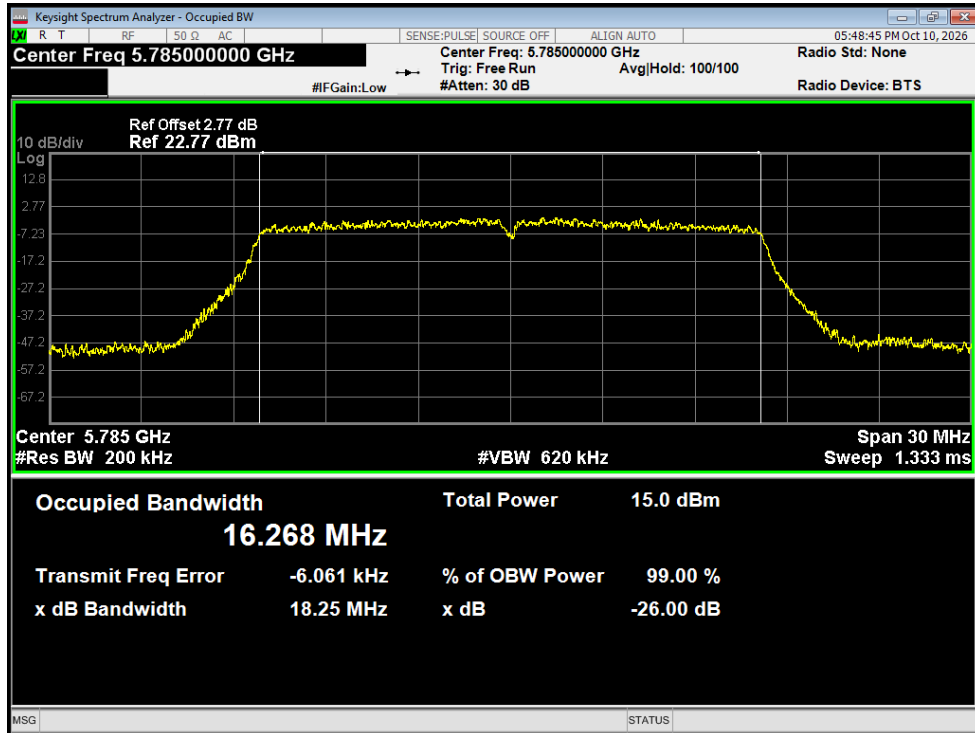


Test plot 99% Bandwidth

OBW NVNT a 5745MHz Ant1

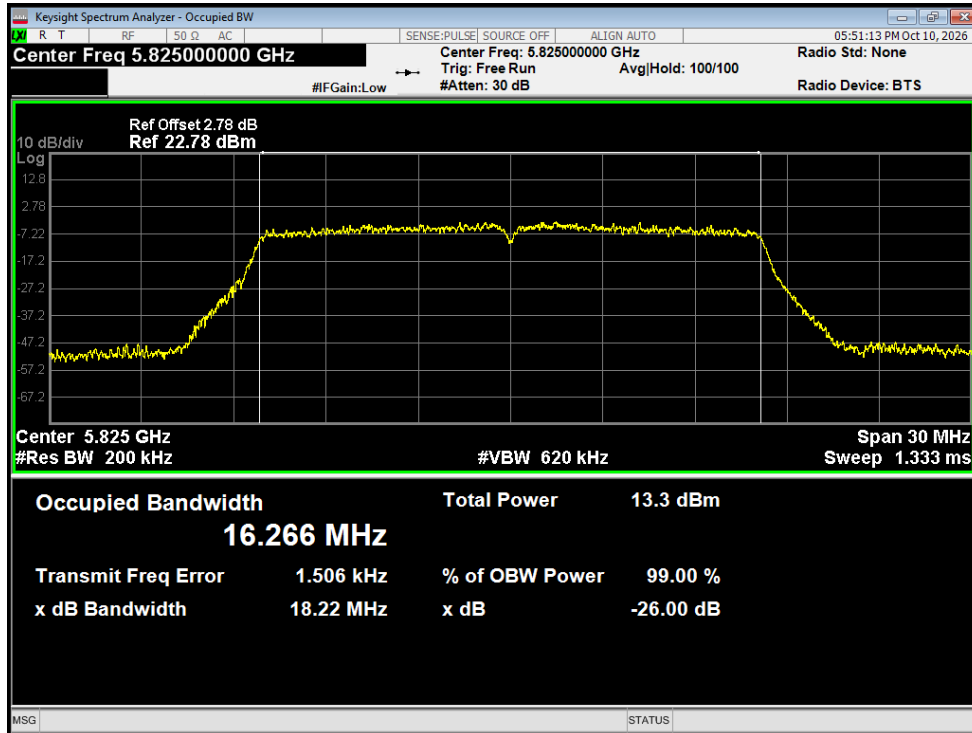


OBW NVNT a 5785MHz Ant1

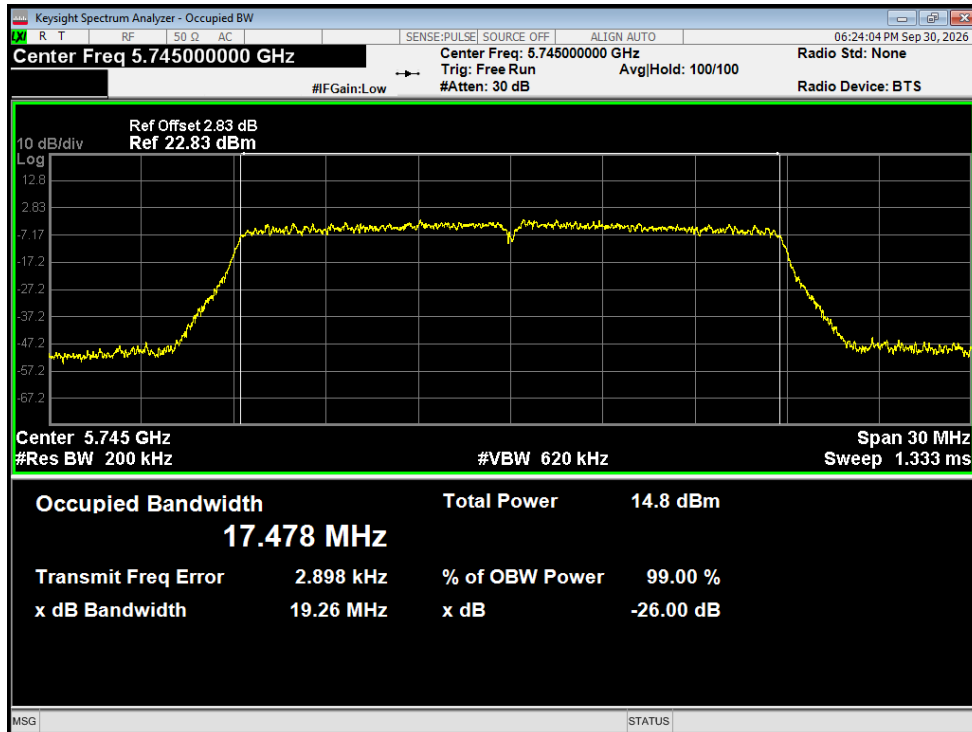




OBW NVNT a 5825MHz Ant1

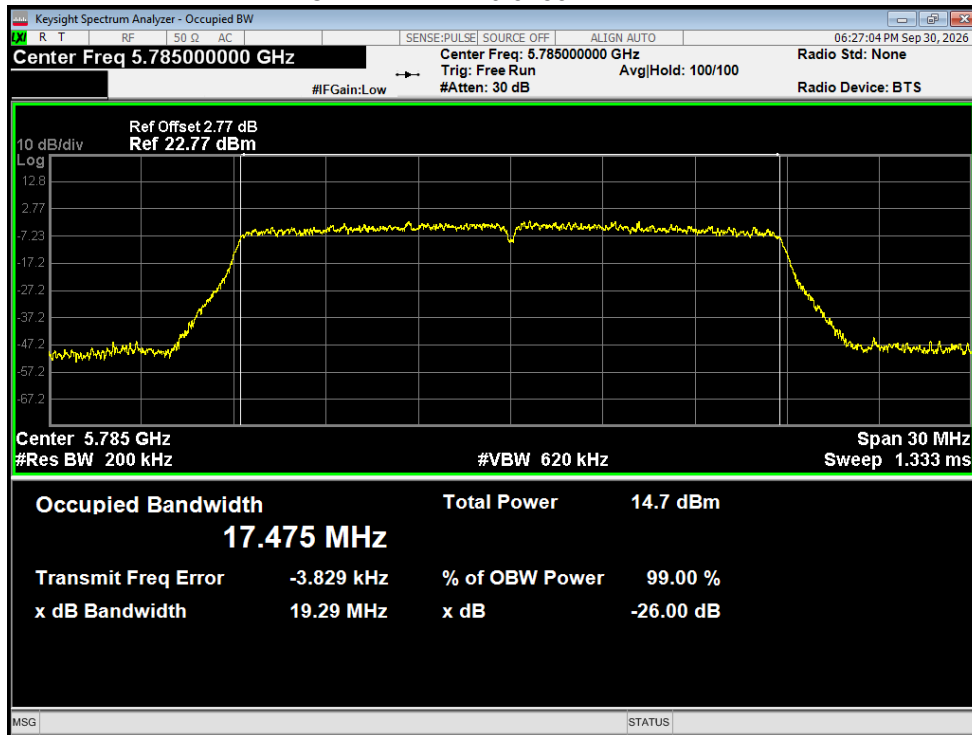


OBW NVNT n20 5745MHz Ant1

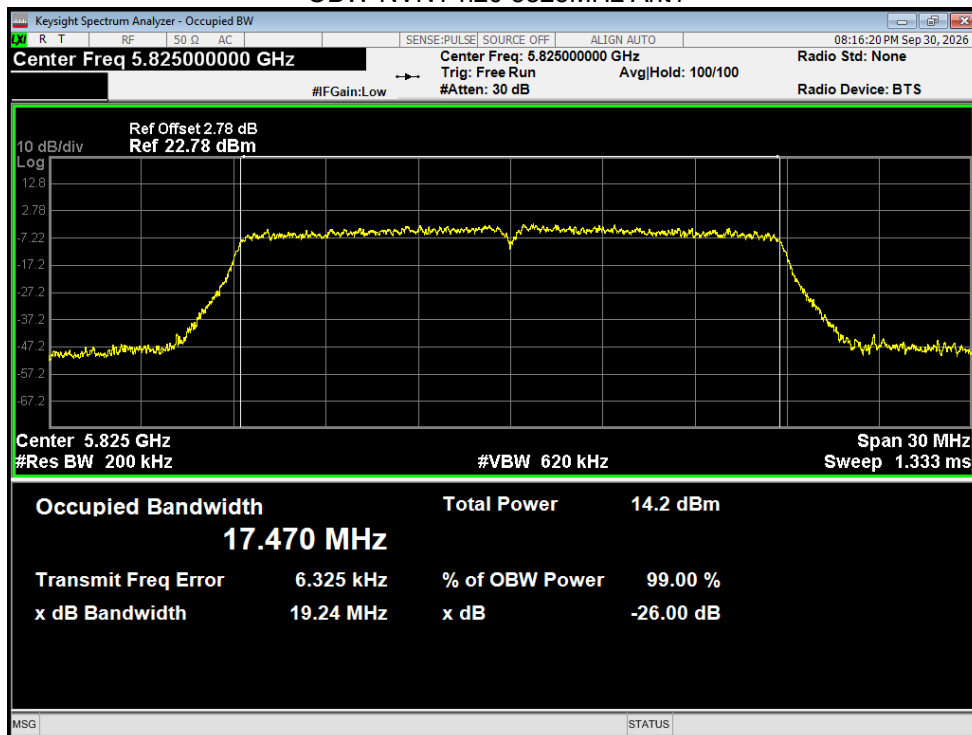




OBW NVNT n20 5785MHz Ant1

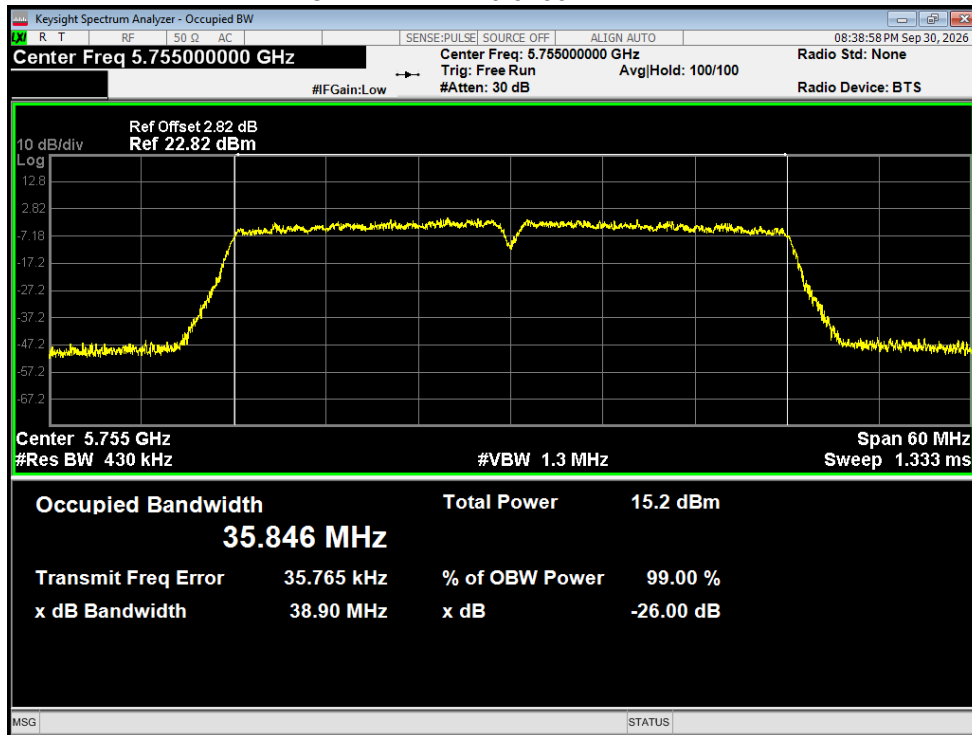


OBW NVNT n20 5825MHz Ant1

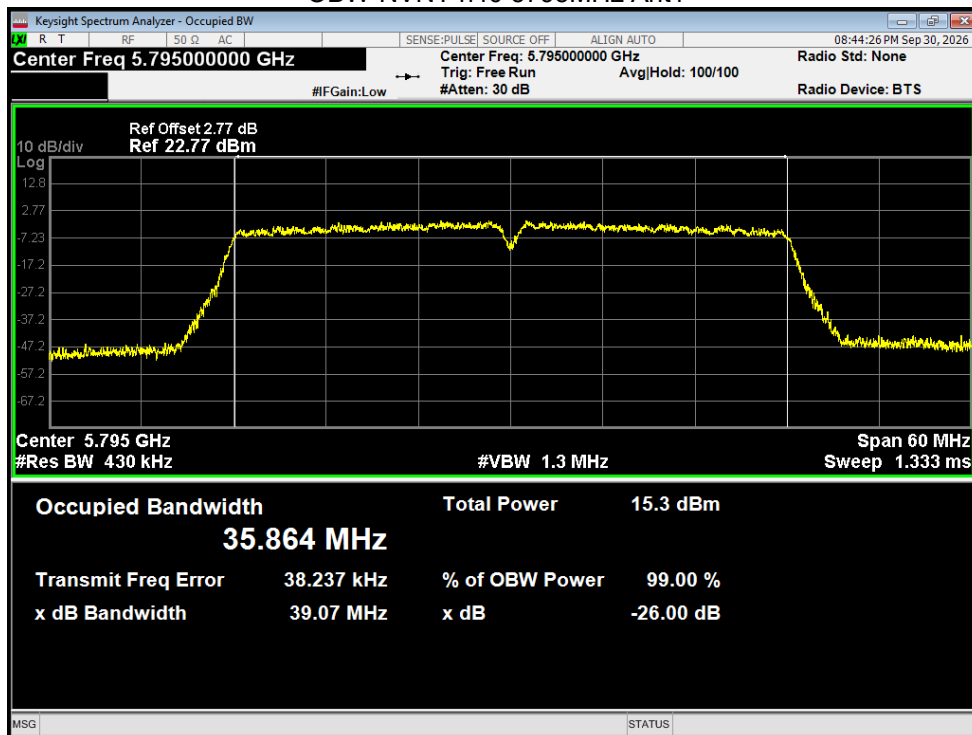




OBW NVNT n40 5755MHz Ant1

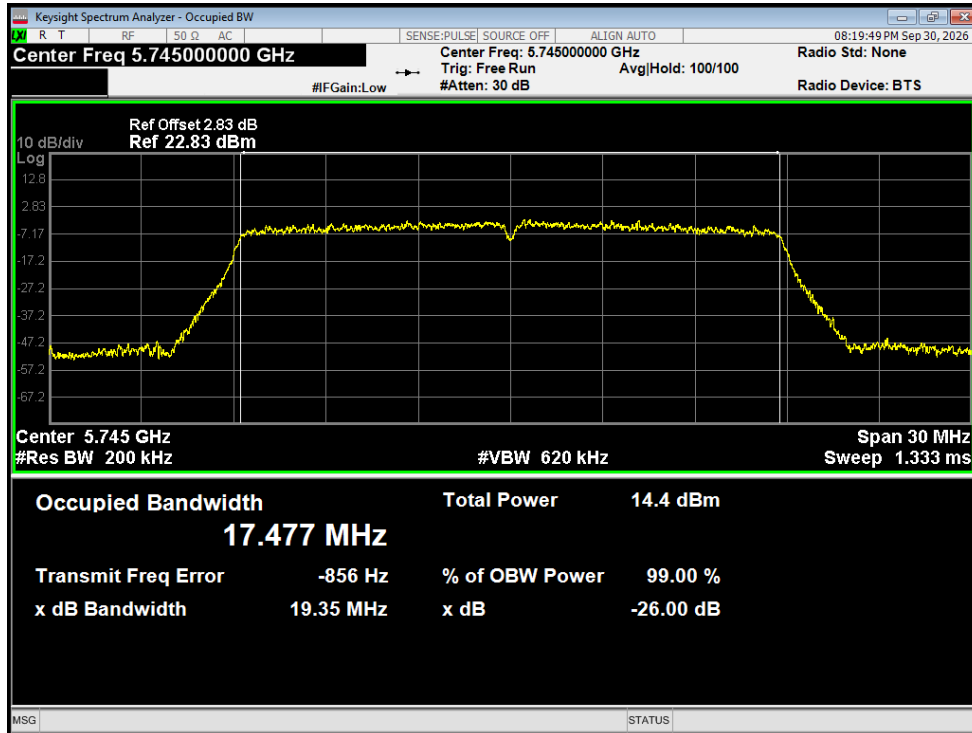


OBW NVNT n40 5795MHz Ant1

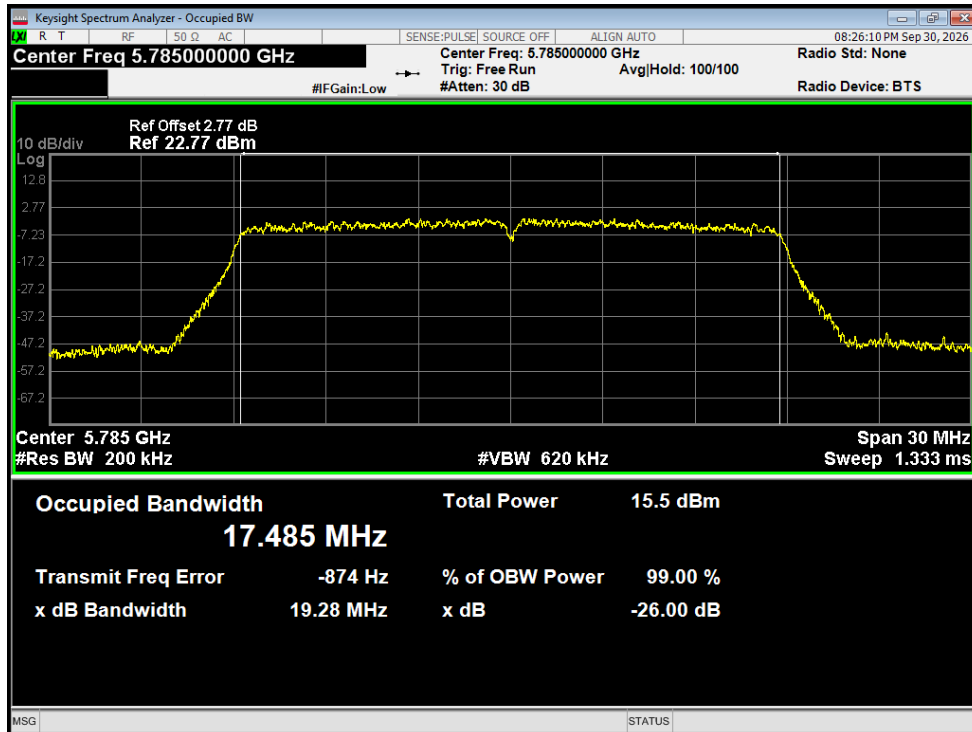




OBW NVNT ac20 5745MHz Ant1

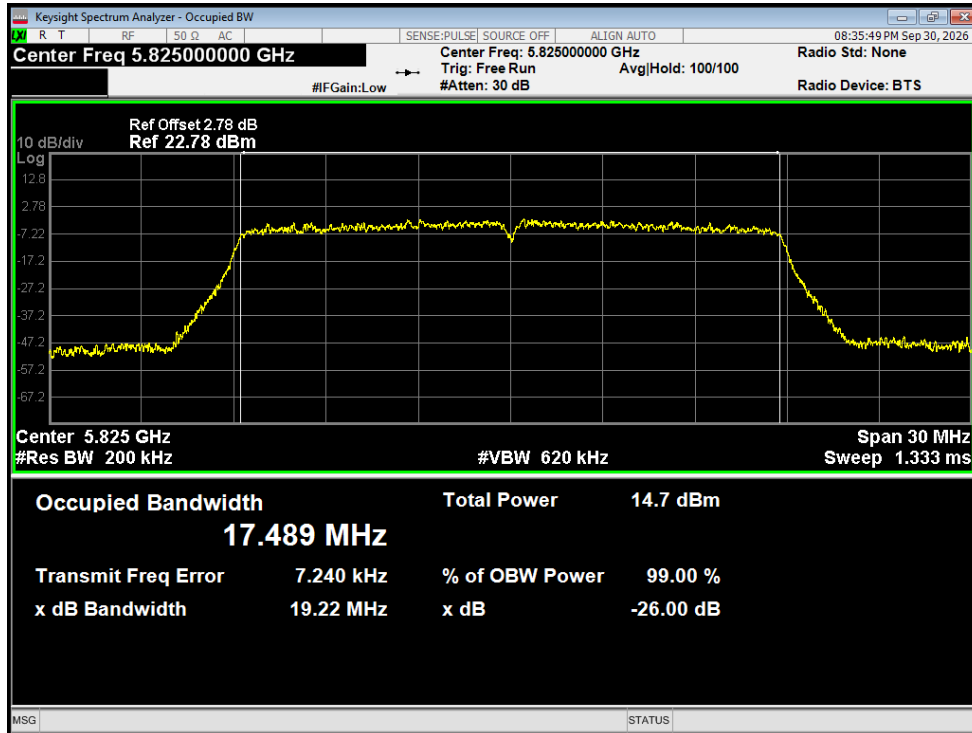


OBW NVNT ac20 5785MHz Ant1

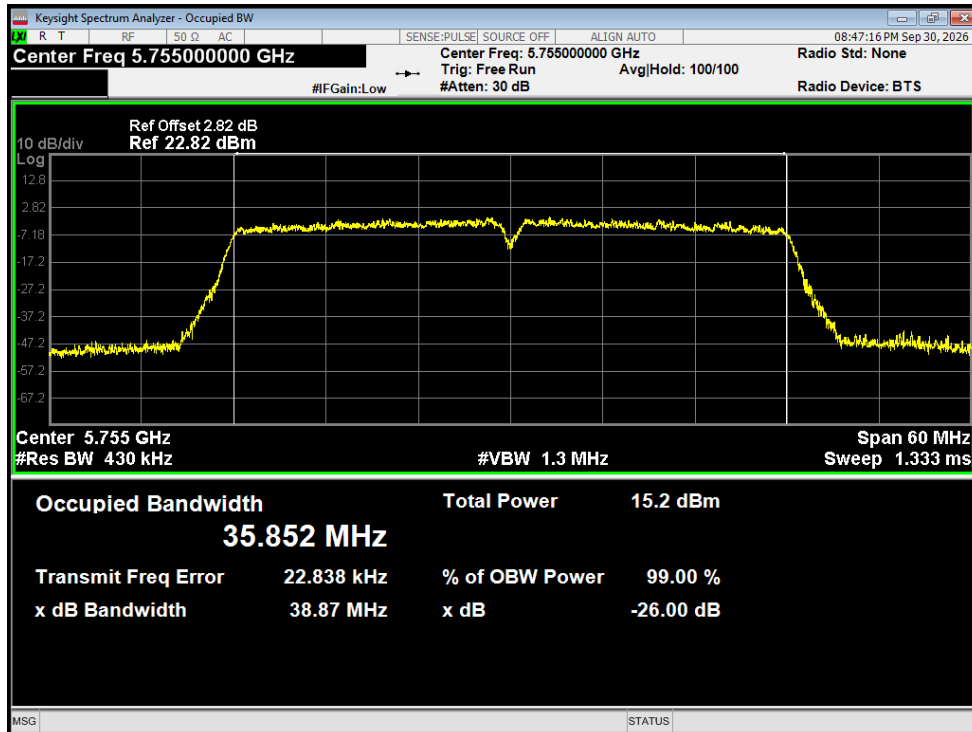




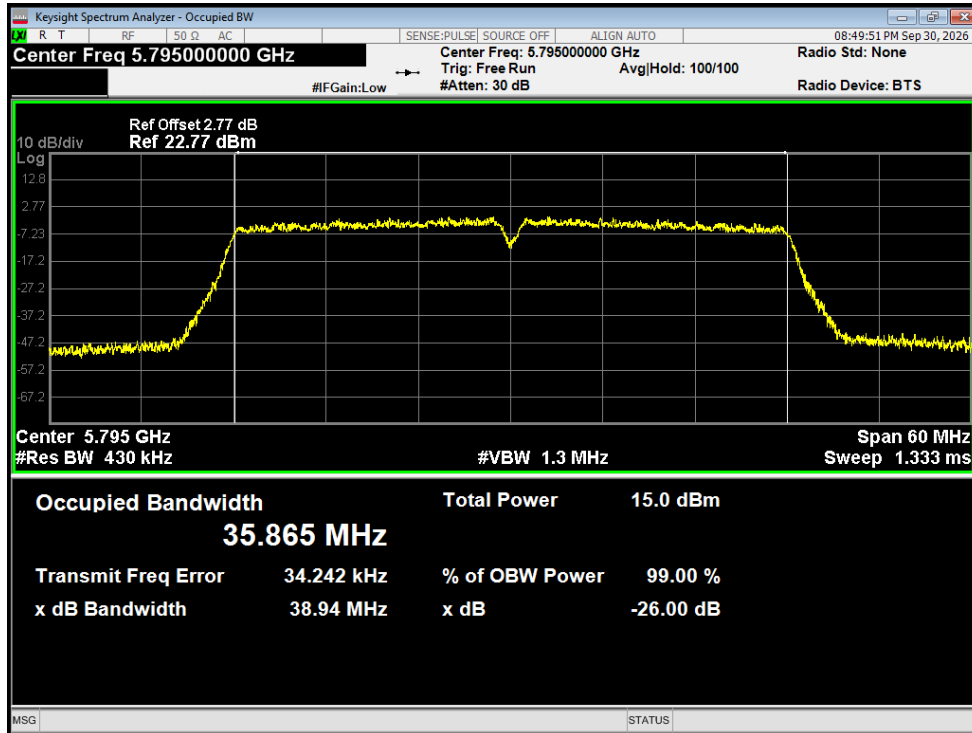
OBW NVNT ac20 5825MHz Ant1



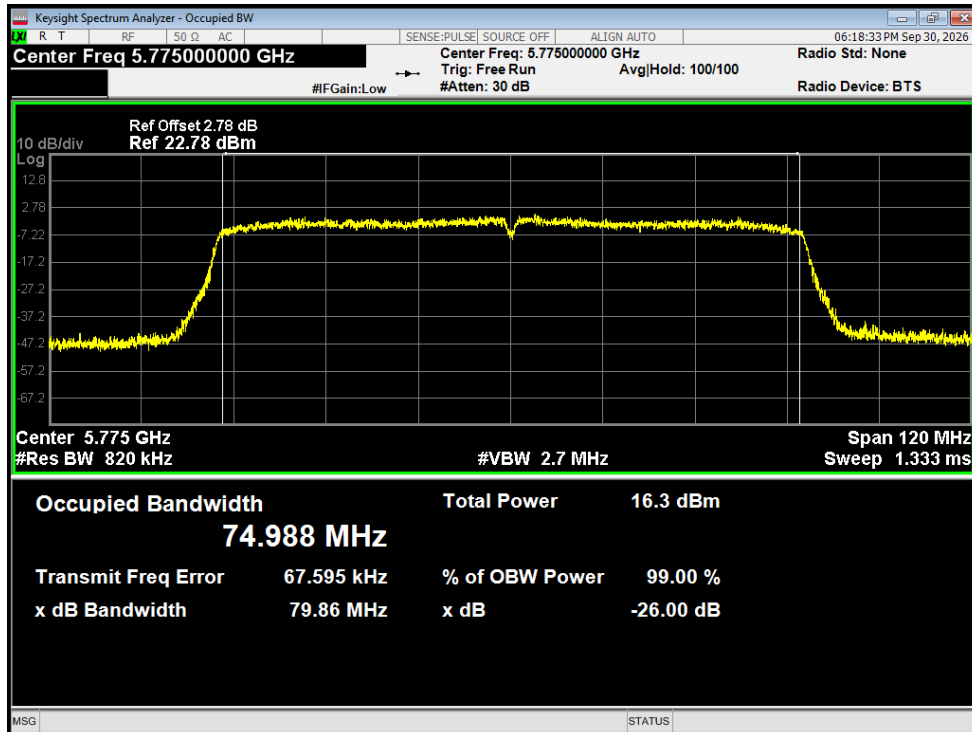
OBW NVNT ac40 5755MHz Ant1



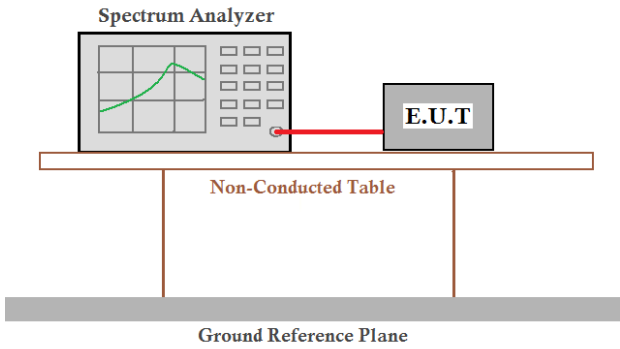
OBW NVNT ac40 5795MHz Ant1



OBW NVNT ac80 5775MHz Ant1



4.6 Power Spectral Density

Test Requirement:	47CFR Part 15.407(a)(1)/ (a)(3)	
Test Method:	KDB 789033 D02 General U-NII Test Procedures New Rules v02r01, ANSI C63.10-2020 + Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024§12.6	
Limit:	Frequency band (MHz)	Limit
	5150-5250	≤17dBm/1MHz for master device
		≤11dBm/1MHz for client device
	5250-5350	≤11dBm/1MHz for client device
	5470-5725	≤11dBm/1MHz for client device
	5725-5850	≤30dBm/500kHz
Test setup:	 The diagram illustrates the test setup. A Spectrum Analyzer 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, which is represented by a thick grey bar at the bottom.	
Test Instruments:	Refer to section 3.0 for details	
Test mode:	Refer to section 2.2 for details	
Test environment:	Temp.: 22.3°C	Humid.: 60%RH
Test voltage:	DC 12V	
Test results:	Pass	



Measurement Result

