Quectel Antenna 6XD Appendix

Report No.:	BCTC2407217909-2E
Applicant:	Vivid-Hosting, LLC
Product Name:	FRC Radio
Test Model:	VH-109
Tested Date:	2024-07-15 to 2024-08-13
Issued Date:	2024-09-09

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Appendix 1: Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax20	5955	Ant1	98.68	0	0.19
		6175		96.85	0.14	0.19
		6415		97.94	0.09	0.19
		6435		97.57	0.11	0.19
		6475		98.86	0	0.19
		6515		98.68	0	0.19
		6535		98.68	0	0.19
		6695		97.21	0.12	0.19
		6855		98.68	0	0.19
		6875		98.31	0	0.19
		6895		97.39	0.11	0.19
		7115		98.68	0	0.19
		5955	Ant2	97.21	0.12	0.19
		6175		97.21	0.12	0.19
		6415		97.03	0.13	0.19
		6435		97.03	0.13	0.19
		6475		98.86	0	0.19
		6515		98.83	0	0.19
		6535		98.68	0	0.19
		6695		98.12	0	0.19
		6855		98.68	0	0.19
		6875		98.68	0	0.19
		6895		98.68	0	0.19
		6995		97.03	0.13	0.19
		7115		96.85	0.14	0.19
		5955	Ant3	98.68	0	0.19
		6175		98.68	0	0.19
		6415		98.31	0	0.19
		6435		98.68	0	0.19
		6475		97.57	0.11	0.19
		6515		97.03	0.13	0.19
		6535		96.85	0.14	0.19
		6695		97.03	0.13	0.19
		6855		97.57	0.11	0.19
		6875		97.57	0.11	0.19
		6895		98.68	0	0.19
		6995		97.03	0.13	0.19
		7115		98.31	0	0.19
		5935	Ant4	97.39	0.11	0.19

		6175		98.12	0	0.19
		6415		98.49	0	0.19
		6435		96.85	0.14	0.19
		6475		98.68	0	0.19
		6515		97.03	0.13	0.19
		6535		98.68	0	0.19
		6695		97.75	0.1	0.19
		6855		98.31	0	0.19
		6875		97.21	0.12	0.19
		6895		97.21	0.12	0.19
		6995		98.49	0	0.19
		7115		98.12	0	0.19
		5955		97.39	0.11	0.19
		6175		97.03	0.13	0.19
		6415		96.67	0.15	0.19
		6435		96.67	0.15	0.19
		6475		97.39	0.11	0.19
		6515		97.03	0.13	0.19
		6535	Sum	98.68	0	0.19
		6695		96.85	0.14	0.19
		6855		97.57	0.11	0.19
		6875		98.68	0	0.19
		6895		98.68	0	0.19
		6995		98.31	0	0.19
		7115		98.49	0	0.19
		5965		98.71	0	0.19
		6165		98.17	0	0.19
		6405		98.9	0	0.19
		6445		98.35	0	0.19
		6485		97.46	0.11	0.19
		6525		98.71	0	0.19
		6565	Ant1	98.9	0	0.19
		6685		98.35	0	0.19
		6845		96.93	0.14	0.19
	ax40	6885		97.46	0.11	0.19
		6925		98.53	0	0.19
		6965		97.28	0.12	0.19
		7085		97.64	0.1	0.19
		5965		98.71	0	0.19
		6165		98.9	0	0.19
		6405		98.89	0	0.19
		6445	Ant2	98.9	0	0.19
		6485		98.17	0	0.19
		6525		96.93	0.14	0.19

		6565		97.46	0.11	0.19
		6685		98.71	0	0.19
		6845		98.71	0	0.19
		6885		98.71	0	0.19
		6925		97.11	0.13	0.19
		6965		99.72	0	1.38
		7085		96.76	0.14	0.19
		5965		98.71	0	0.19
		6165		98.53	0	0.19
		6405		98.35	0	0.19
		6445		98.06	0	0.19
		6485		98.17	0	0.19
		6525		98.17	0	0.19
		6565	Ant3	97.81	0.1	0.19
		6685		98.17	0	0.19
		6845		97.64	0.1	0.19
		6885		98.71	0	0.19
		6925		98.53	0	0.19
		6965		97.28	0.12	0.19
		7085		97.81	0.1	0.19
		5965		97.45	0.11	0.19
		6165		96.93	0.14	0.19
		6405		98.71	0	0.19
		6445		98.35	0	0.19
		6485		98.9	0	0.19
		6525		98.71	0	0.19
		6565	Ant4	97.28	0.12	0.19
		6685		97.64	0.1	0.19
		6845		98.71	0	0.19
		6885		98.71	0	0.19
		6925		97.63	0.1	0.19
		6965		98.35	0	0.19
		7085		97.28	0.12	0.19
		5965		97.45	0.11	0.19
		6165		98.71	0	0.19
		6405		98.71	0	0.19
		6445		97.64	0.1	0.19
		6485		98.71	0	0.19
		6525	Sum	96.93	0.14	0.19
		6565		96.93	0.14	0.19
		6685		98.35	0	0.19
		6845		98.89	0	0.19
		6885		97.11	0.13	0.19
		6925		97.28	0.12	0.19