5180-5240MHz

ANT1

Mode	Frequency	Measured Power Density (dBm/MHz)	Correction Factor (dB)	Total Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5180 MHz	-1.382	0	-1.382	11
	5200 MHz	-0.747	0	-0.747	11
	5240 MHz	0.135	0	0.135	11
802.11 n20	5180 MHz	-3.688	0	-3.688	11
	5200 MHz	-3.095	0	-3.095	11
	5240 MHz	-2.223	0	-2.223	11
802.11 ac20	5180 MHz	-3.81	0	-3.81	11
	5200 MHz	-3.275	0	-3.275	11
	5240 MHz	-2.718	0	-2.718	11
802.11 n40	5190 MHz	-9.26	0	-9.26	11
	5230 MHz	-8.452	0	-8.452	11
802.11 ac40	5190 MHz	-9.379	0	-9.379	11
	5230 MHz	-8.37	0	-8.37	11
802.11 ac80	5210 MHz	-14.808	0	-14.808	11

ANT2

Mode	Frequency	Measured Power Density (dBm/MHz)	Correction Factor (dB)	Total Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5180 MHz	-2.266	0	-2.266	11
	5200 MHz	-1.979	0	-1.979	11
	5240 MHz	1.821	0	1.821	11
802.11 n20	5180 MHz	-0.778	0	-0.778	11
	5200 MHz	-0.611	0	-0.611	11
	5240 MHz	0.13	0	0.13	11
802.11 ac20	5180 MHz	0.045	0	0.045	11
	5200 MHz	-0.989	0	-0.989	11
	5240 MHz	0.293	0	0.293	11
802.11 n40	5190 MHz	-6.388	0	-6.388	11
	5230 MHz	-5.651	0	-5.651	11
802.11 ac40	5190 MHz	-6.605	0	-6.605	11
	5230 MHz	-5.882	0	-5.882	11
802.11 ac80	5210 MHz	-11.881	0	-11.881	11



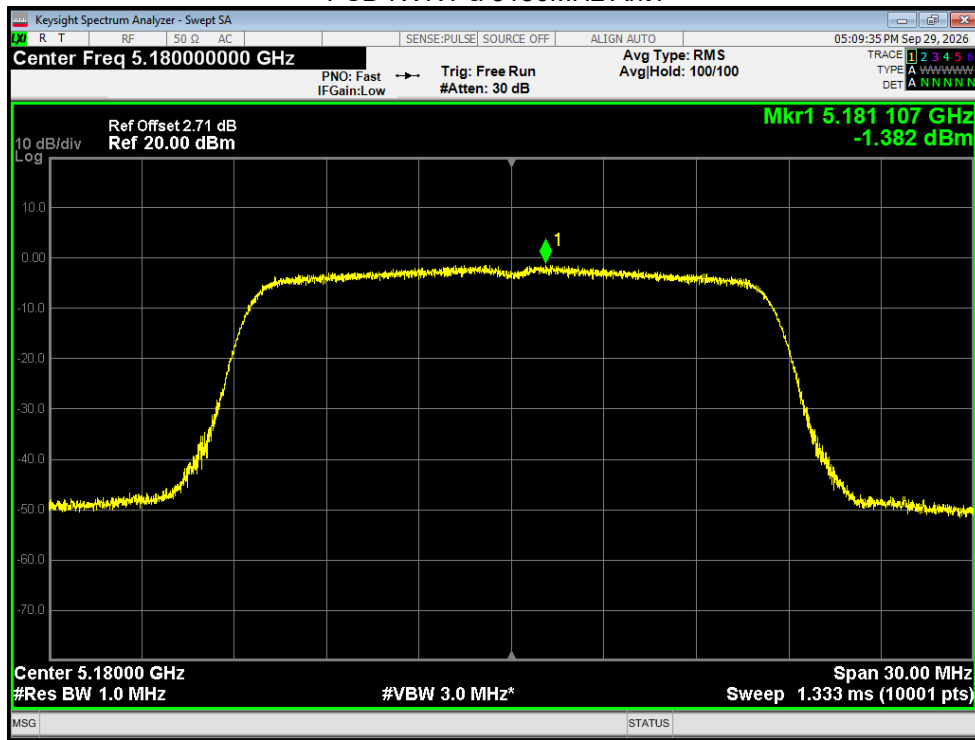
ANT1+ANT2

5180-5240MHz

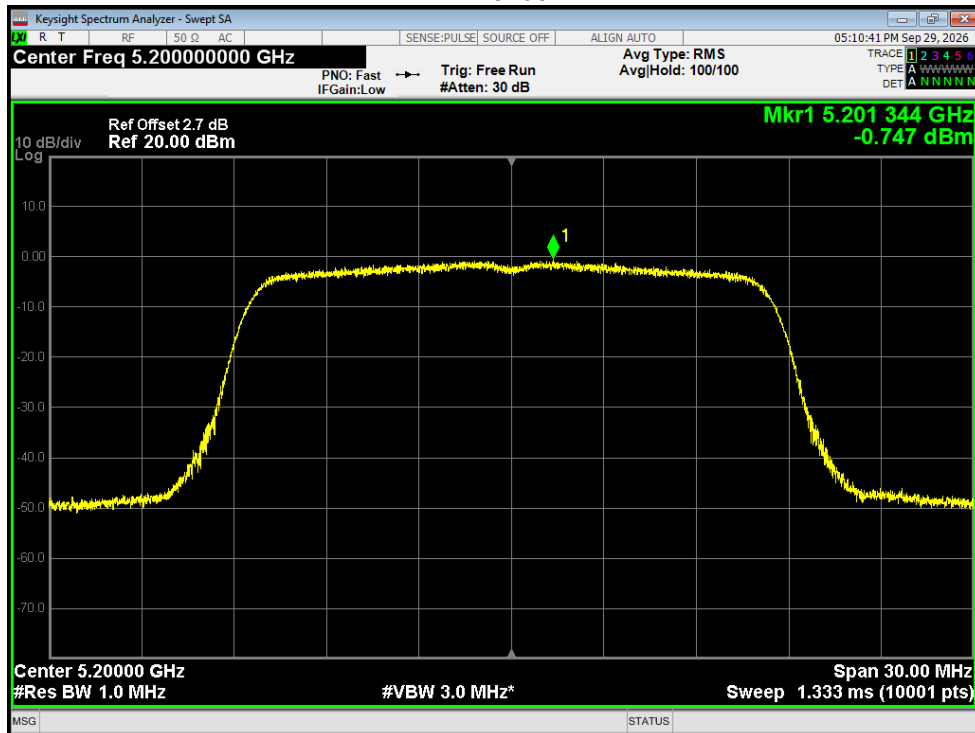
Mode	Frequency	Measured Power Density (dBm/MHz) ANT1	Measured Power Density (dBm/MHz) ANT2	MIMO Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 n20	5180 MHz	-3.688	-0.778	0.90	11
	5200 MHz	-3.095	-0.611	1.25	11
	5240 MHz	-2.223	0.13	2.04	11
802.11 ac20	5180 MHz	-3.81	0.045	1.34	11
	5200 MHz	-3.275	-0.989	0.95	11
	5240 MHz	-2.718	0.293	1.93	11
802.11 n40	5190 MHz	-9.26	-6.388	-4.70	11
	5230 MHz	-8.452	-5.651	-3.93	11
802.11 ac40	5190 MHz	-9.379	-6.605	-4.87	11
	5230 MHz	-8.37	-5.882	-4.03	11
802.11 ac80	5210 MHz	-14.808	-11.881	-10.21	11