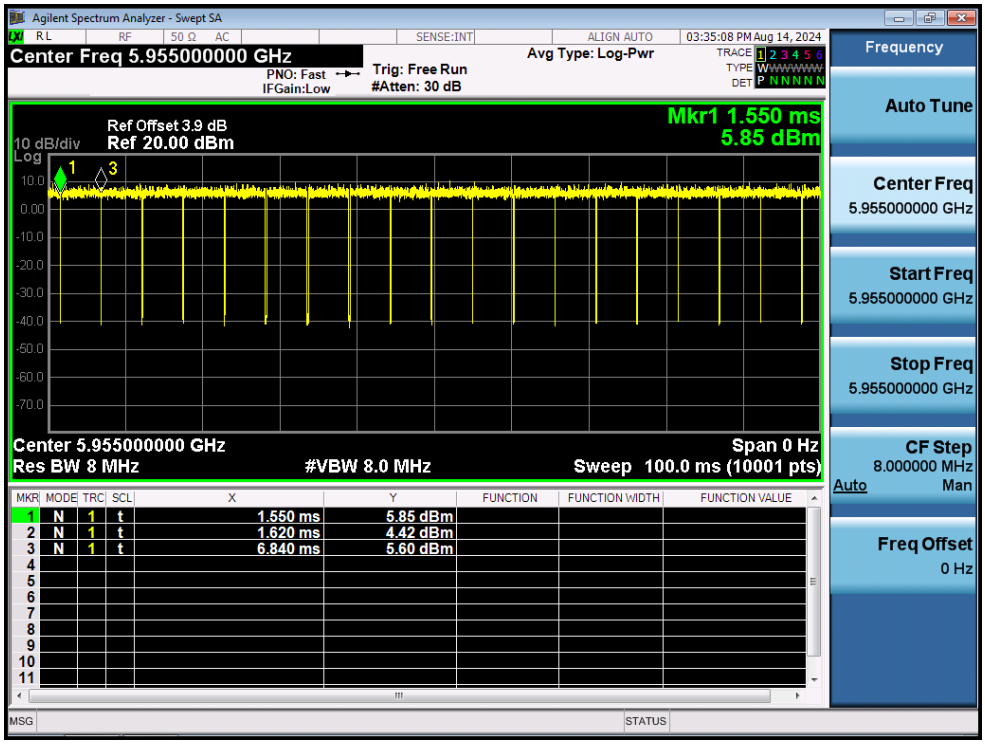
		6965		98.35	0	0.19
		7085		97.64	0.1	0.19
	ax80	5985	Ant1	98.54	0	0.19
		6145		98.18	0	0.19
		6385		98.01	0	0.18
		6465		96.77	0.14	0.19
		6545		97.83	0.1	0.19
		6625		96.95	0.13	0.19
		6705		97.65	0.1	0.19
		6785		98.72	0	0.19
		6865		97.47	0.11	0.19
		6945		97.3	0.12	0.19
		7025		98.9	0	0.19
		5985	Ant2	97.3	0.12	0.19
		6145		98.18	0	0.19
		6385		98.72	0	0.19
		6465		97.3	0.12	0.19
		6545		97.12	0.13	0.19
		6625		97.47	0.11	0.19
		6705		98.01	0	0.18
		6785		98.72	0	0.19
		6865		98.72	0	0.19
		6945		98.9	0	0.19
		7025		97.47	0.11	0.19
		5985	Ant3	98.72	0	0.19
		6145		97.65	0.1	0.19
		6385		98.18	0	0.19
		6465		98.9	0	0.19
		6545		97.12	0.13	0.19
		6625		96.95	0.13	0.18
		6705		97.83	0.1	0.18
		6785		97.3	0.12	0.19
		6865		97.13	0.13	0.18
		6945		98.9	0	0.18
		7025		96.95	0.13	0.19
		6145	Ant4	96.95	0.13	0.18
		6385		98.72	0	0.19
		6465		98.54	0	0.19
		6545		97.48	0.11	0.18
		6625		98.72	0	0.19
		6705		97.3	0.12	0.18
		6785		97.83	0.1	0.19
		6865		98.54	0	0.18
		6945		98.18	0	0.19