ANT1

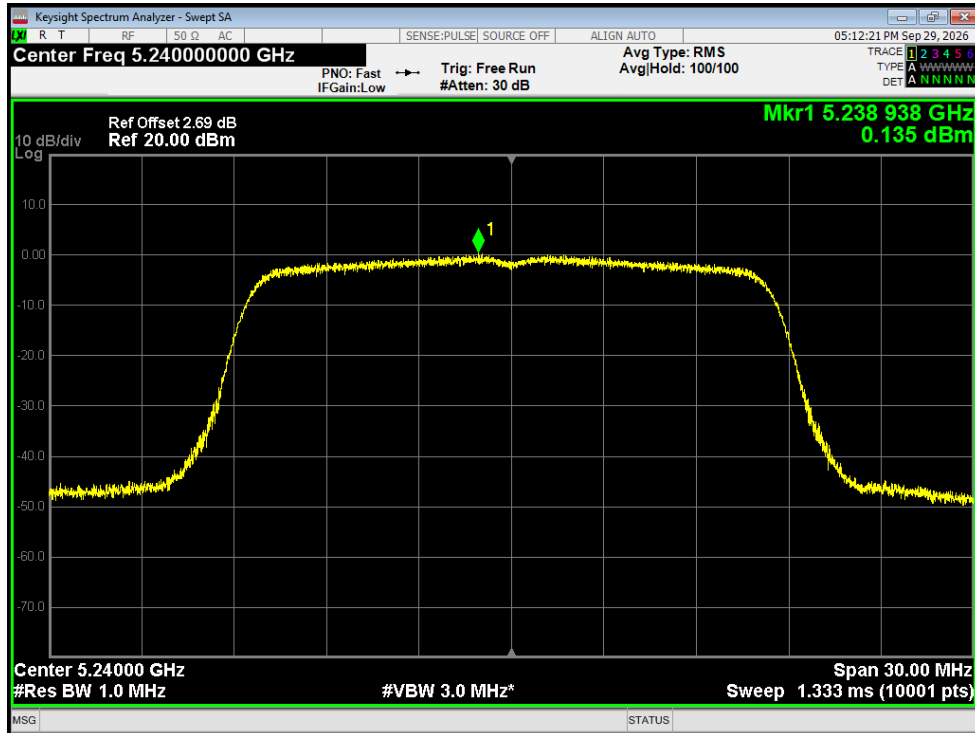
PSD NVNT a 5180MHz Ant1



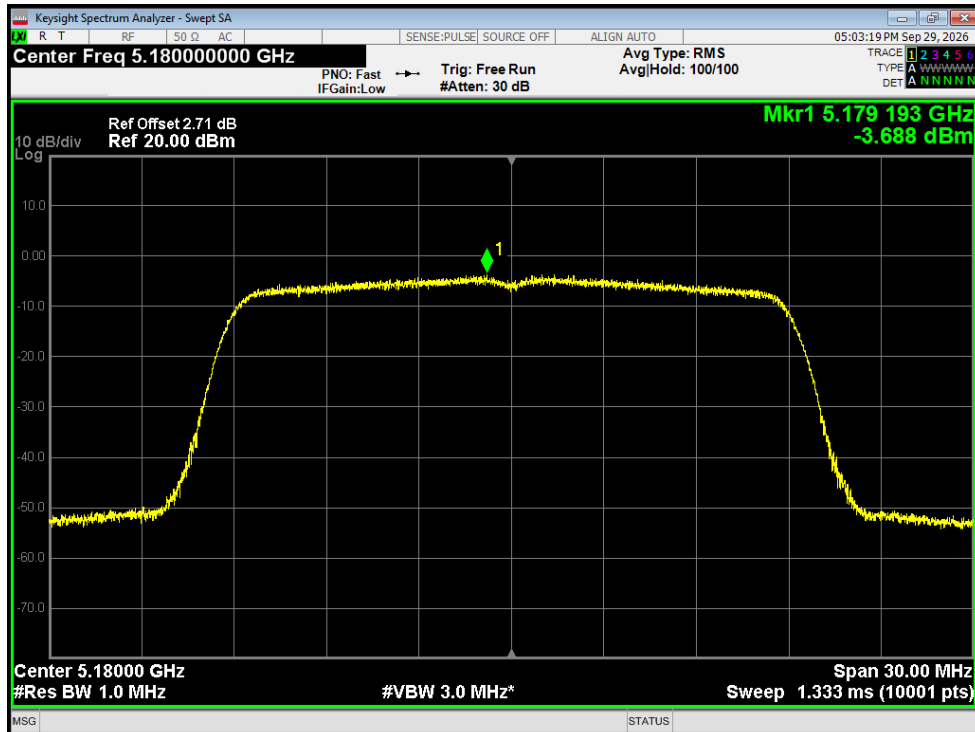
PSD NVNT a 5200MHz Ant1



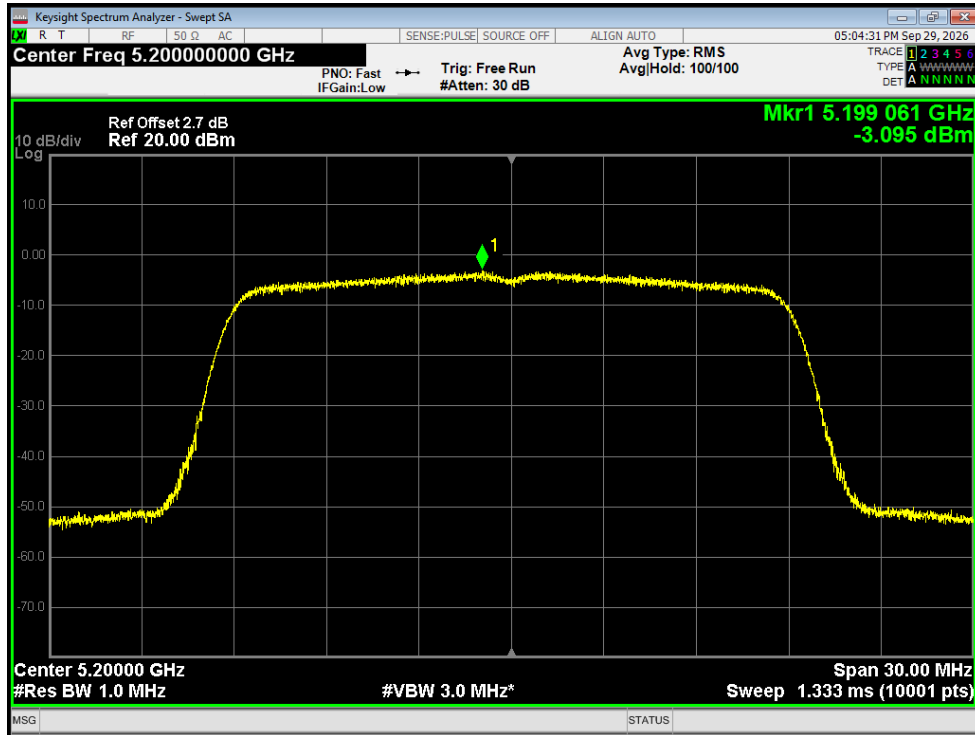
PSD NVNT a 5240MHz Ant1



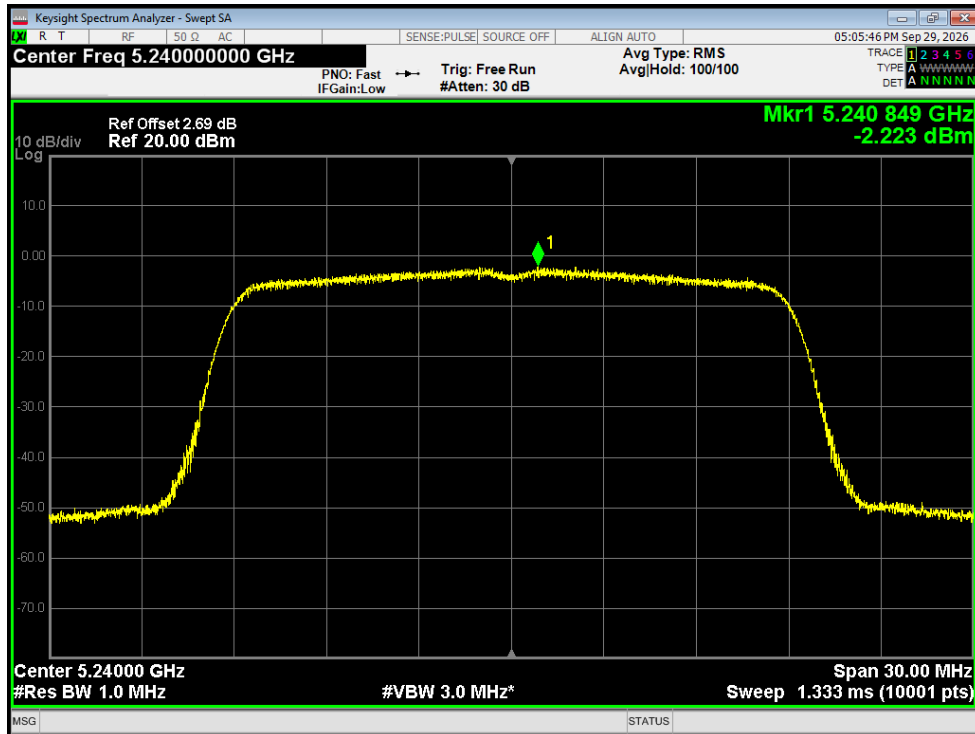
PSD NVNT n20 5180MHz Ant1



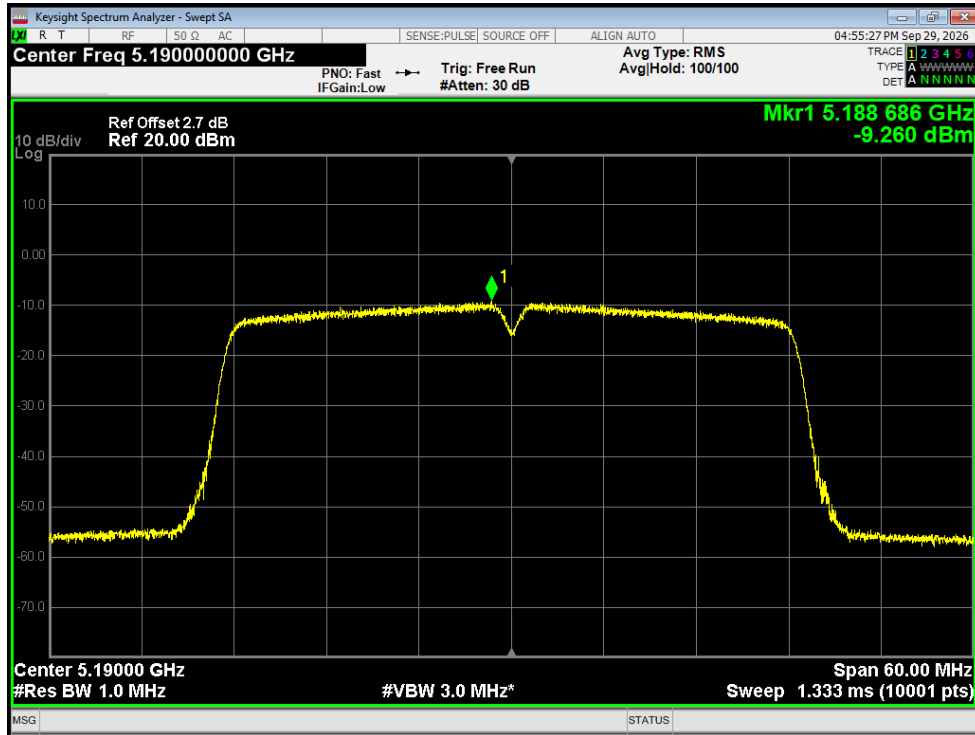
PSD NVNT n20 5200MHz Ant1



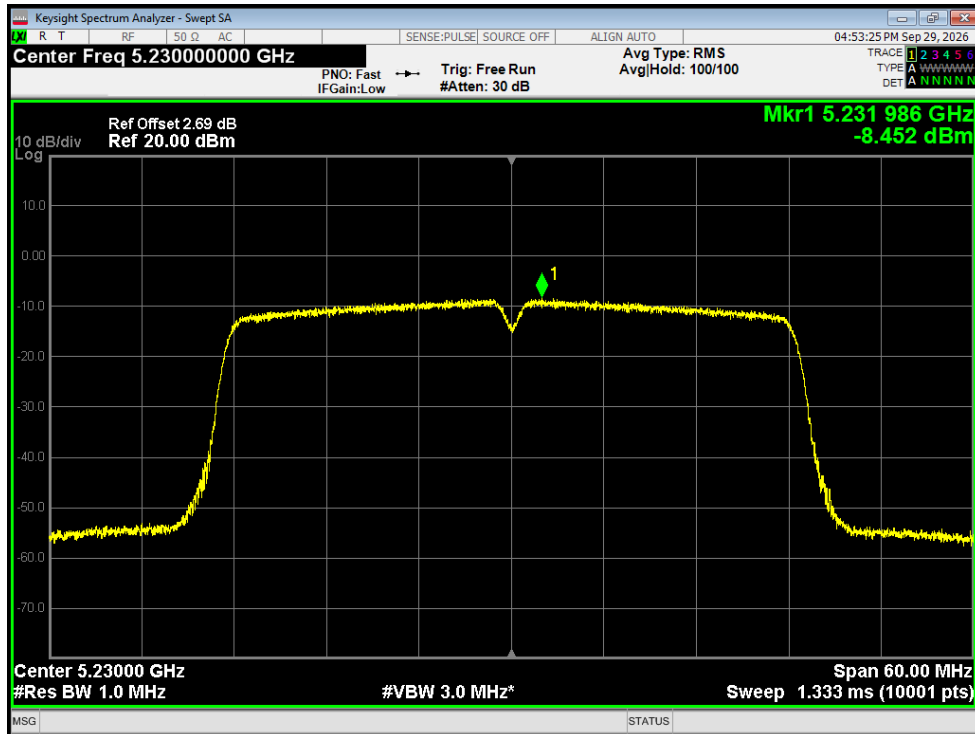
PSD NVNT n20 5240MHz Ant1



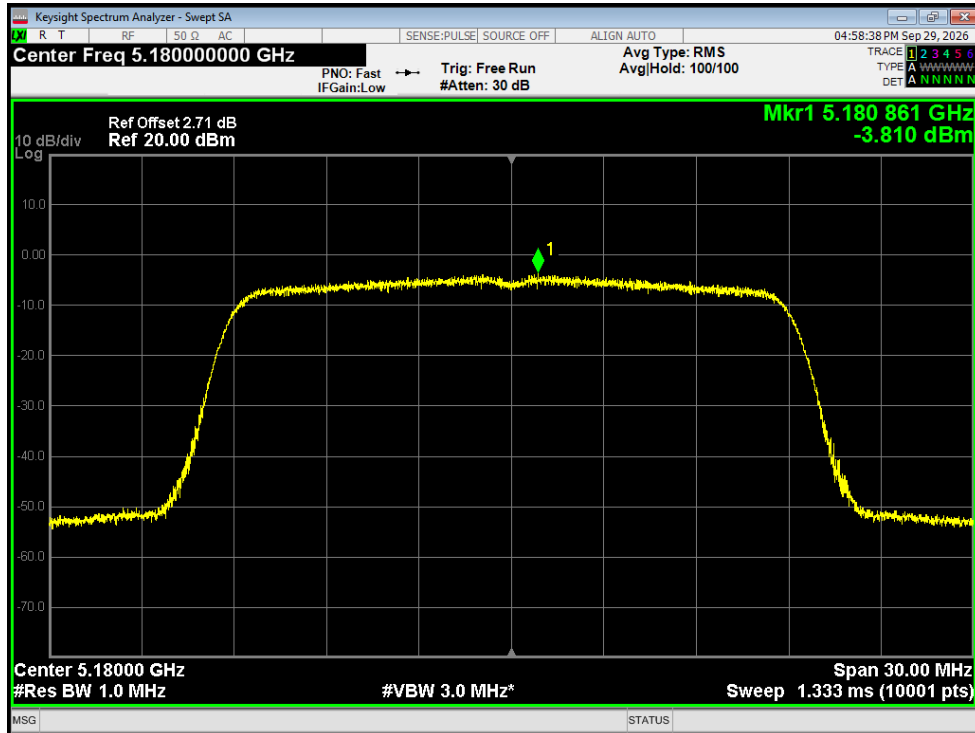
PSD NVNT n40 5190MHz Ant1



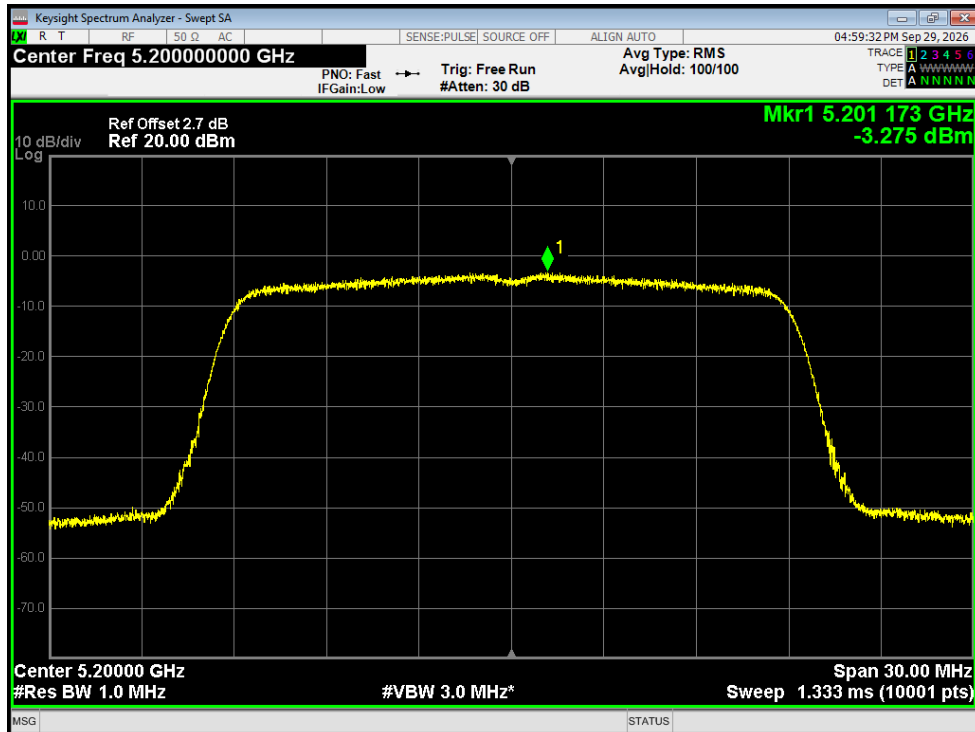
PSD NVNT n40 5230MHz Ant1



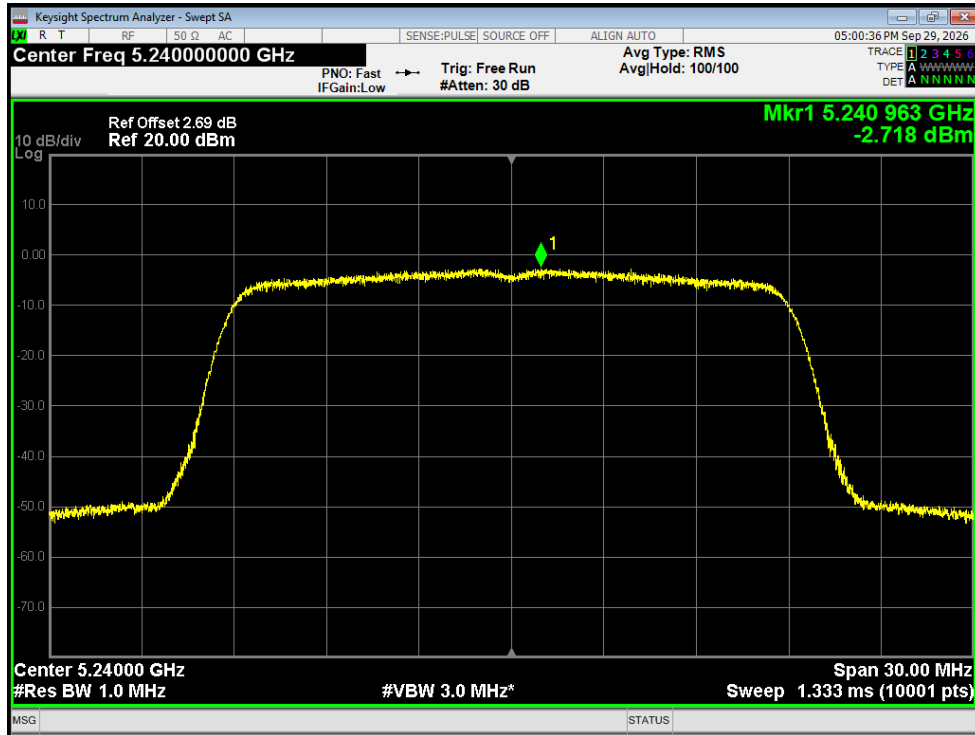
PSD NVNT ac20 5180MHz Ant1



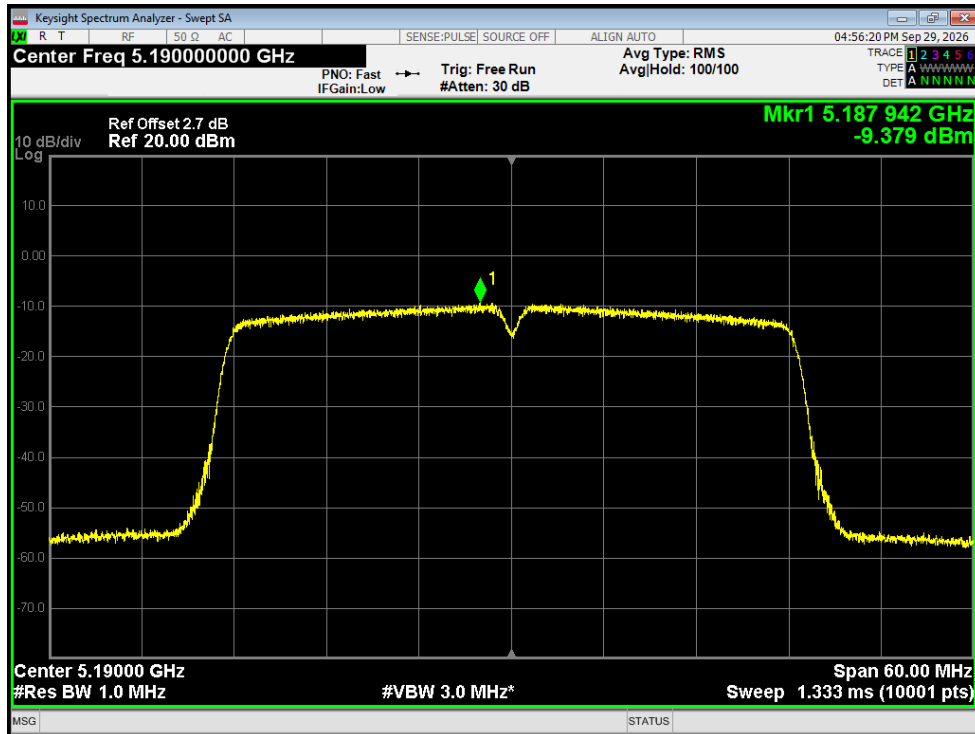
PSD NVNT ac20 5200MHz Ant1



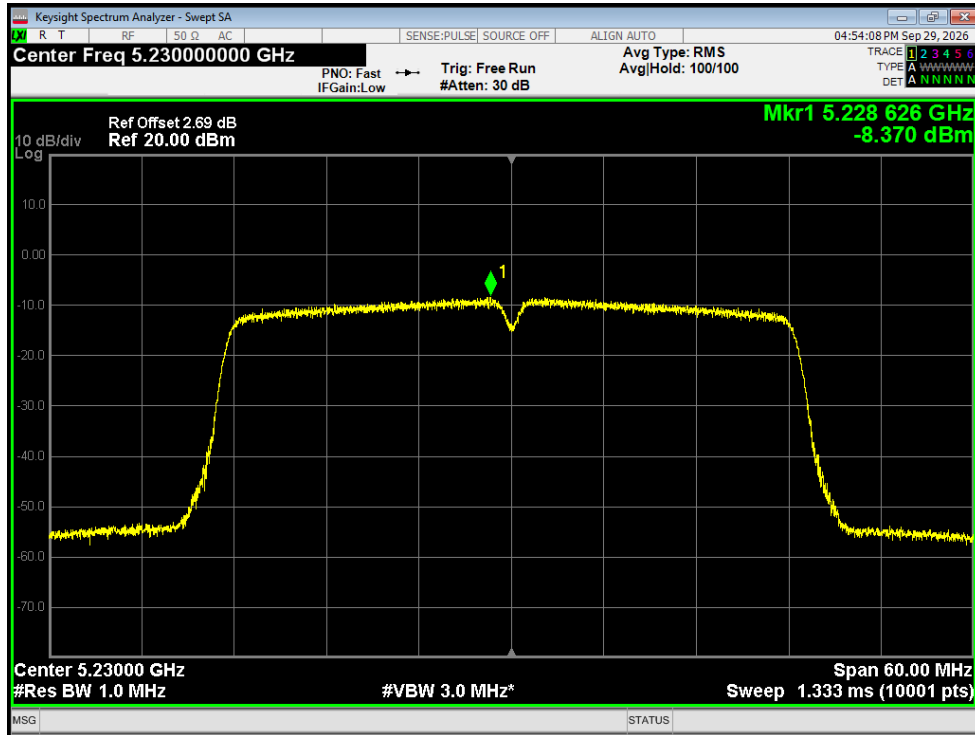
PSD NVNT ac20 5240MHz Ant1



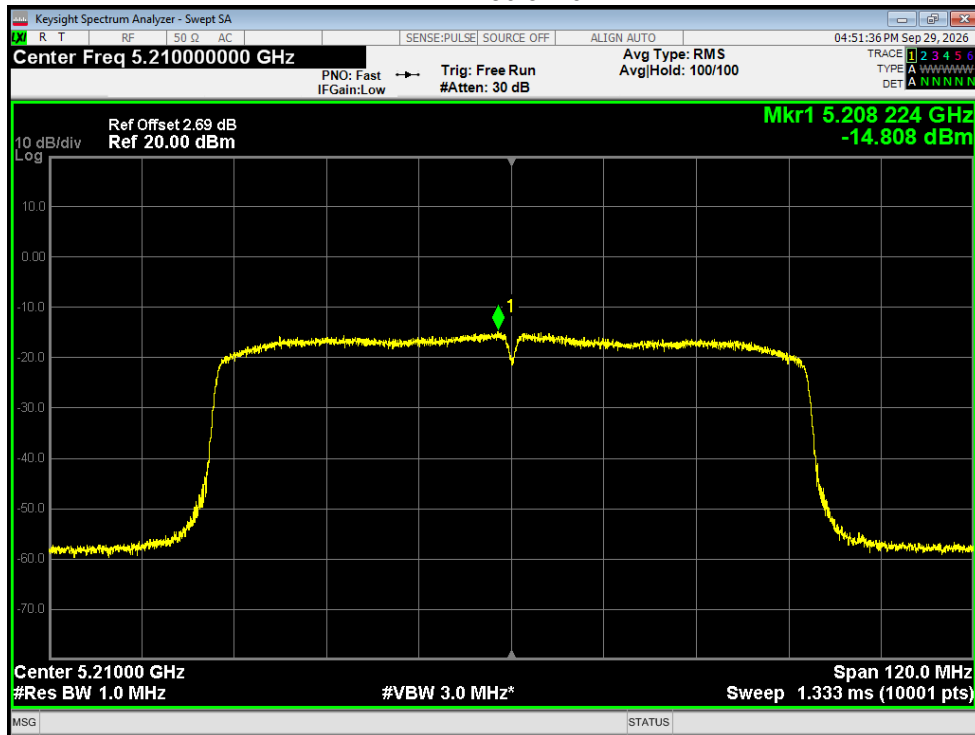
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1

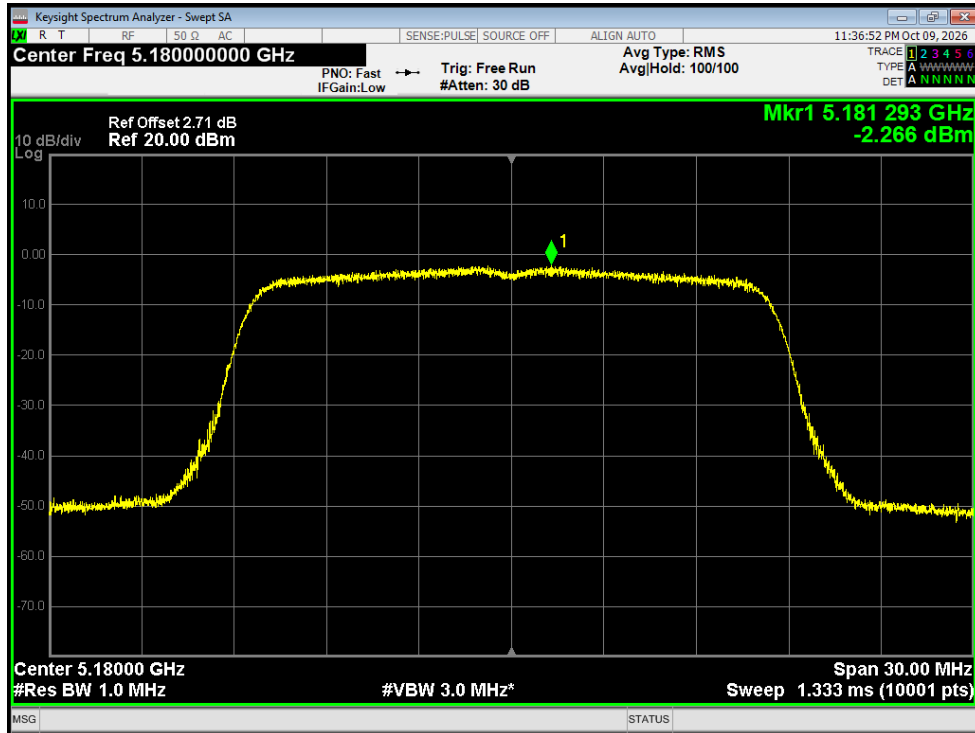


PSD NVNT ac80 5210MHz Ant1

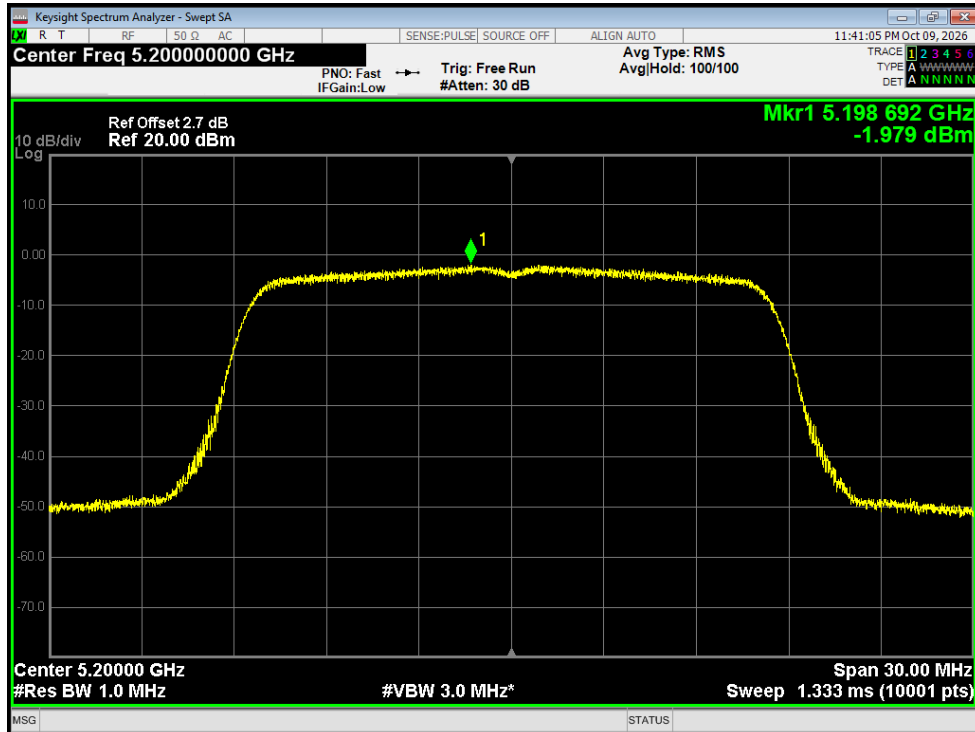


ANT2

PSD NVNT a 5180MHz Ant1

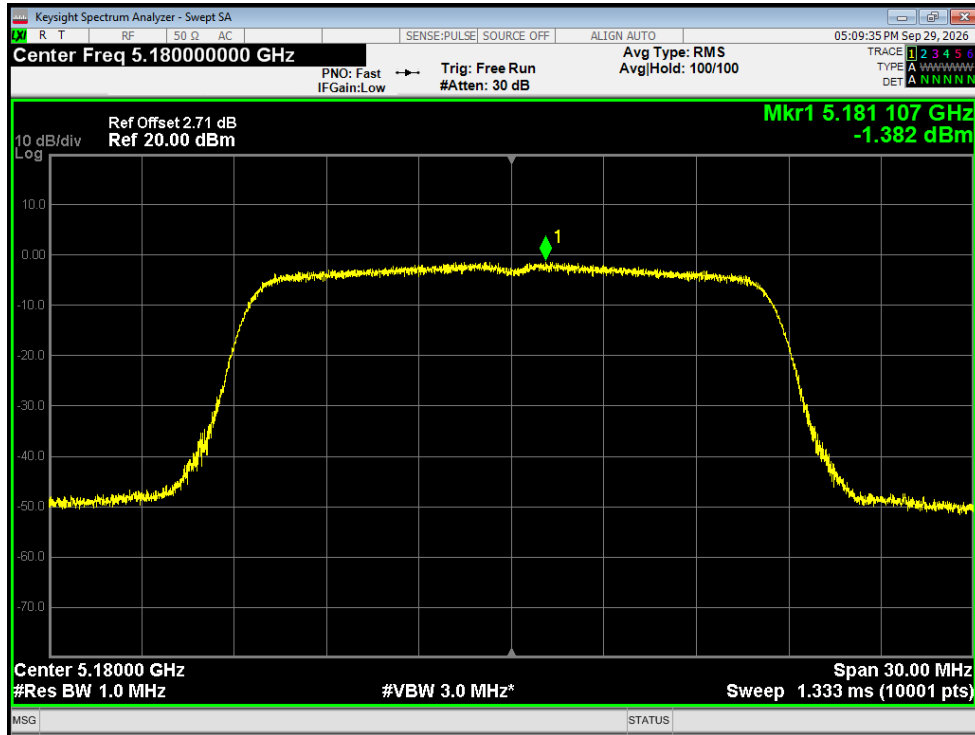


PSD NVNT a 5200MHz Ant1

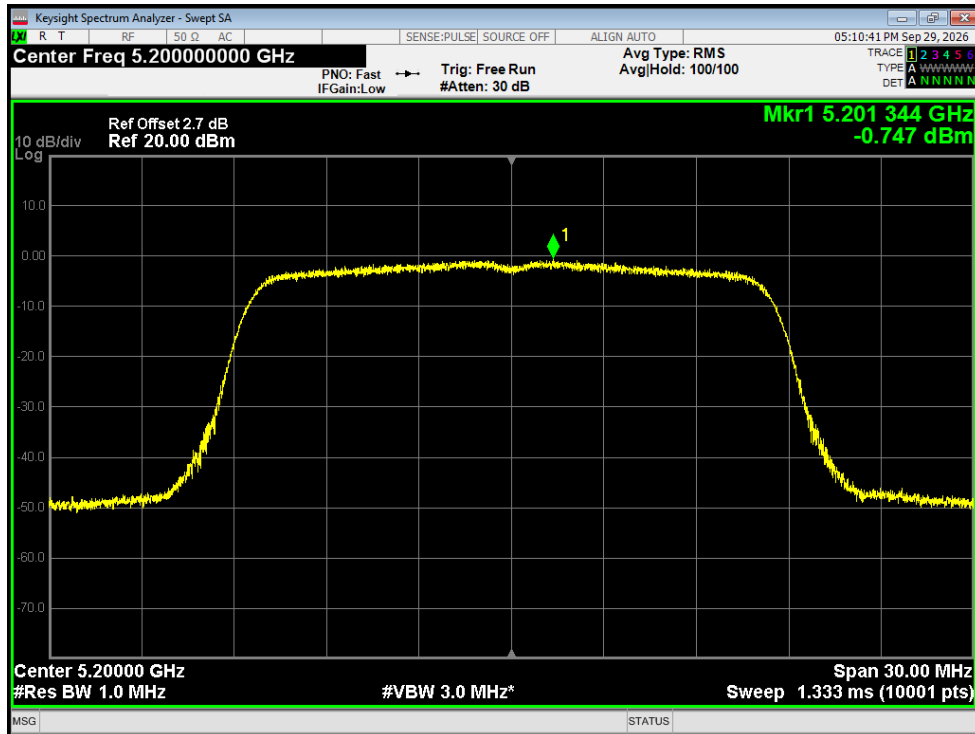


PSD NVNT a 5240MHz Ant1

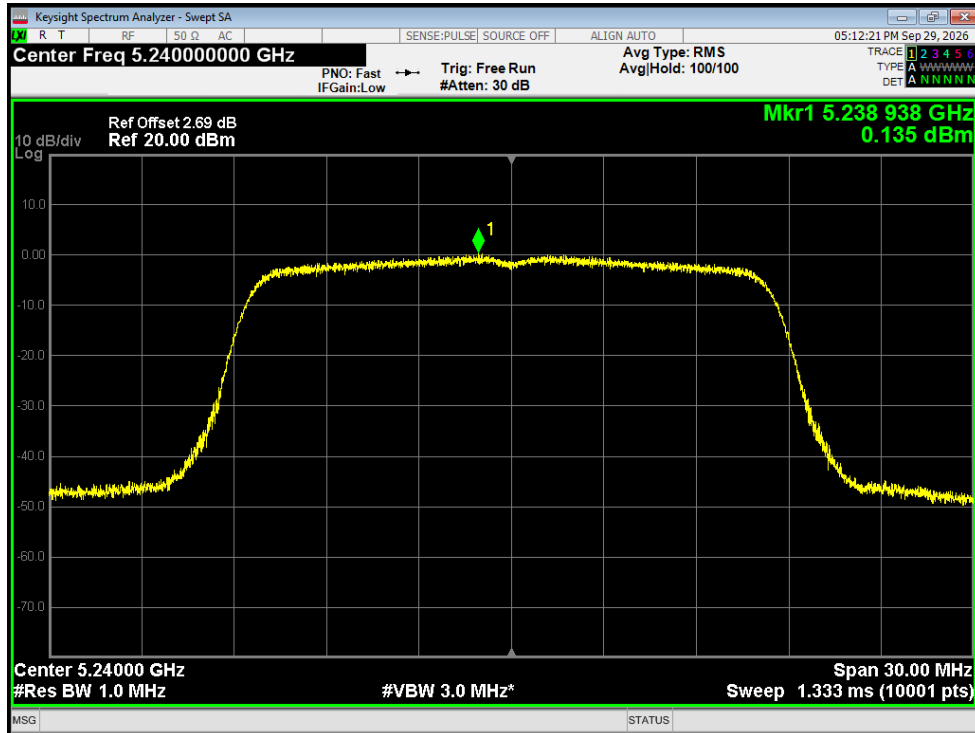
PSD NVNT a 5180MHz Ant1



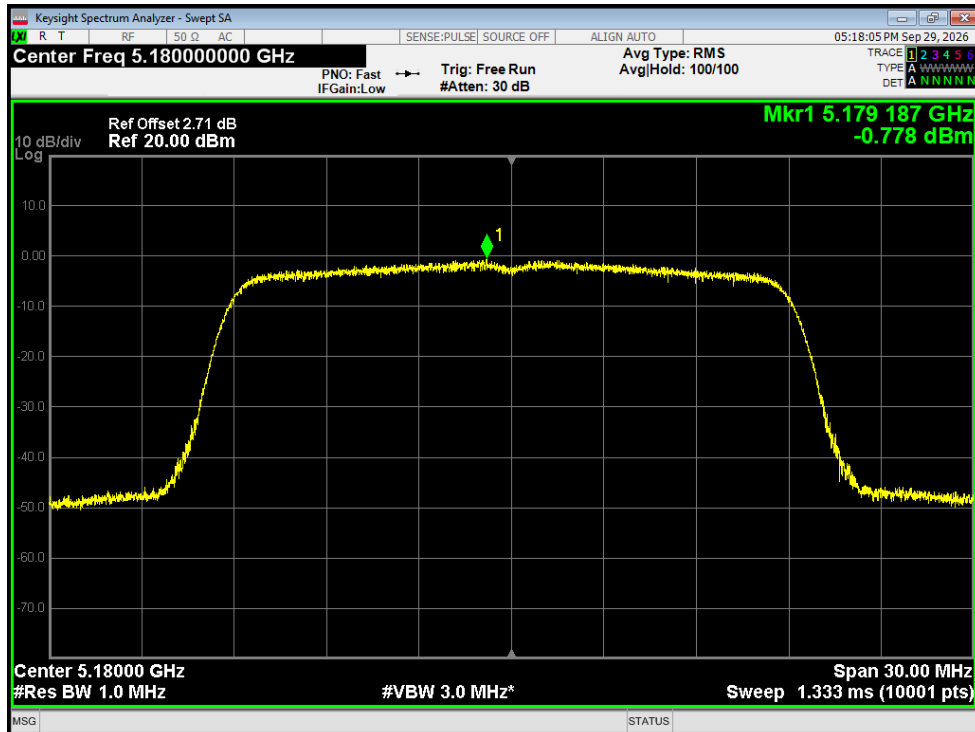
PSD NVNT a 5200MHz Ant1



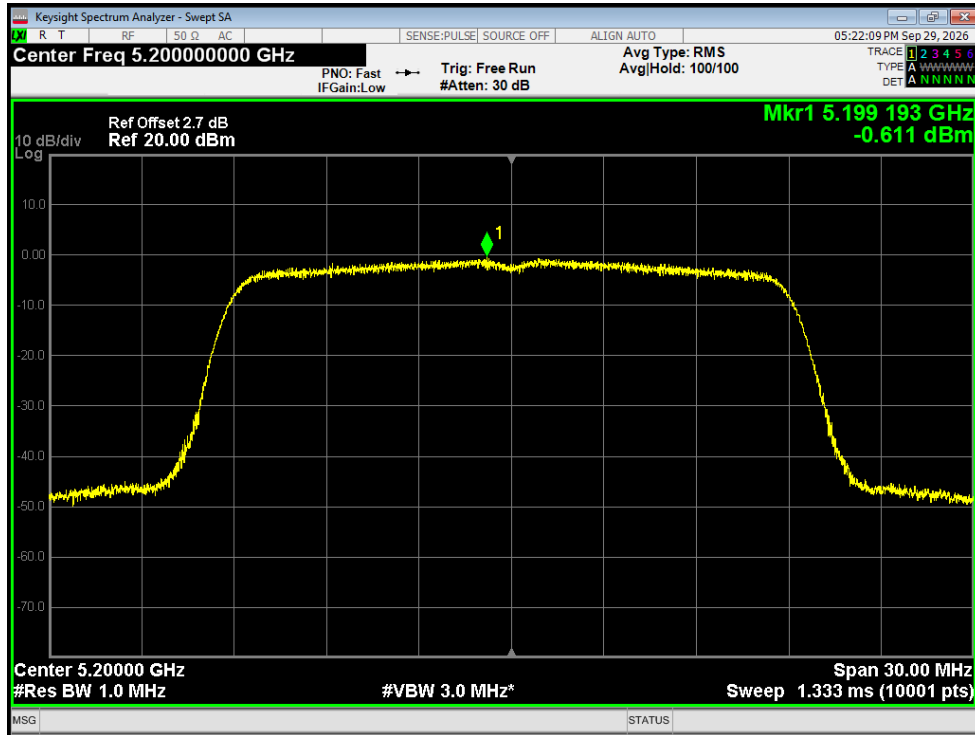
PSD NVNT a 5240MHz Ant1



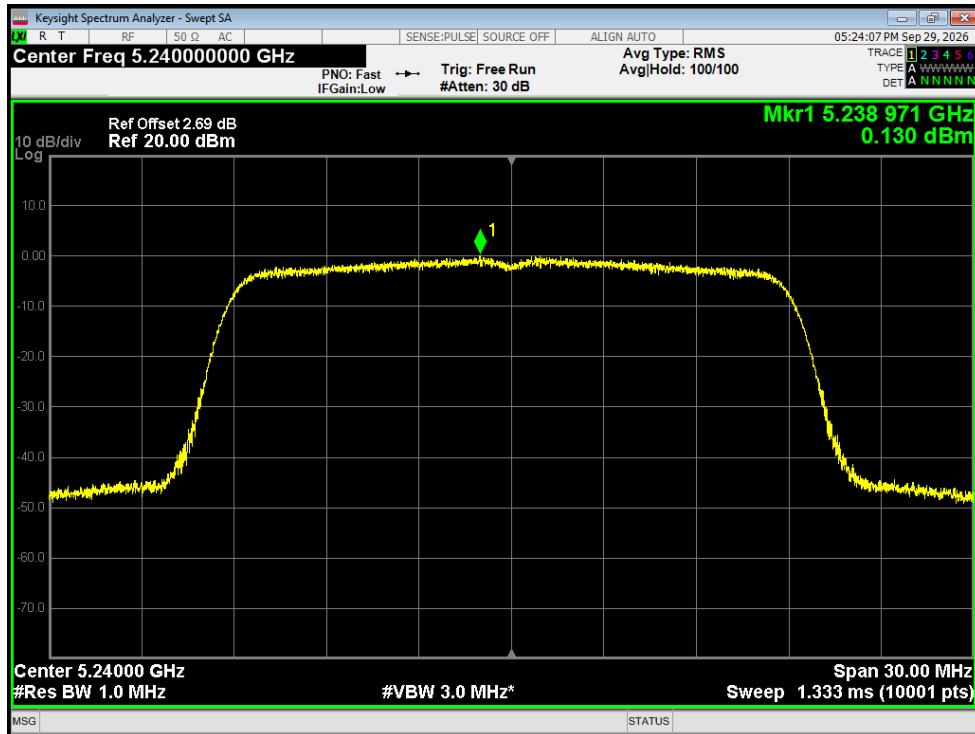
PSD NVNT n20 5180MHz Ant1



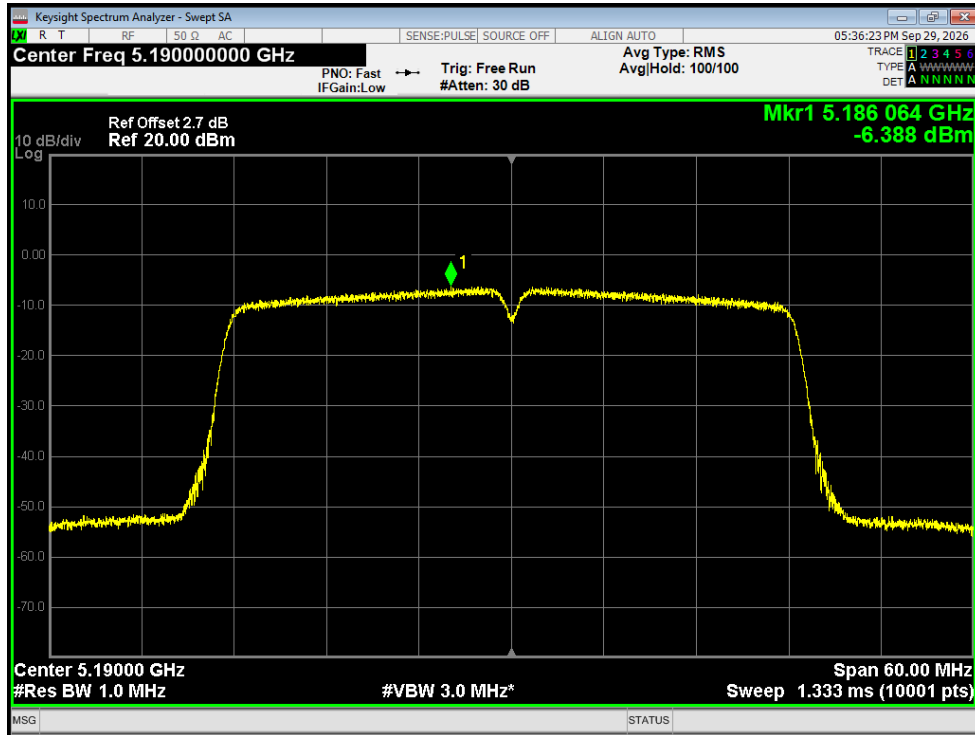
PSD NVNT n20 5200MHz Ant1



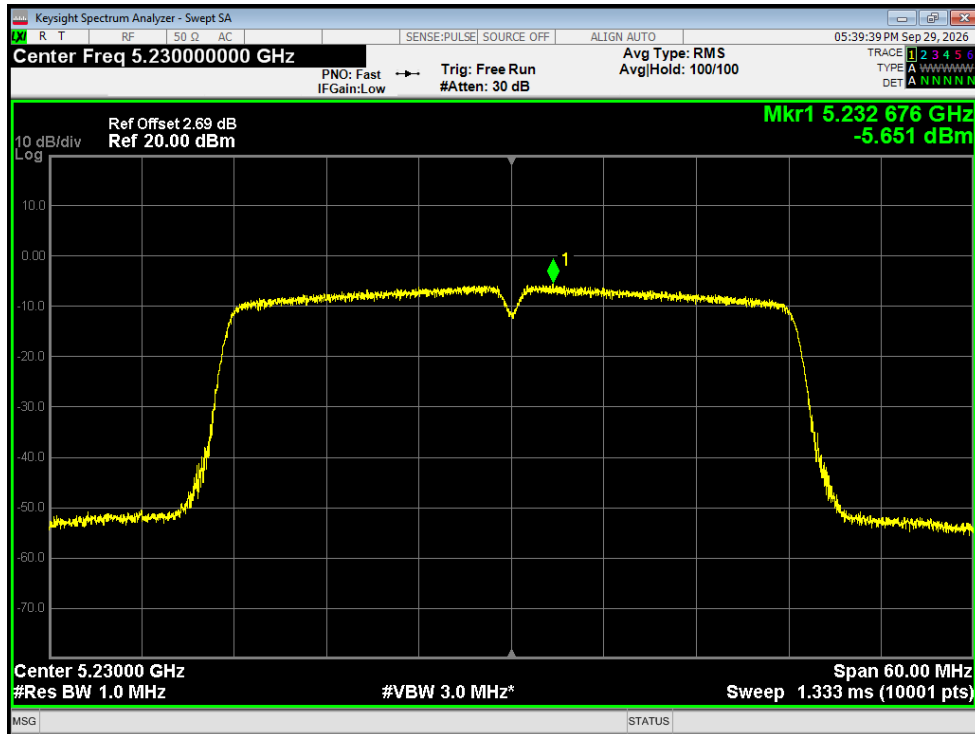
PSD NVNT n20 5240MHz Ant1



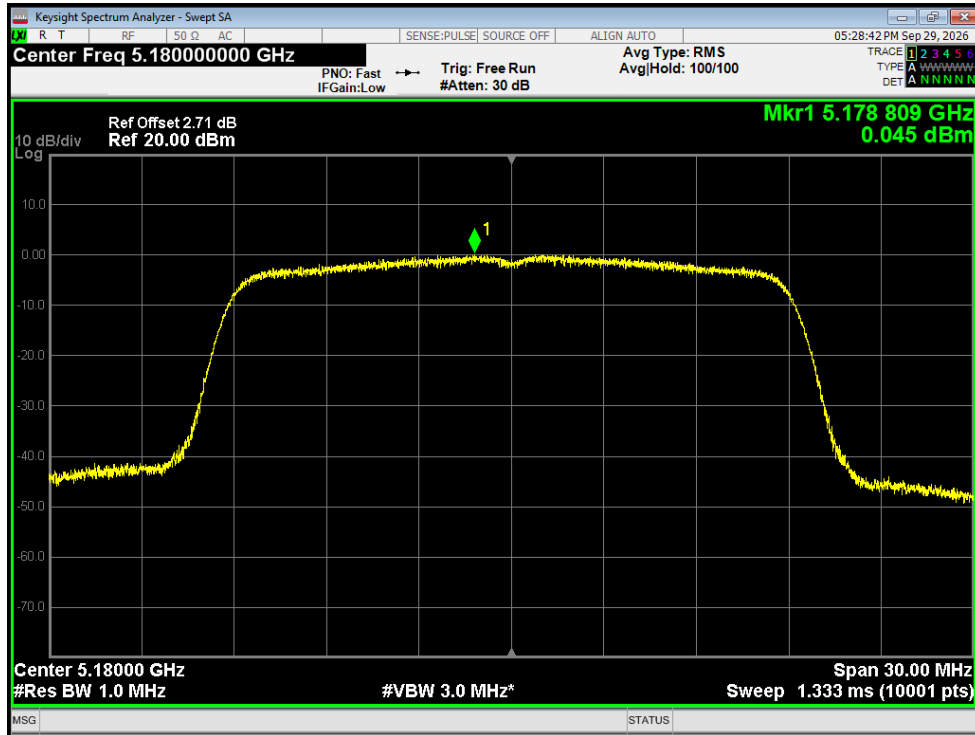
PSD NVNT n40 5190MHz Ant1



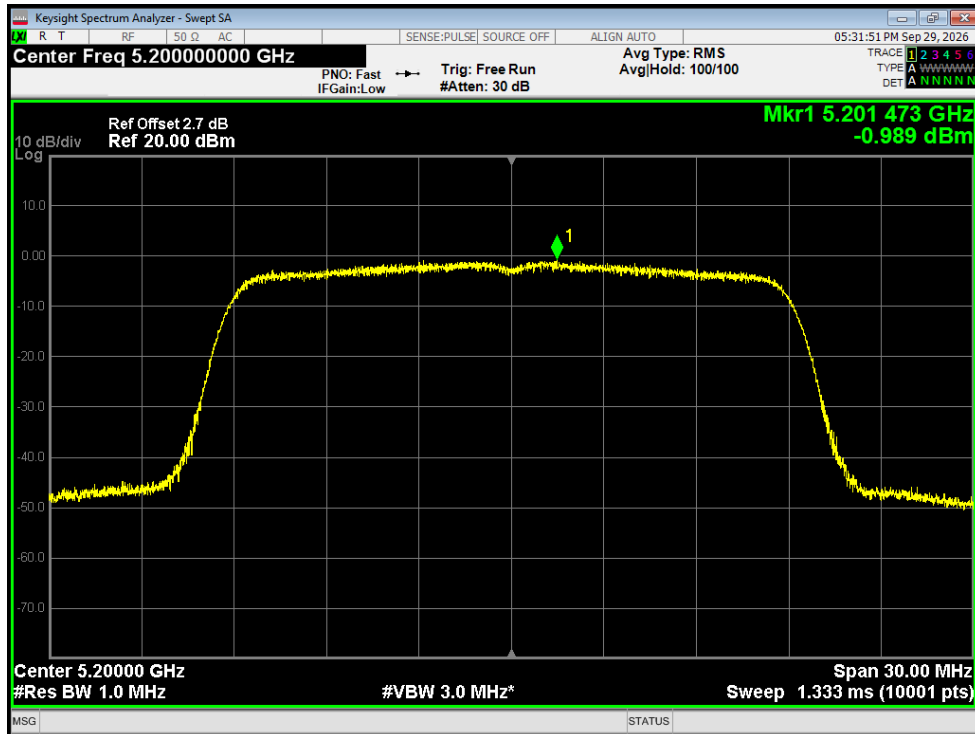
PSD NVNT n40 5230MHz Ant1



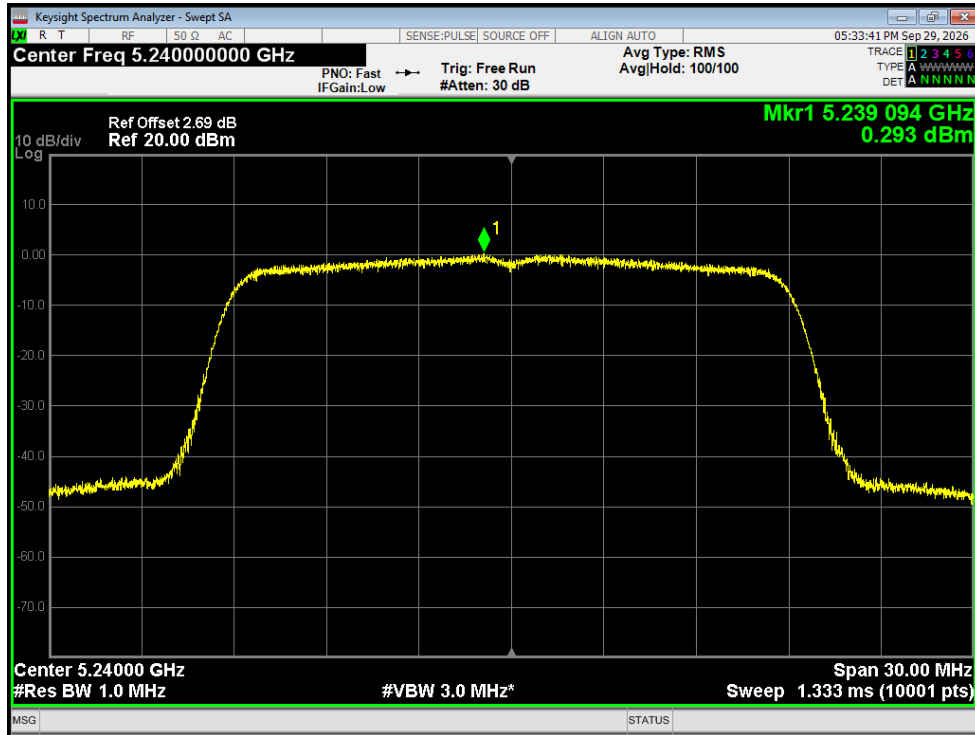
PSD NVNT ac20 5180MHz Ant1



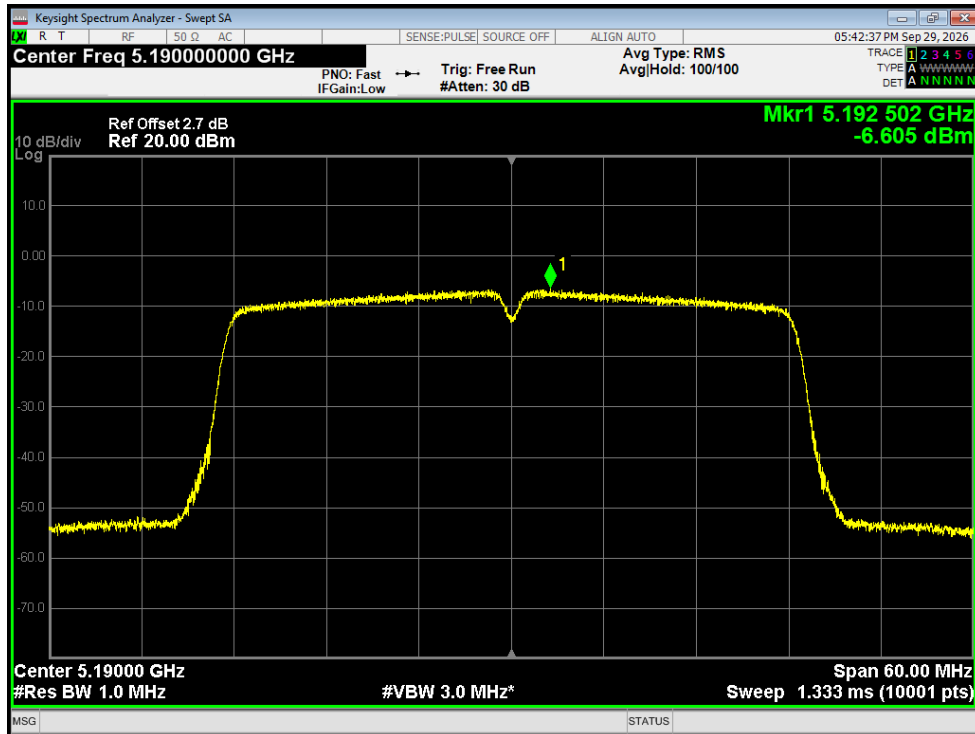
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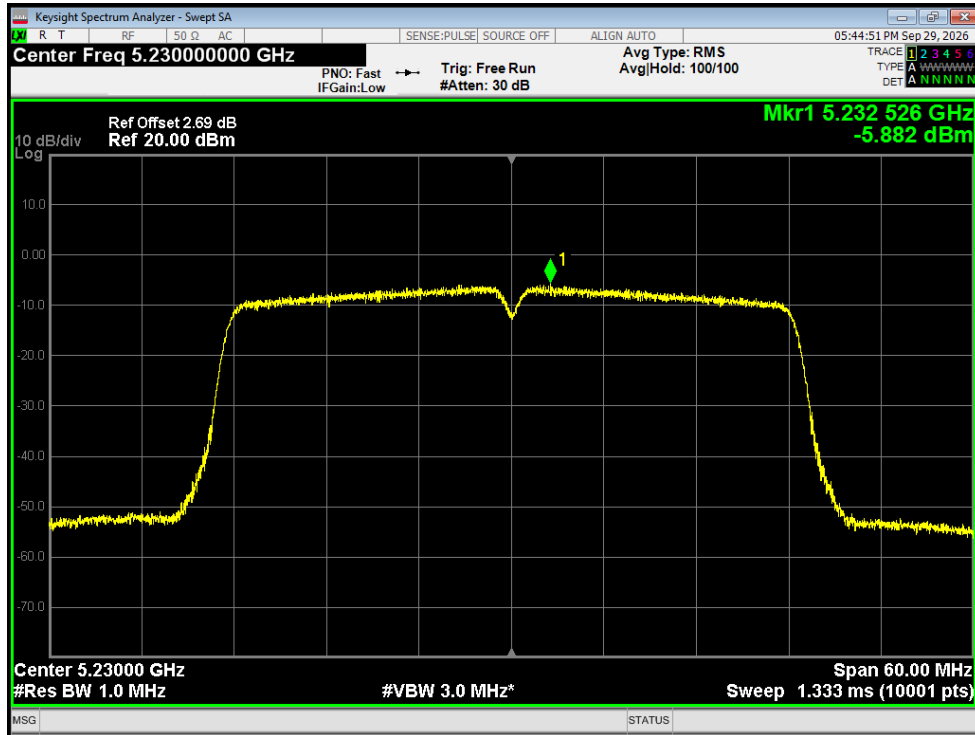
PSD NVNT ac20 5240MHz Ant1



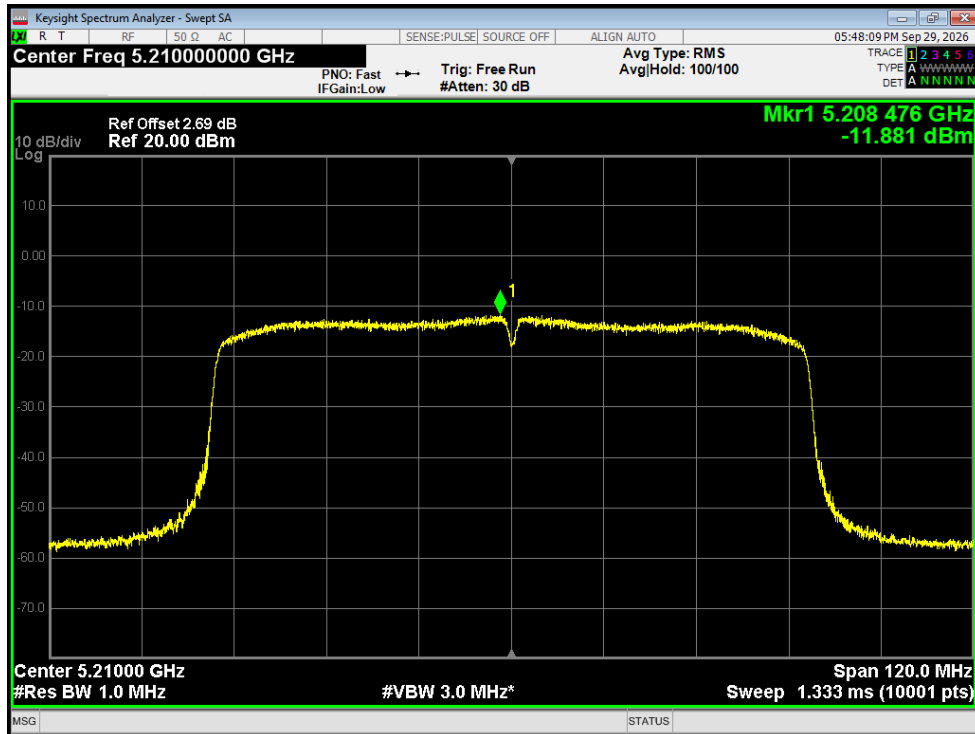
PSD NVNT ac40 5190MHz Ant1



PSD NVNT ac40 5230MHz Ant1



PSD NVNT ac80 5210MHz Ant1





ANT1 5260-5320MHz

Mode	Frequency	Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5260 MHz	-0.544	11
	5280 MHz	-0.331	11