		7025		97.3	0.12	0.19
		5985	Sum	97.3	0.12	0.18
		6145		97.83	0.1	0.19
		6385		97.48	0.11	0.18
		6465		98	0	0.19
		6545		98.36	0	0.19
		6625		97.83	0.1	0.19
		6705		97.83	0.1	0.19
		6785		98.72	0	0.19
		6865		98.72	0	0.19
		6945		98.72	0	0.19
		7025		98.36	0	0.19
	ax160	6025	Ant1	98.67	0	0.22
		6185		97.58	0.11	0.23
		6345		96.32	0.16	0.22
		6505		98.67	0	0.22
		6665		96.74	0.14	0.22
		6825		97.59	0.11	0.22
		6985		98.45	0	0.22
		6025	Ant2	96.74	0.14	0.22
		6185		97.58	0.11	0.23
		6345		98.45	0	0.23
		6505		96.32	0.16	0.22
		6665		96.94	0.13	0.23
		6825		96.11	0.17	0.22
		6985		98.45	0	0.22
		6025	Ant3	97.37	0.12	0.23
		6185		98.45	0	0.22
		6345		97.37	0.12	0.22
		6505		97.37	0.12	0.23
		6665		98.01	0	0.23
		6825		97.8	0.1	0.23
		6985		98.67	0	0.23
		6025	Ant4	96.95	0.13	0.22
		6185		98.23	0	0.23
		6345		97.37	0.12	0.23
		6505		97.37	0.12	0.23
		6665		98.02	0	0.22
		6825		96.74	0.14	0.22
		6985		98.23	0	0.22
		6025	Sum	98.23	0	0.22
		6185		96.31	0.16	0.23
		6345		96.95	0.13	0.22
		6505		96.31	0.16	0.23

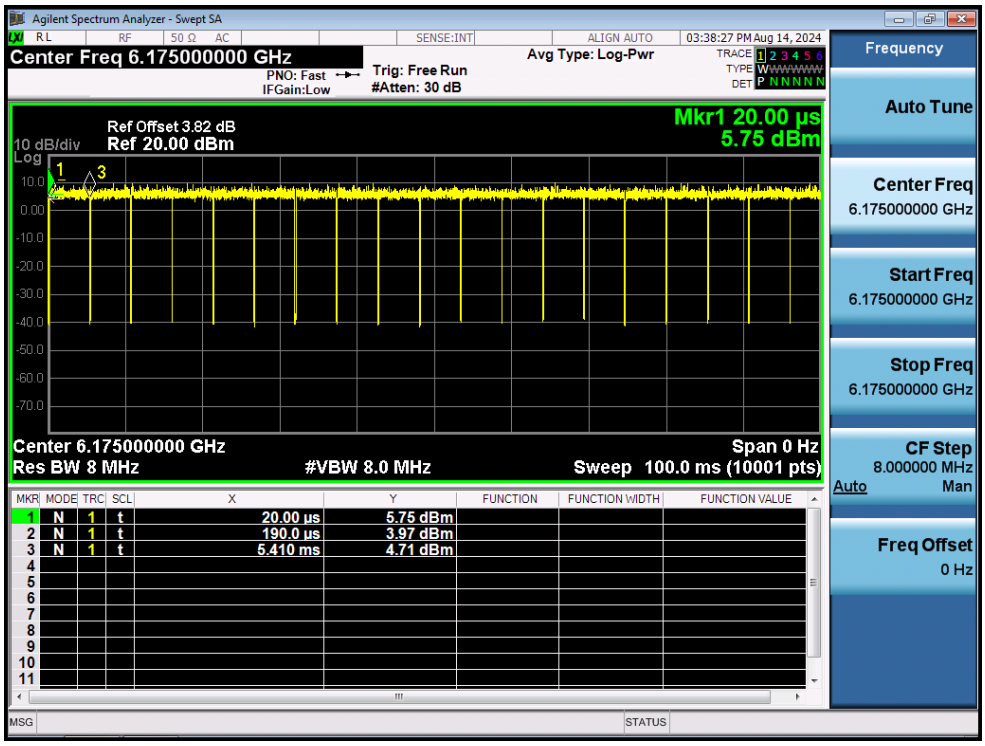
		6665		98.23	0	0.22
		6825		97.37	0.12	0.23
		6985		97.8	0.1	0.22