	5320 MHz	0.084	11
802.11 n20	5260 MHz	-3.291	11
	5280 MHz	-1.549	11
	5320 MHz	-2.384	11
802.11ac20	5260 MHz	-10.262	11
	5280 MHz	-10.011	11
	5320 MHz	-2.495	11
802.11 n40	5270 MHz	-2.534	11
	5310 MHz	-2.541	11
802.11ac40	5270 MHz	-10.22	11
	5310 MHz	-9.762	11
802.11ac80	5290 MHz	-11.32	11

ANT2 5260-5320MHz

Mode	Frequency	Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5260 MHz	-0.053	11
	5280 MHz	0.235	11
	5320 MHz	0.139	11
802.11 n20	5260 MHz	-0.641	11
	5280 MHz	0.424	11
	5320 MHz	-0.134	11
802.11ac20	5260 MHz	0.12	11
	5280 MHz	-0.01	11
	5320 MHz	0.77	11
802.11 n40	5270 MHz	-7.867	11
	5310 MHz	-6.913	11
802.11ac40	5270 MHz	-7.44	11
	5310 MHz	-7.371	11
802.11ac80	5290 MHz	-7.634	11

ANT1+ANT2

5260-5320MHz

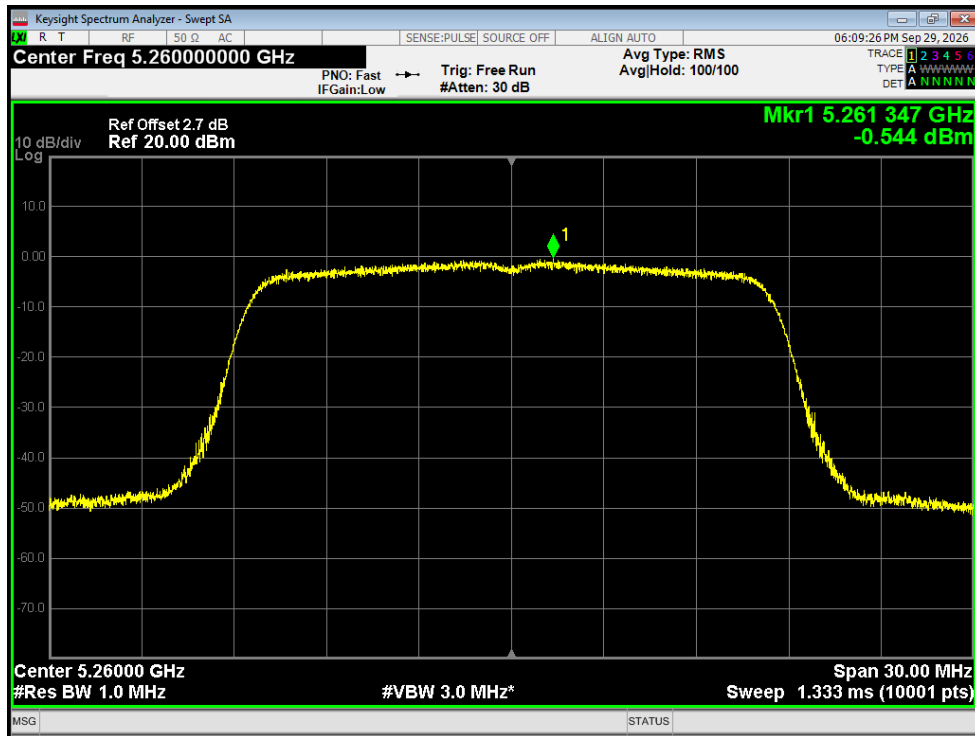
Mode	Frequency	Measured Power Density (dBm/MHz) ANT1	Measured Power Density (dBm/MHz) ANT2	MIMO Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 n20	5260 MHz	-3.291	-0.641	1.14	11
	5280 MHz	-1.549	0.424	2.50	11
	5320 MHz	-2.384	-0.134	1.82	11
802.11ac20	5260 MHz	-10.262	0.12	-0.59	11
	5280 MHz	-10.011	-0.01	-0.63	11
	5320 MHz	-2.495	0.77	2.30	11
802.11 n40	5270 MHz	-2.534	-7.867	-1.79	11
	5310 MHz	-2.541	-6.913	-1.44	11
802.11ac40	5270 MHz	-10.22	-7.44	-5.71	11
	5310 MHz	-9.762	-7.371	-5.47	11
802.11ac80	5290 MHz	-11.32	-7.634	-6.27	11