Test Graphs

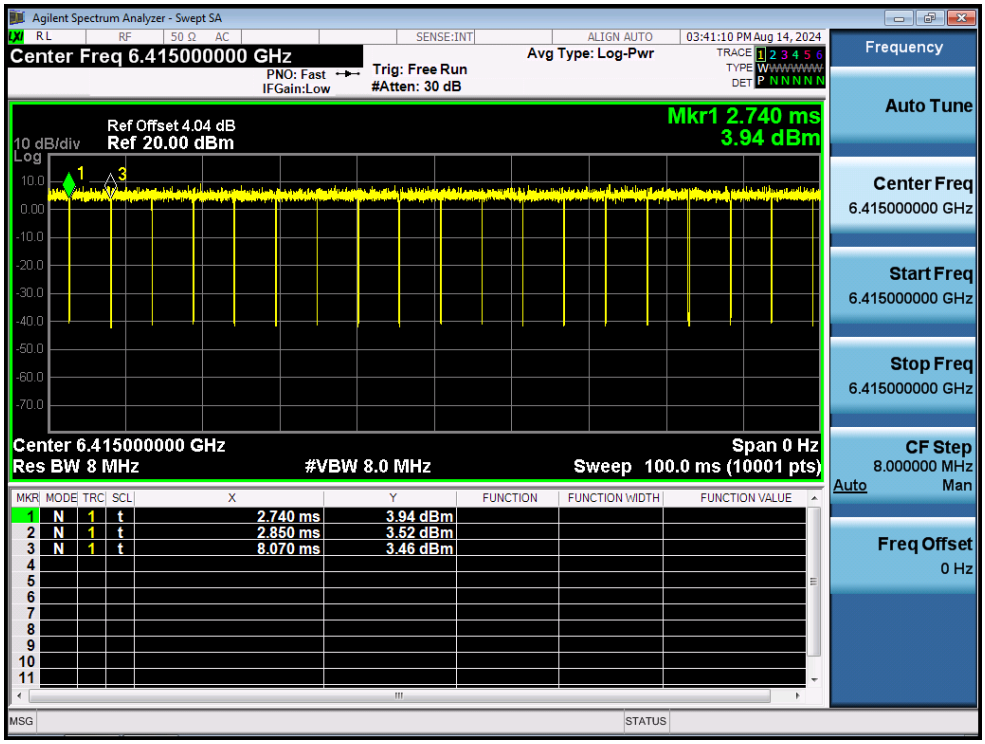
Duty Cycle NVNT ax20 5955MHz Ant1



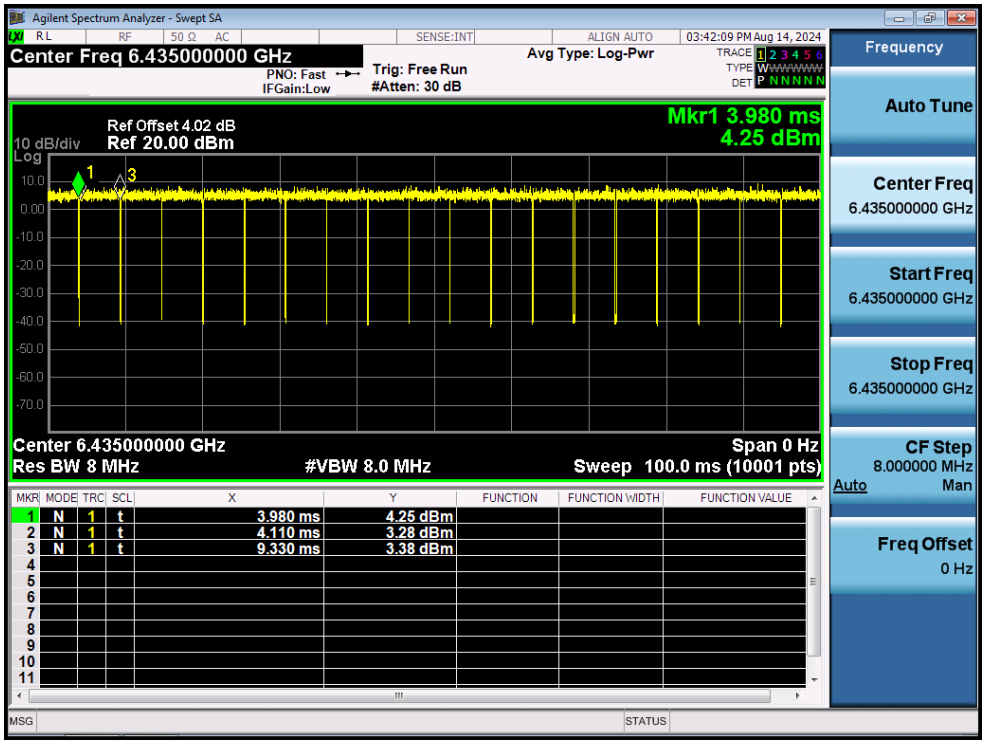
Duty Cycle NVNT ax20 6175MHz Ant1



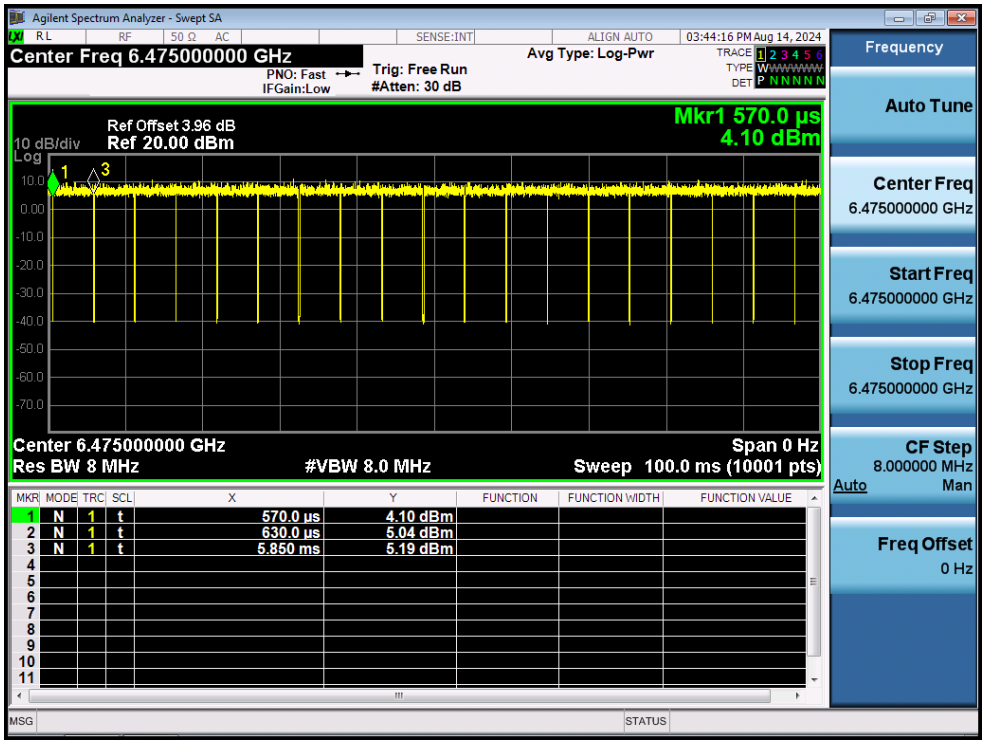
Duty Cycle NVNT ax20 6415MHz Ant1



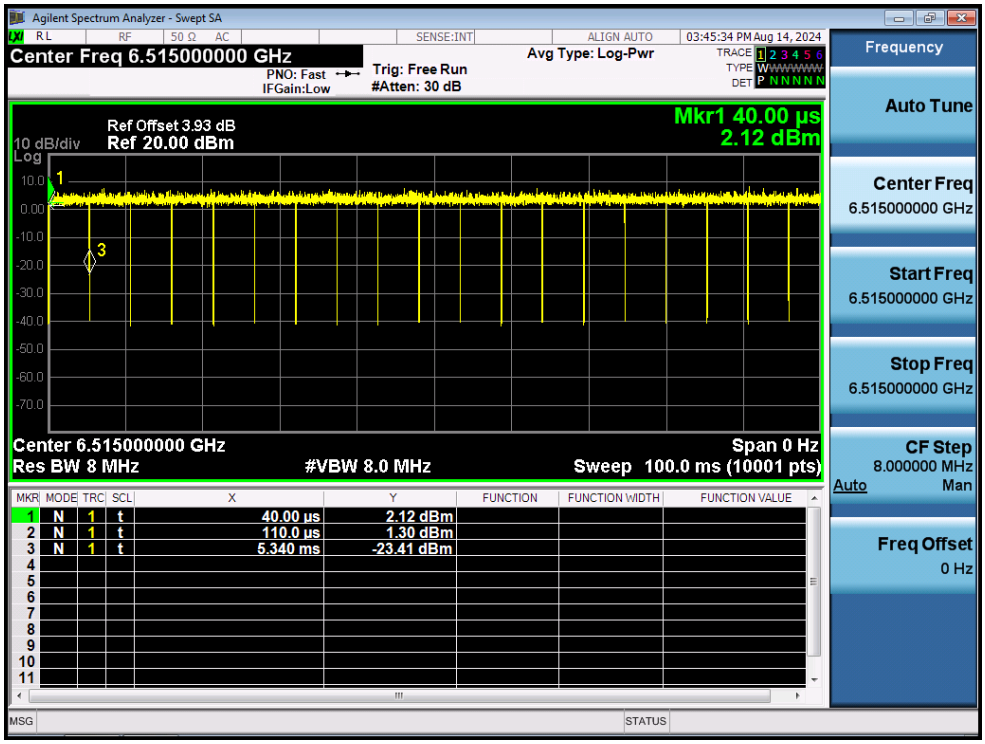
Duty Cycle NVNT ax20 6435MHz Ant1