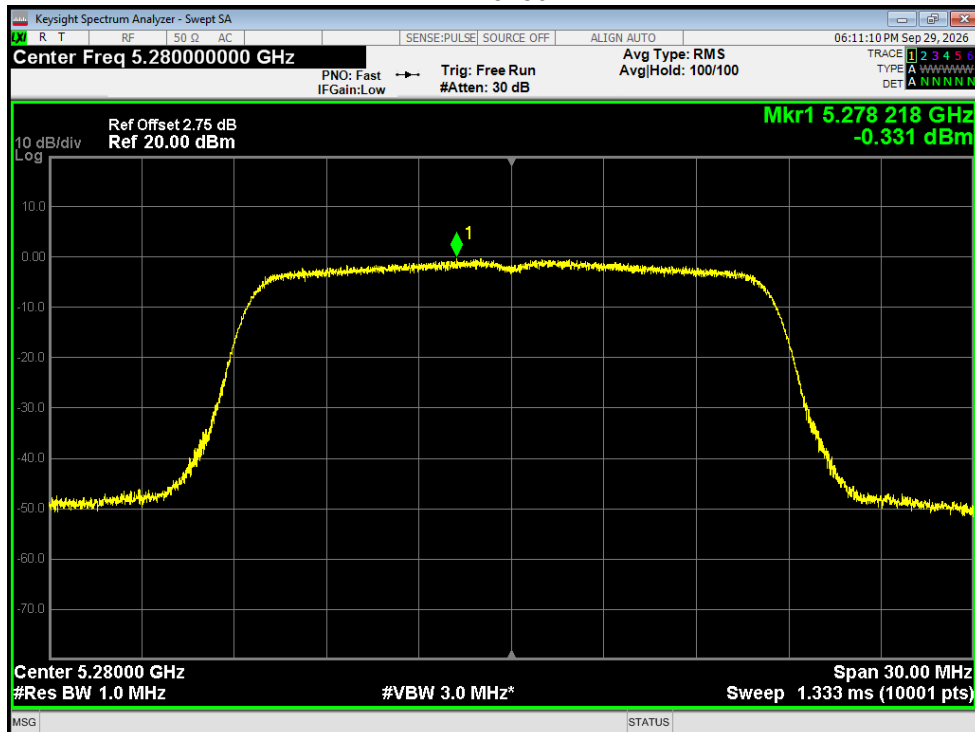


ANT1

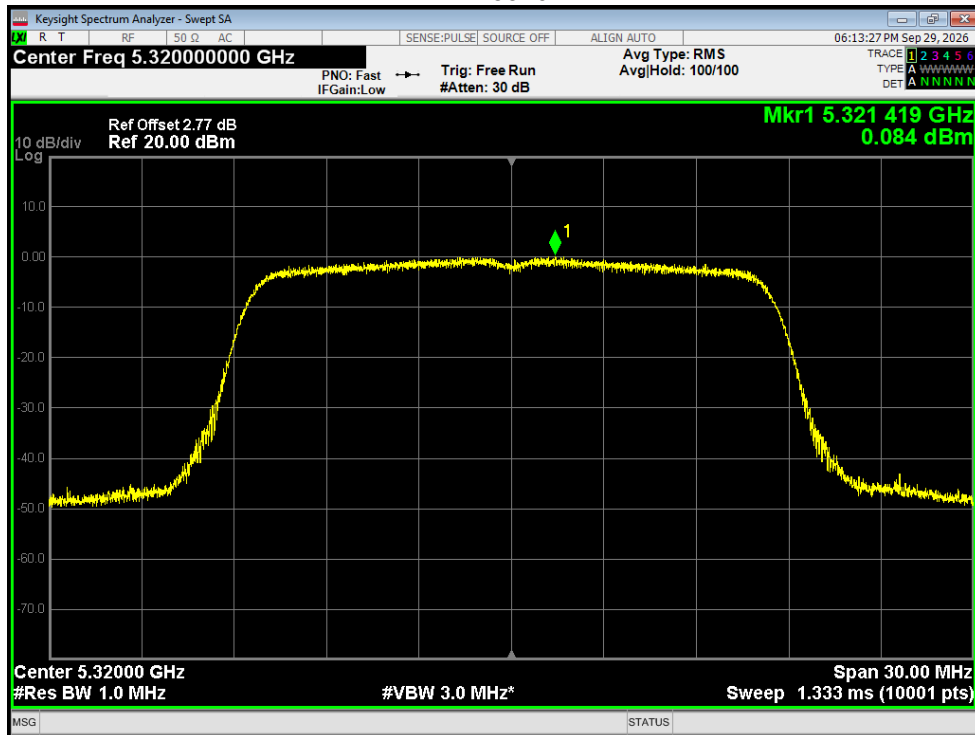
PSD NVNT a 5260MHz Ant1



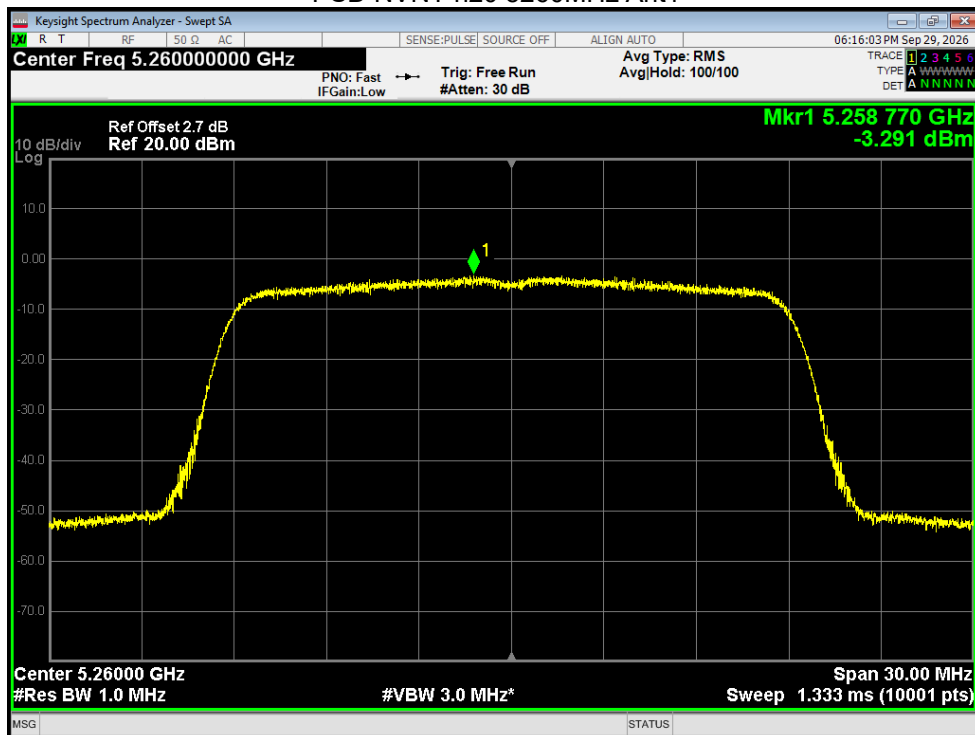
PSD NVNT a 5280MHz Ant1



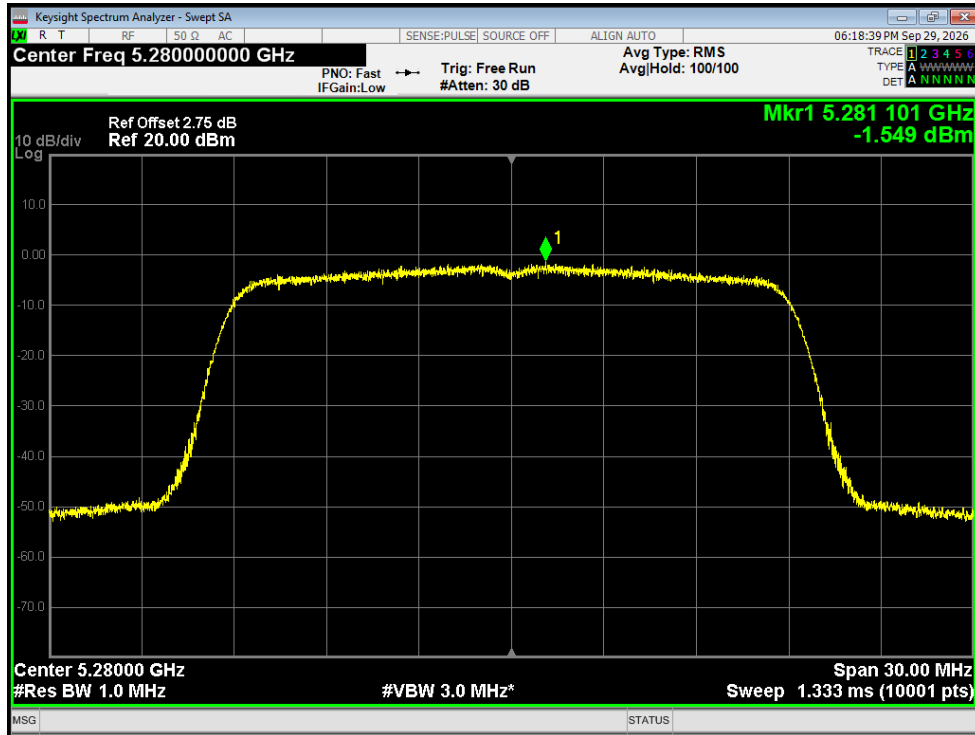
PSD NVNT a 5320MHz Ant1



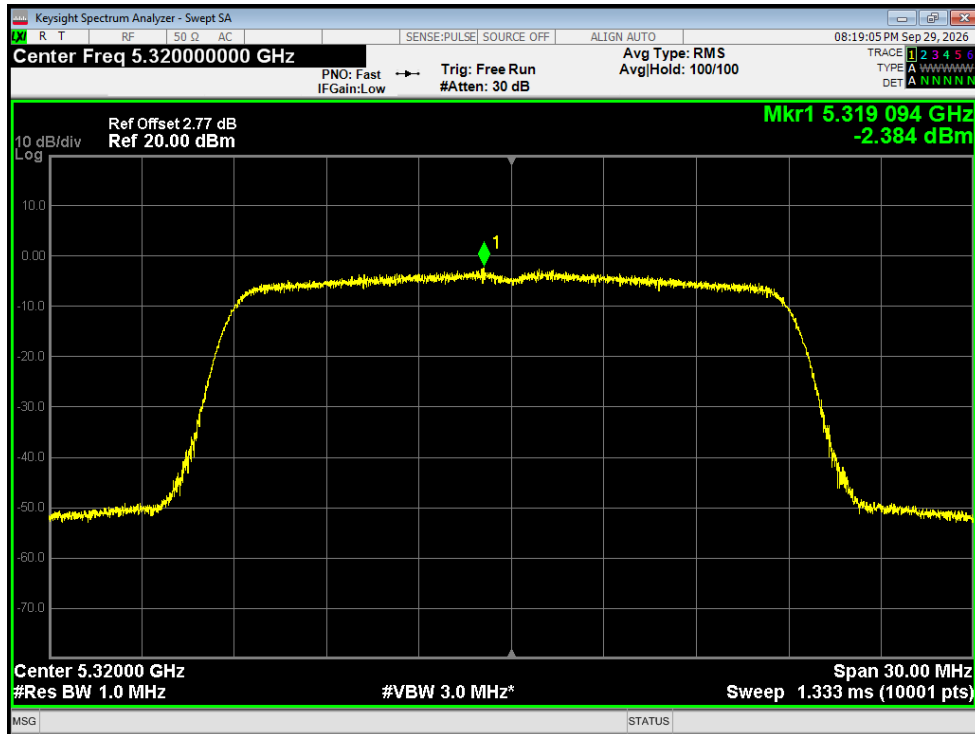
PSD NVNT n20 5260MHz Ant1



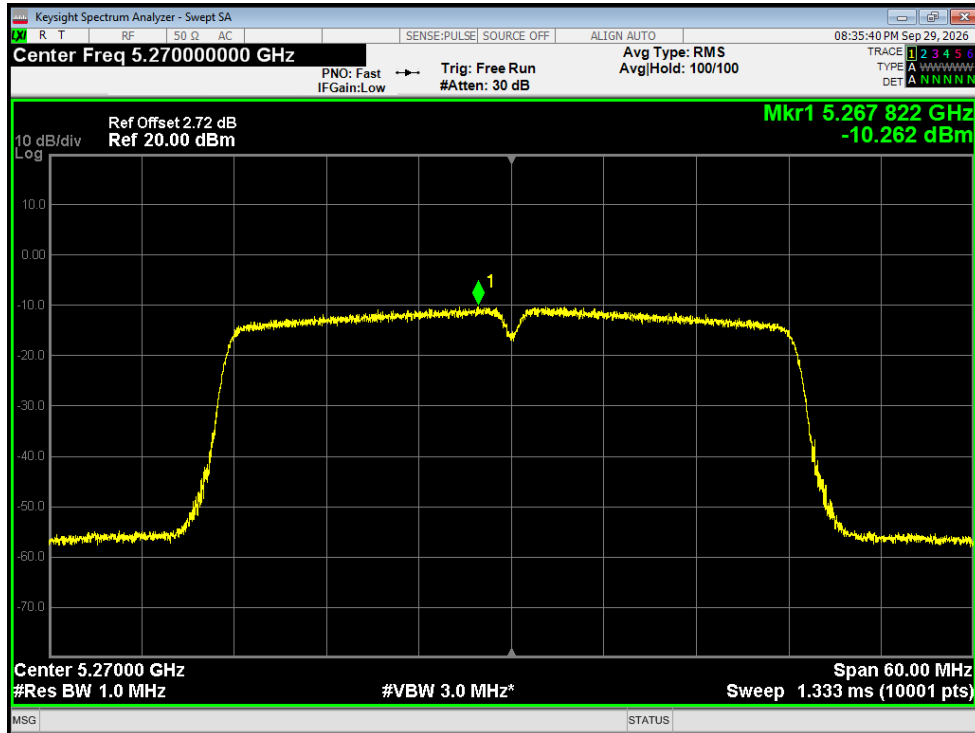
PSD NVNT n20 5280MHz Ant1



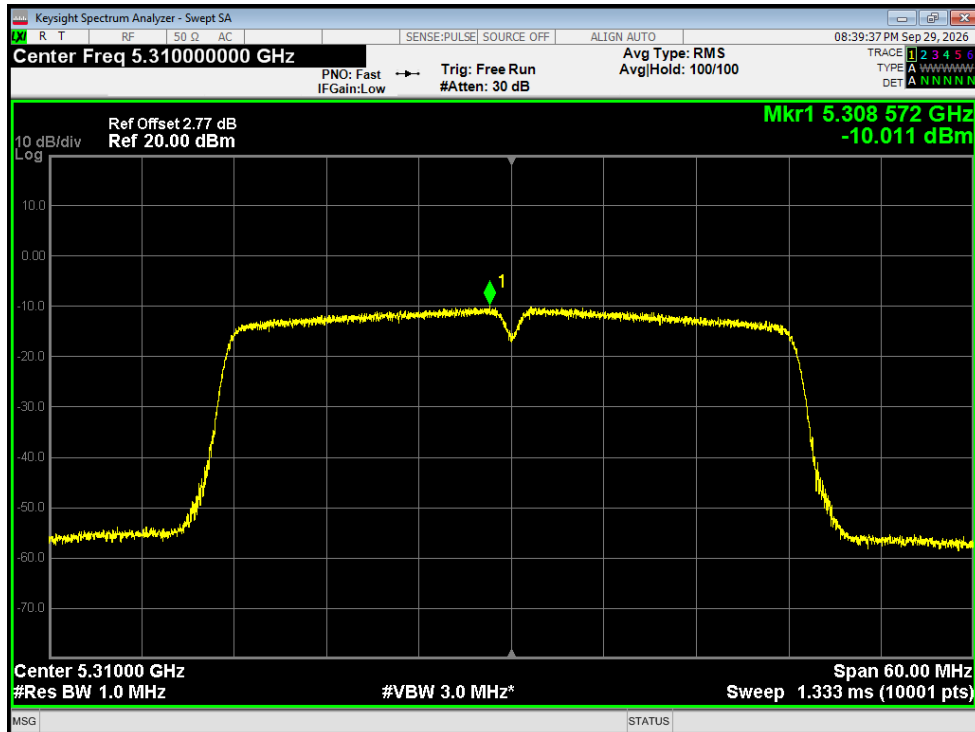
PSD NVNT n20 5320MHz Ant1



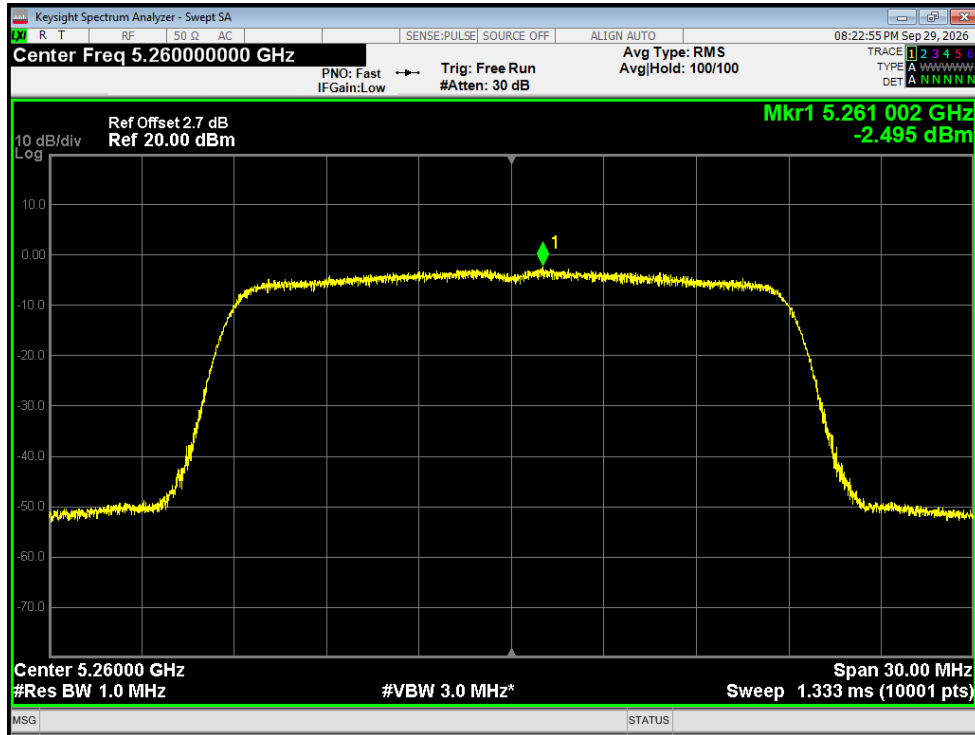
PSD NVNT n40 5270MHz Ant1



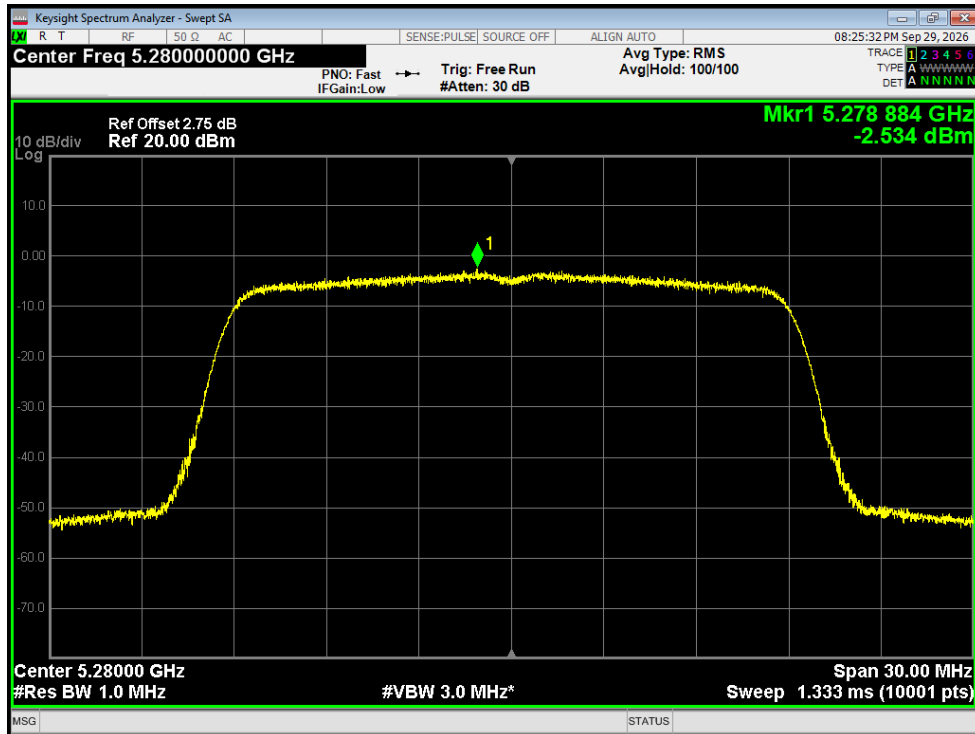
PSD NVNT n40 5310MHz Ant1



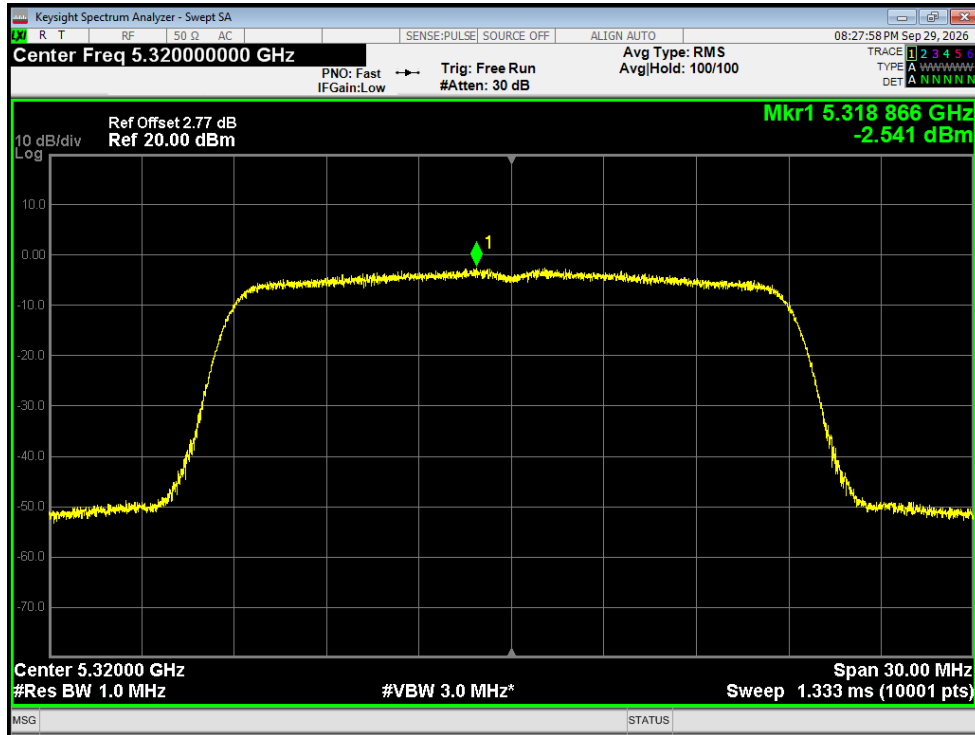
PSD NVNT ac20 5260MHz Ant1



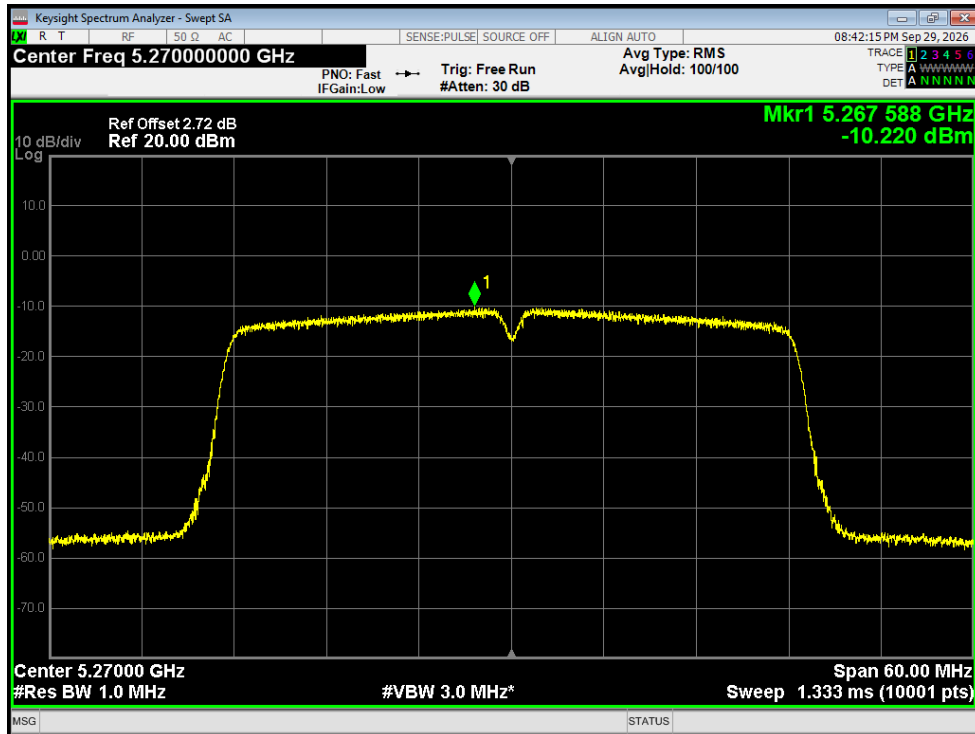
PSD NVNT ac20 5280MHz Ant1



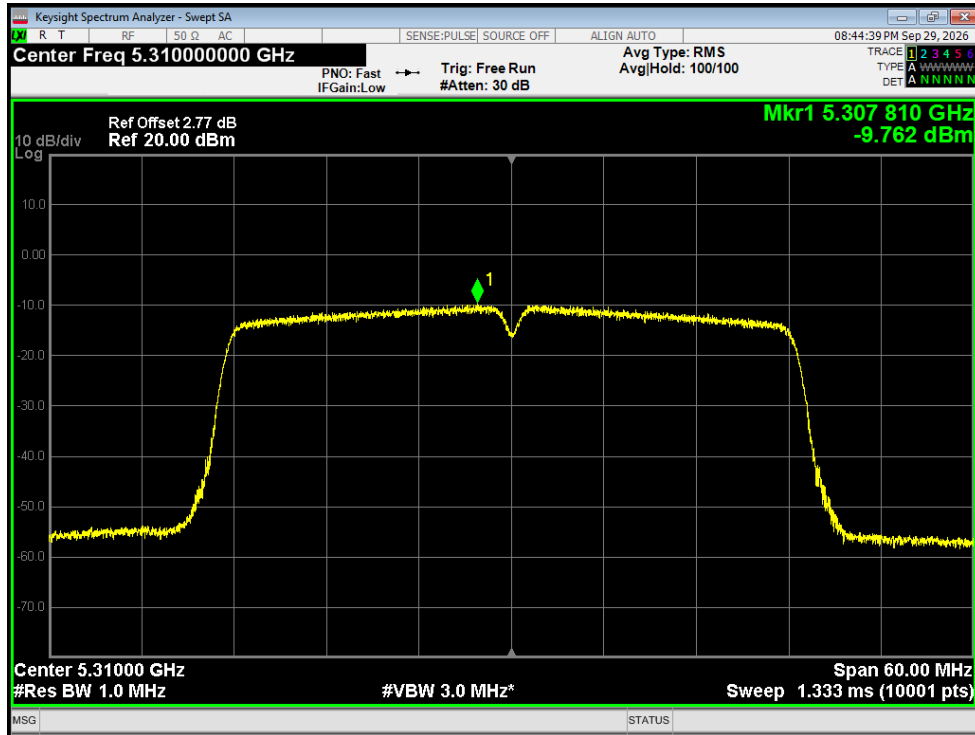
PSD NVNT ac20 5320MHz Ant1



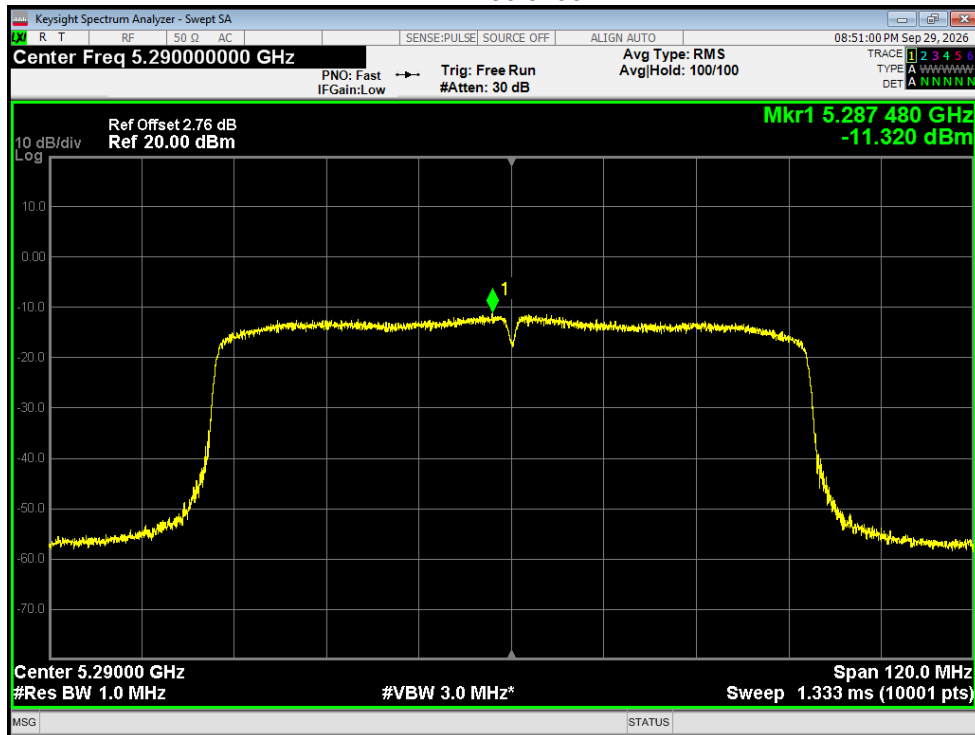
PSD NVNT ac40 5270MHz Ant1



PSD NVNT ac40 5310MHz Ant1

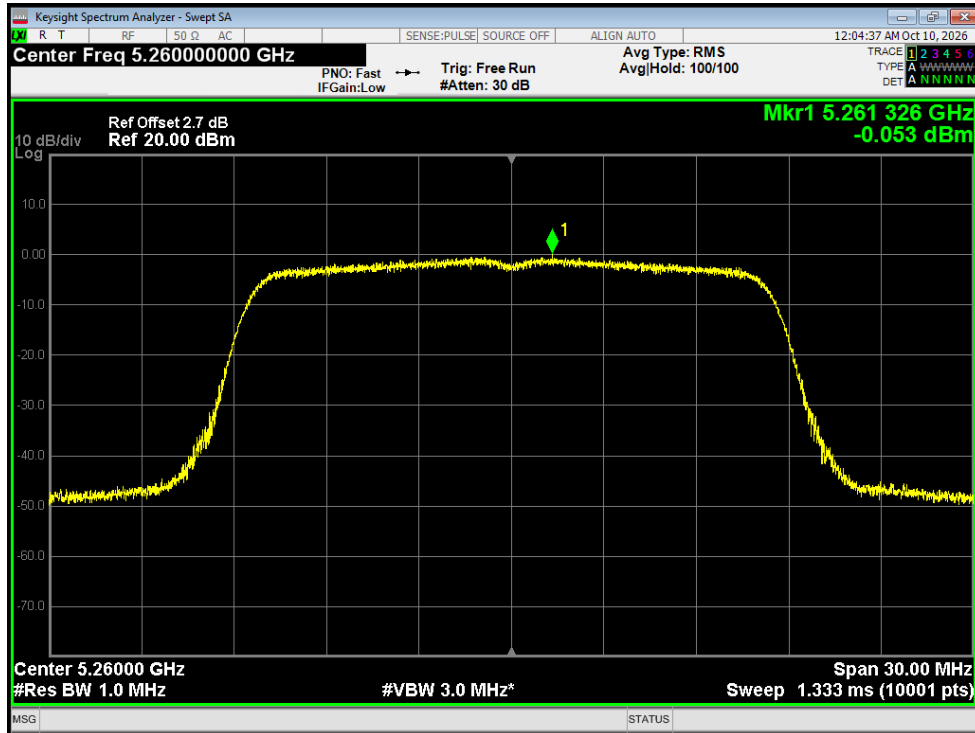


PSD NVNT ac80 5290MHz Ant1

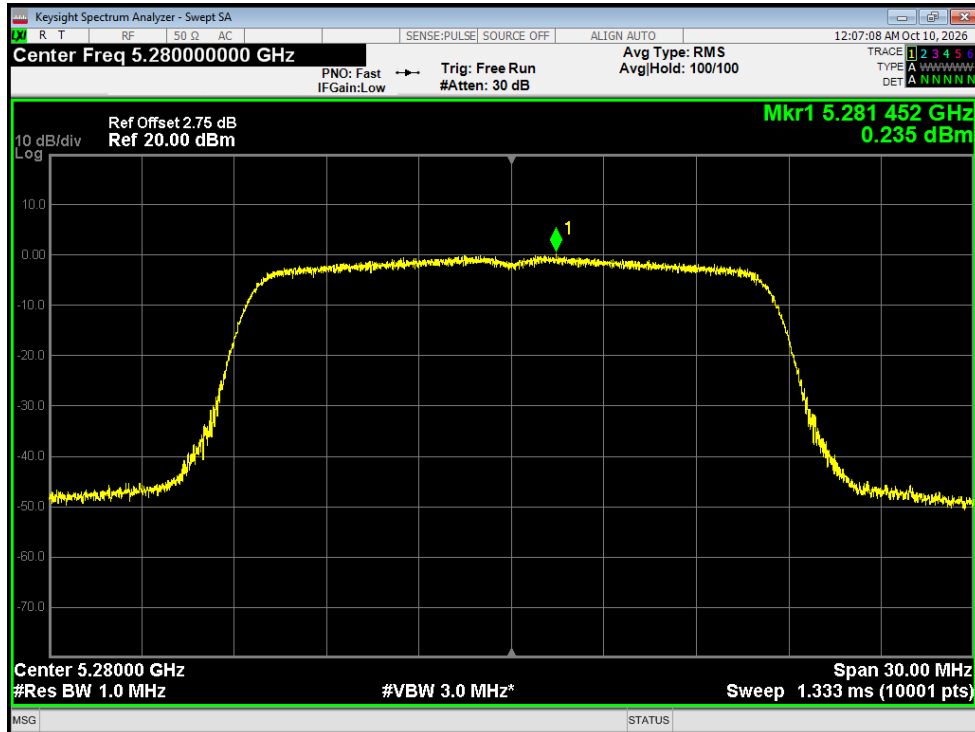


ANT2

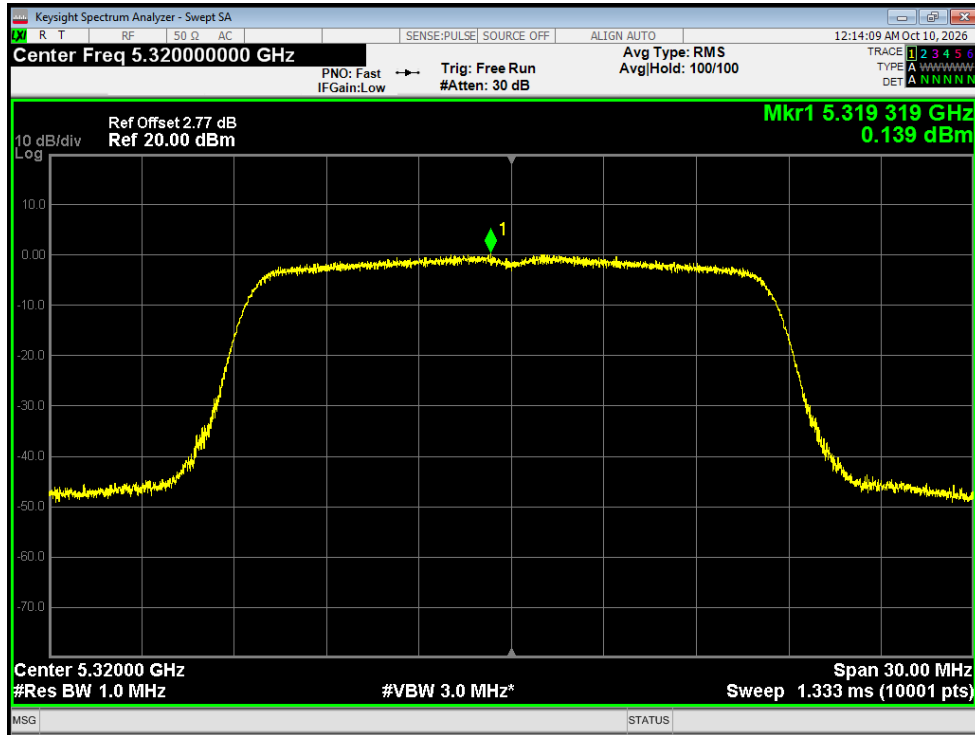
PSD NVNT a 5260MHz Ant1



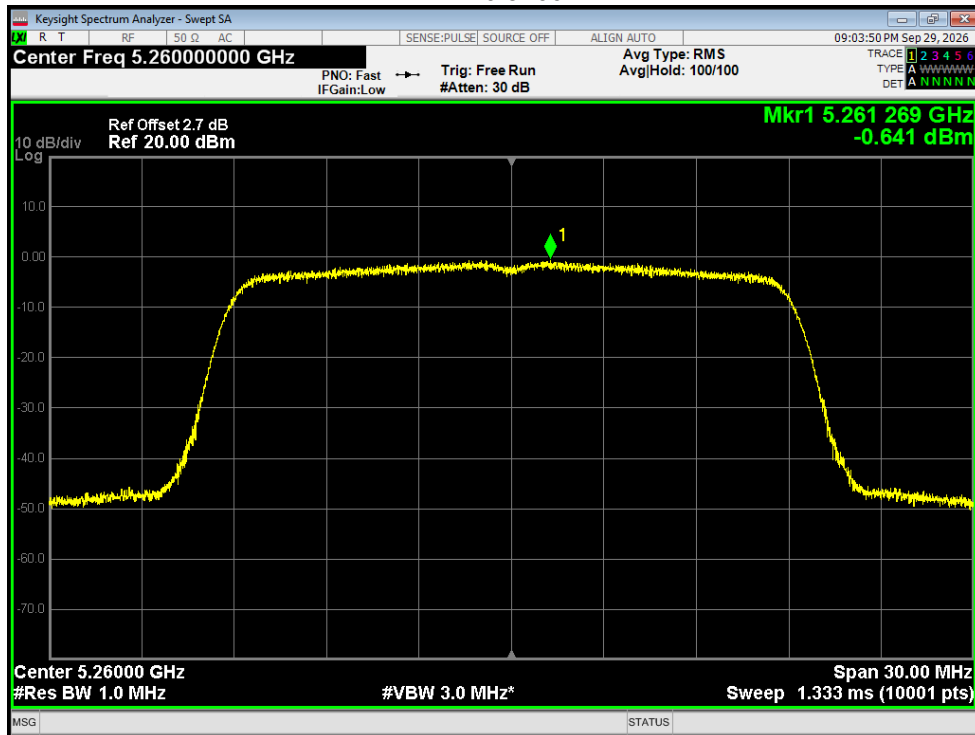
PSD NVNT a 5280MHz Ant1



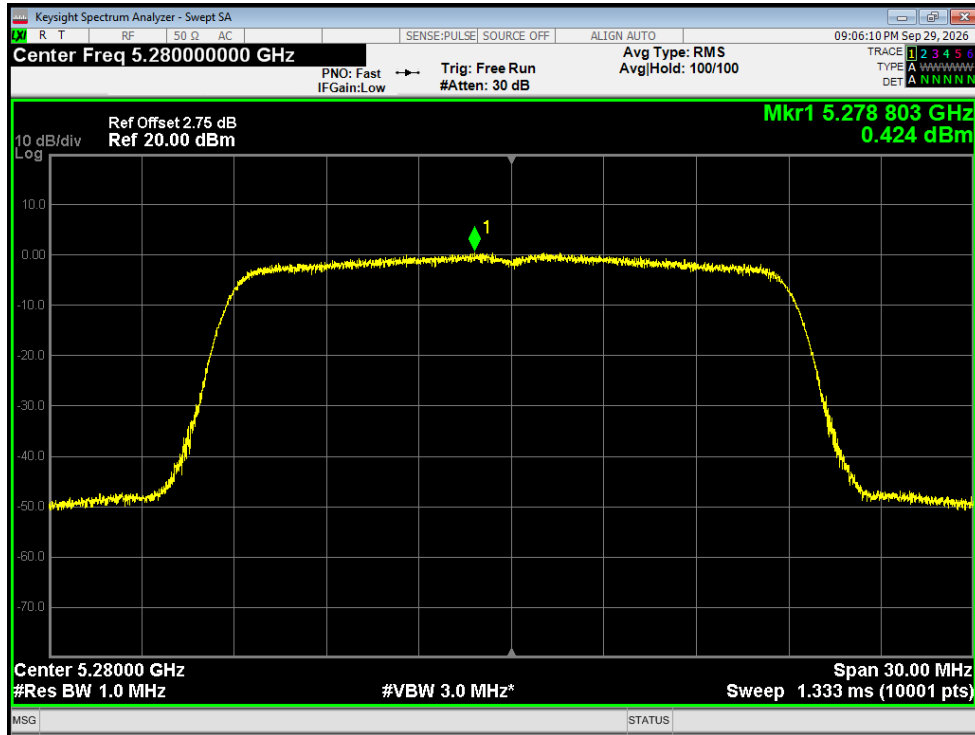
PSD NVNT a 5320MHz Ant1



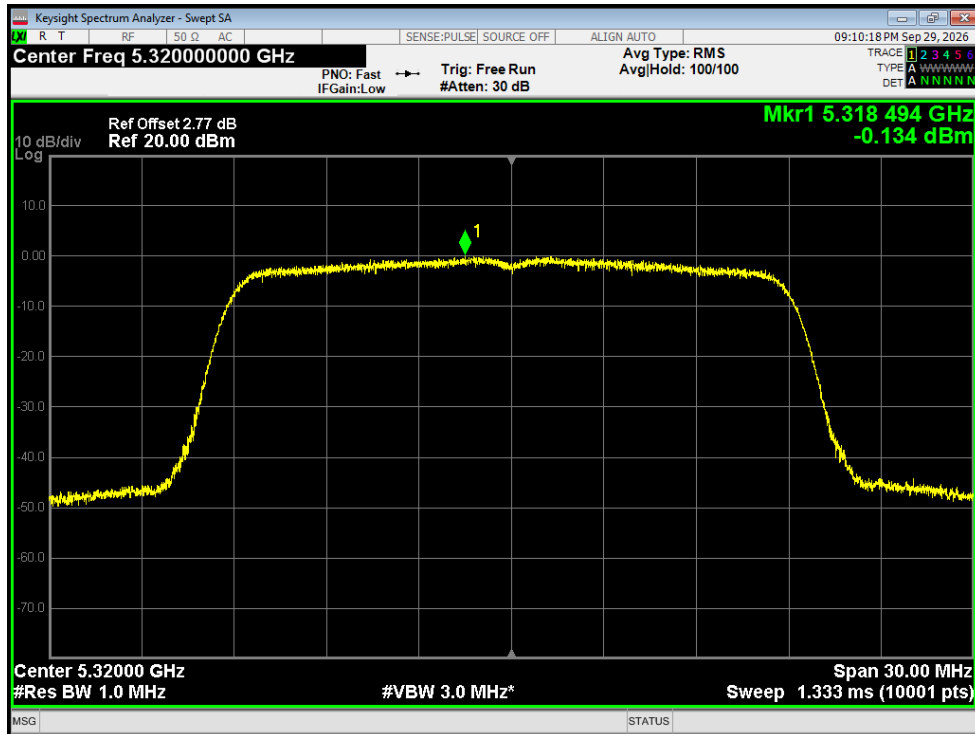
PSD NVNT n20 5260MHz Ant1



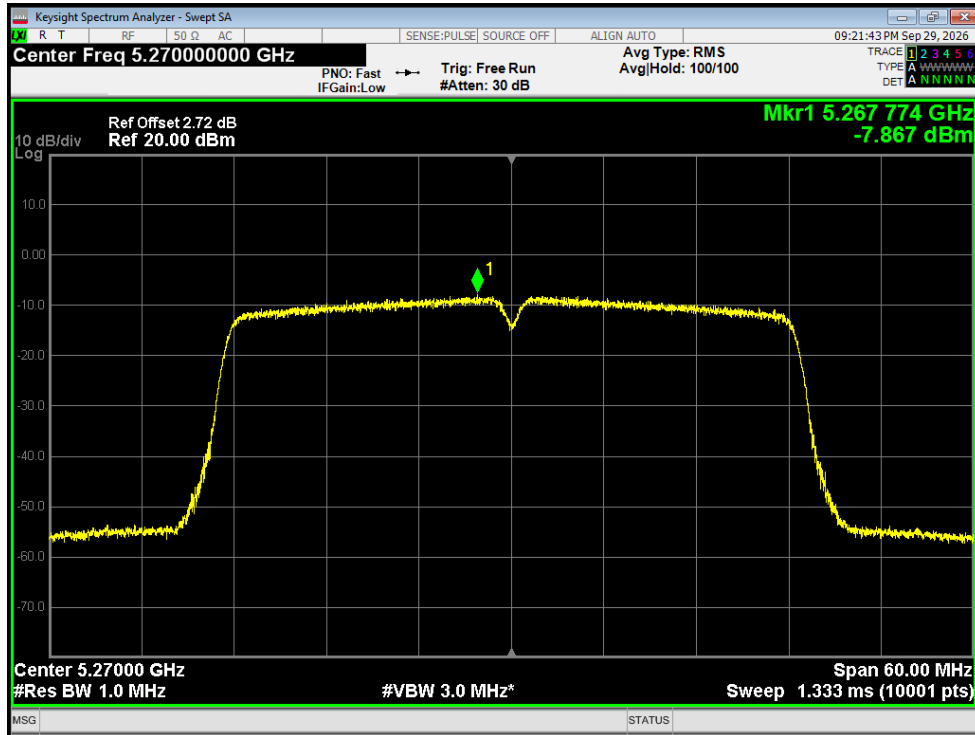
PSD NVNT n20 5280MHz Ant1



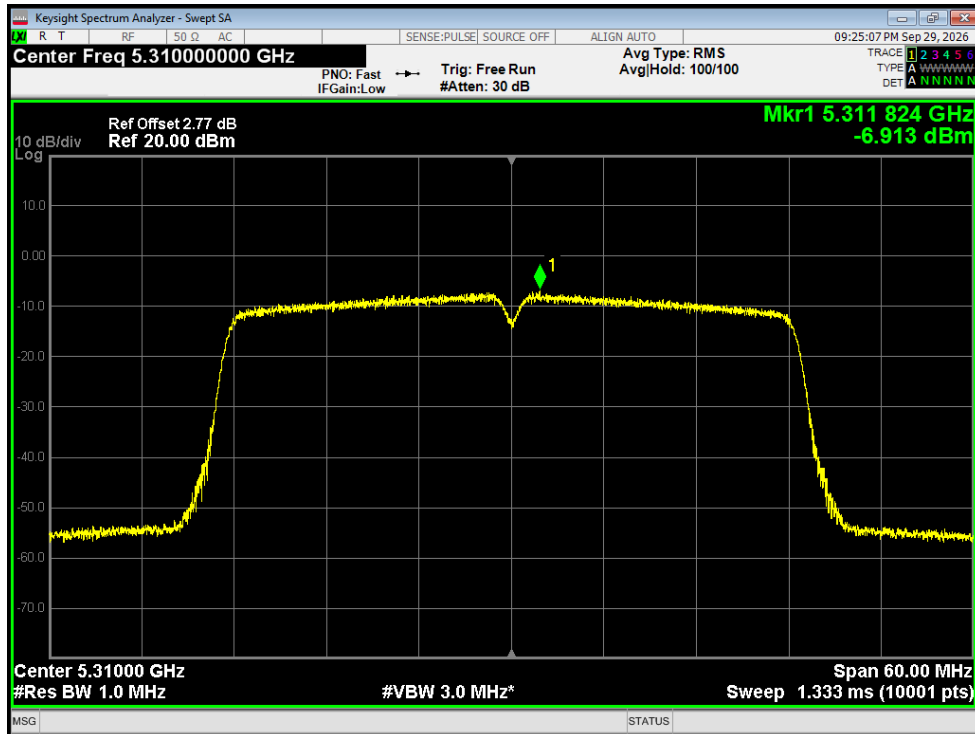
PSD NVNT n20 5320MHz Ant1



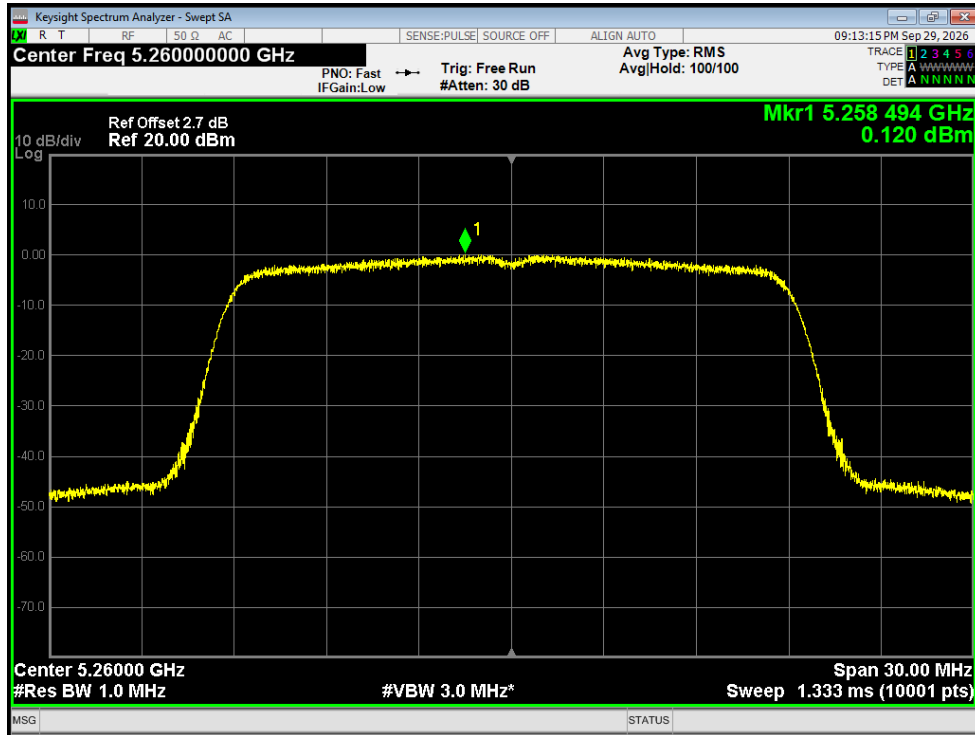
PSD NVNT n40 5270MHz Ant1



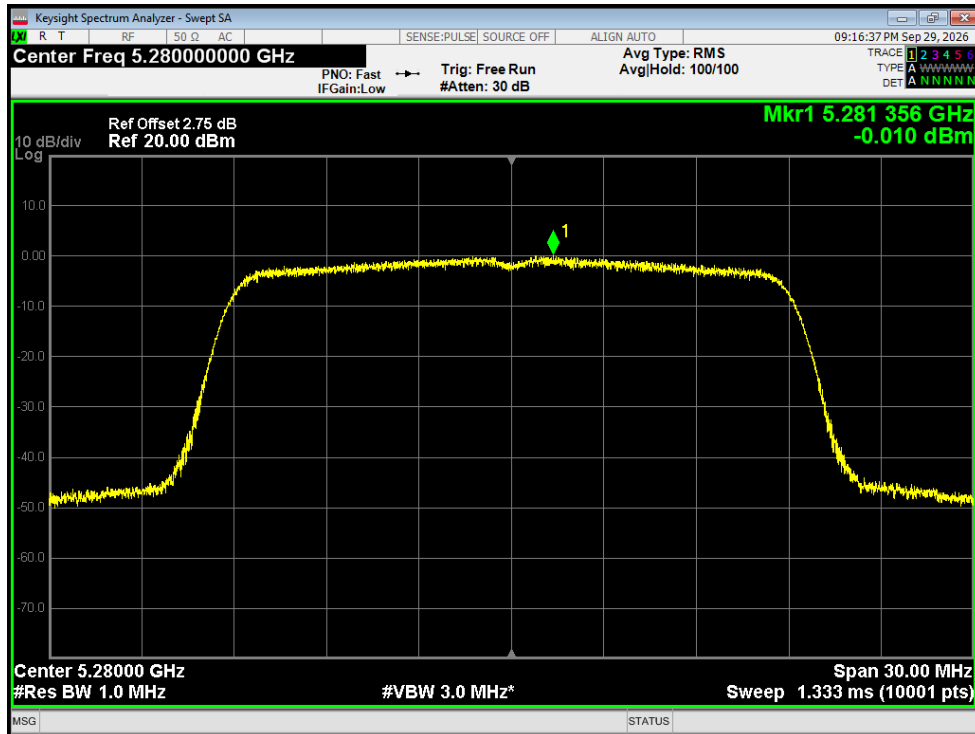
PSD NVNT n40 5310MHz Ant1



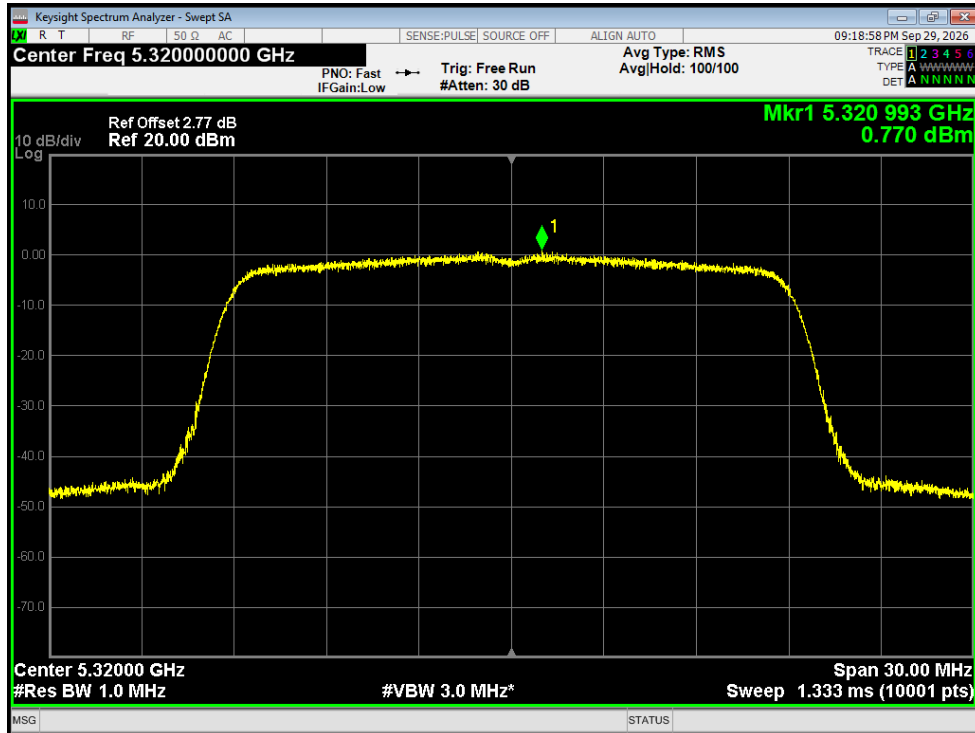
PSD NVNT ac20 5260MHz Ant1



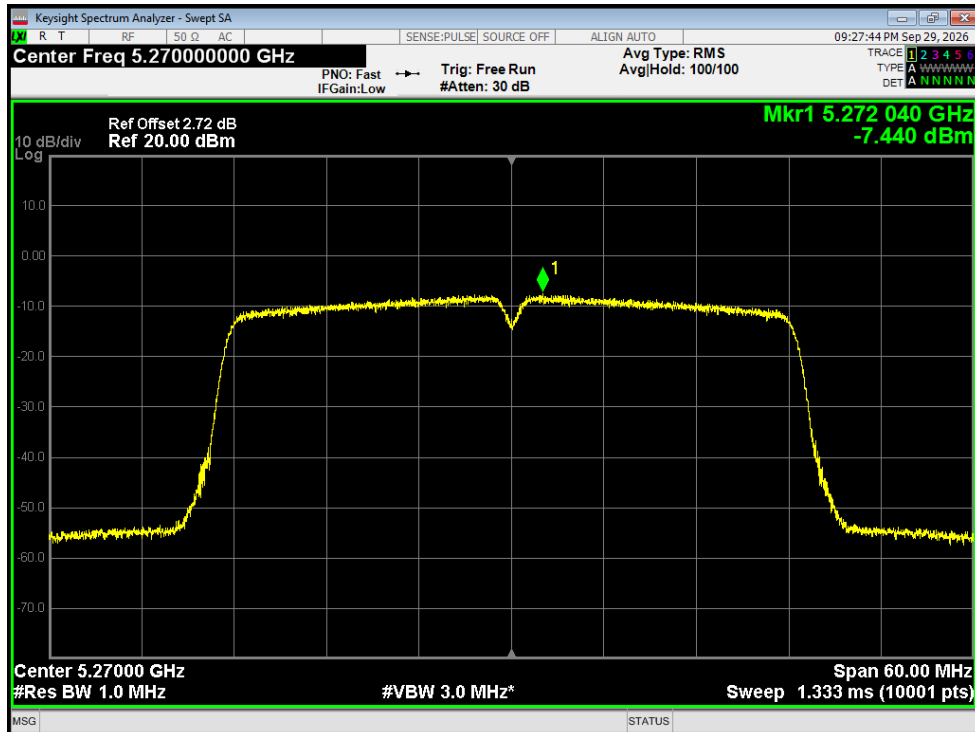
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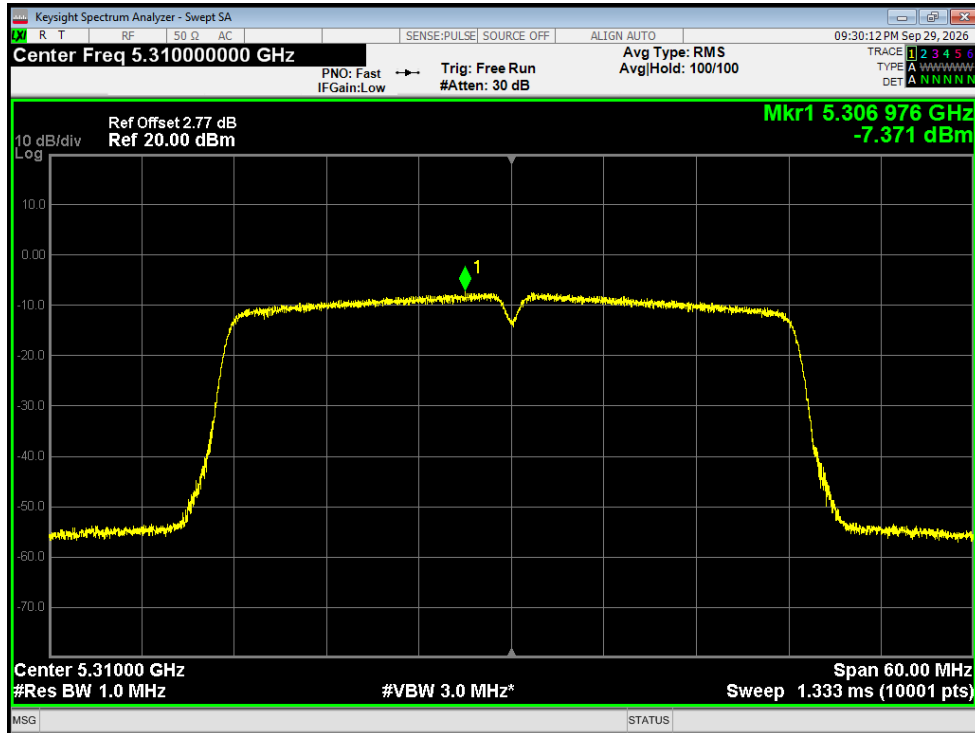
PSD NVNT ac20 5320MHz Ant1



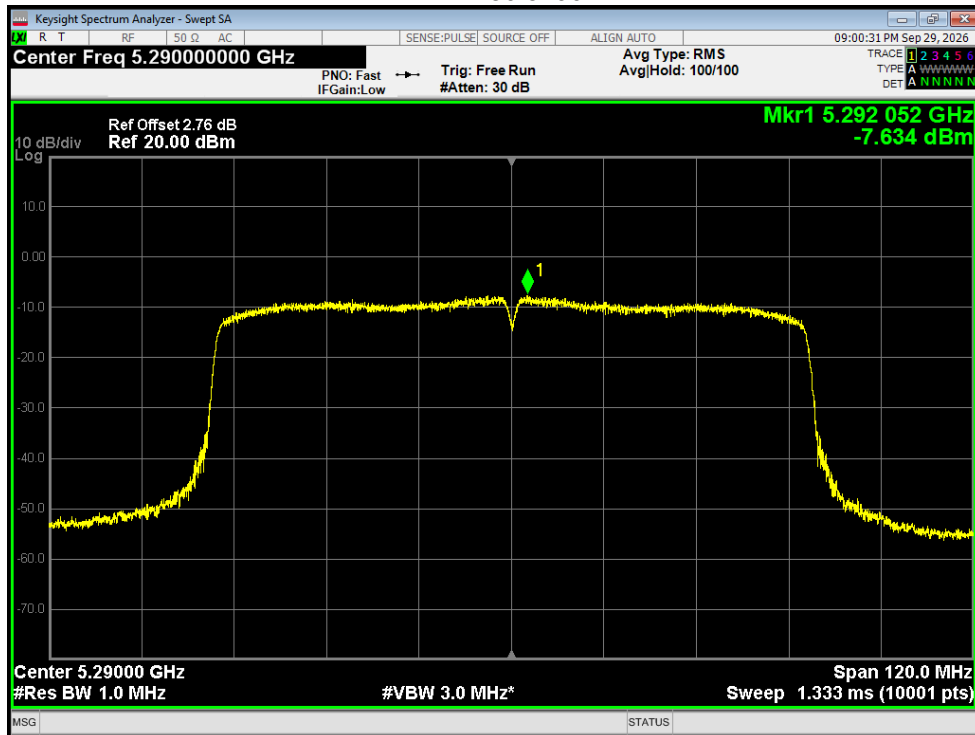
PSD NVNT ac40 5270MHz Ant1



PSD NVNT ac40 5310MHz Ant1



PSD NVNT ac80 5290MHz Ant1





ANT1

5500-5700MHz

Mode	Frequency	Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5500 MHz	-2.538	11
	5600 MHz	-1.831	11
	5700 MHz	-1.921	11
802.11 n20	5500 MHz	-2.48	11
	5600 MHz	-1.864	11
	5700 MHz	-1.788	11
802.11ac20	5500 MHz	-3.214	11
	5600 MHz	-2.357	11
	5700 MHz	-1.811	11
802.11 n40	5510 MHz	-11.042	11
	5590 MHz	0.777	11
	5670 MHz	-10.328	11
802.11ac40	5510 MHz	-10.096	11
	5590 MHz	0.765	11
	5670 MHz	-10.258	11
802.11ac80	5530 MHz	-13.831	11
	5610 MHz	-0.985	11

ANT2

5500-5700MHz

Mode	Frequency	Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 a	5500 MHz	0.248	11
	5600 MHz	-0.953	11
	5700 MHz	0.128	11
802.11 n20	5500 MHz	0.555	11
	5600 MHz	0.484	11
	5700 MHz	0.273	11
802.11ac20	5500 MHz	-0.233	11
	5600 MHz	-0.24	11
	5700 MHz	-0.446	11
802.11 n40	5510 MHz	-7.558	11
	5590 MHz	-7.254	11
	5670 MHz	1.694	11
802.11ac40	5510 MHz	-6.369	11
	5590 MHz	-6.54	11
	5670 MHz	1.667	11
802.11ac80	5530 MHz	-10.493	11
	5610 MHz	-0.053	11



ANT1+ANT2

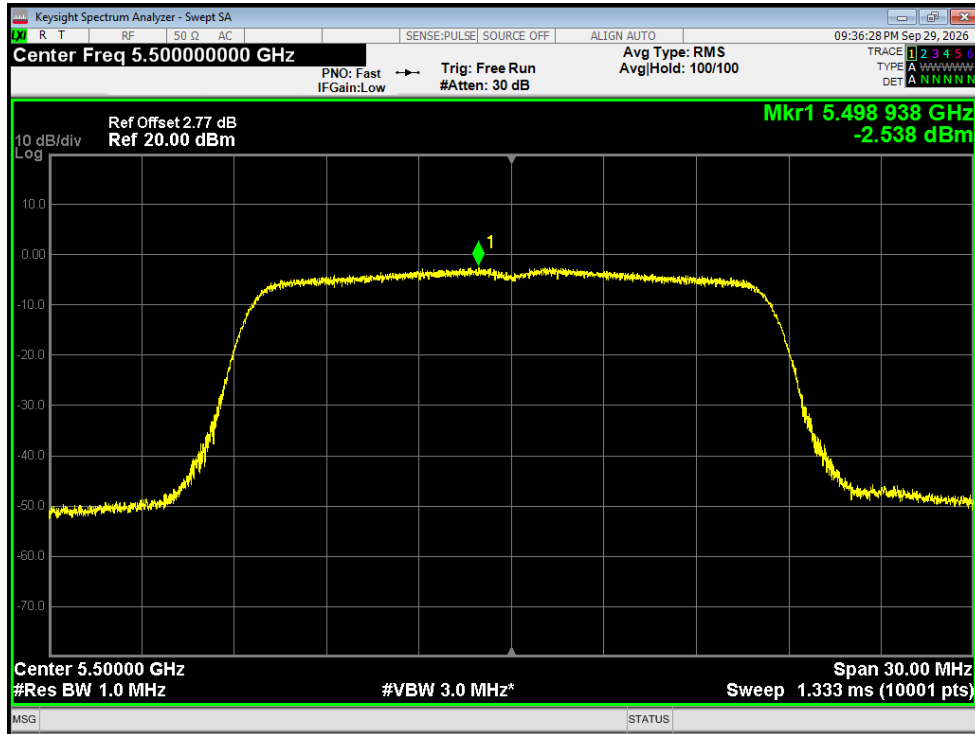
5500-5700MHz

Mode	Frequency	Measured Power Density (dBm/MHz) ANT1	Measured Power Density (dBm/MHz) ANT2	MIMO Measured Power Density (dBm/MHz)	Limit (dBm/MHz)
802.11 n20	5500 MHz	-2.48	0.555	2.18	11
	5600 MHz	-1.864	0.484	2.40	11
	5700 MHz	-1.788	0.273	2.31	11
802.11ac20	5500 MHz	-3.214	-0.233	1.41	11
	5600 MHz	-2.357	-0.24	1.78	11
	5700 MHz	-1.811	-0.446	1.91	11
802.11 n40	5500 MHz	-11.042	-7.558	-6.12	11
	5600 MHz	0.777	1.694	4.26	11
	5700 MHz	-10.328	-7.254	-5.65	11
802.11ac40	5510 MHz	-10.096	-6.369	-5.02	11
	5590 MHz	0.765	1.667	4.24	11
	5670 MHz	-10.258	-6.54	-5.19	11
802.11ac80	5510 MHz	-13.831	-10.493	-8.99	11
	5590 MHz	-0.985	-0.053	2.50	11



ANT1

PSD NVNT a 5500MHz Ant1



PSD NVNT a 5600MHz Ant1