Duty Cycle NVNT ax20 6475MHz Ant1



Duty Cycle NVNT ax20 6515MHz Ant1



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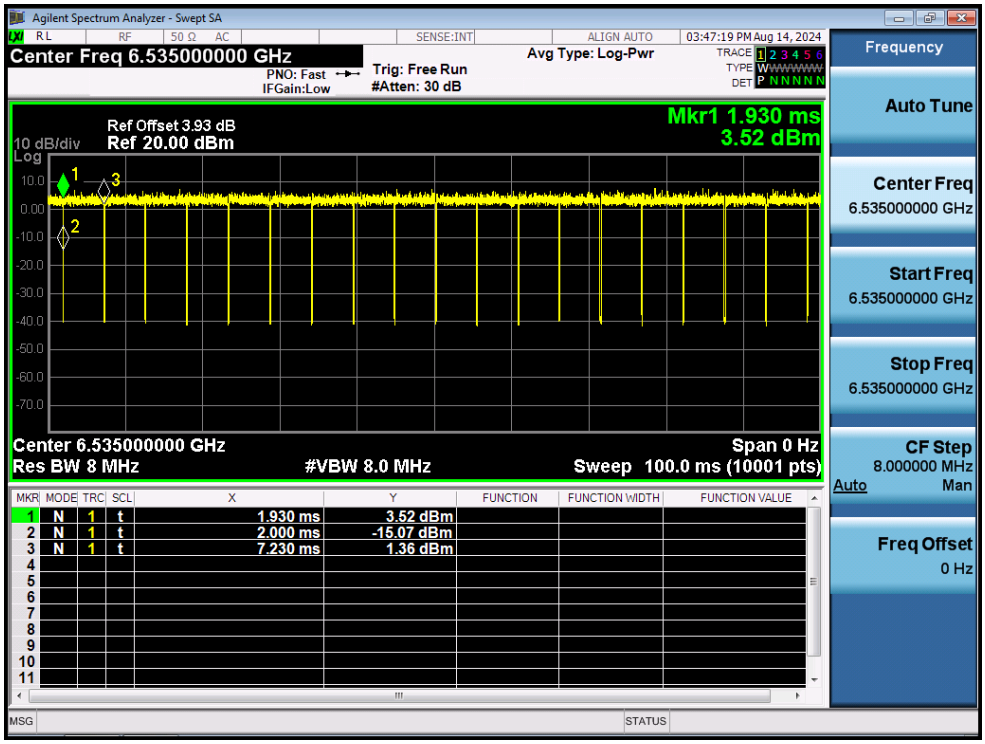
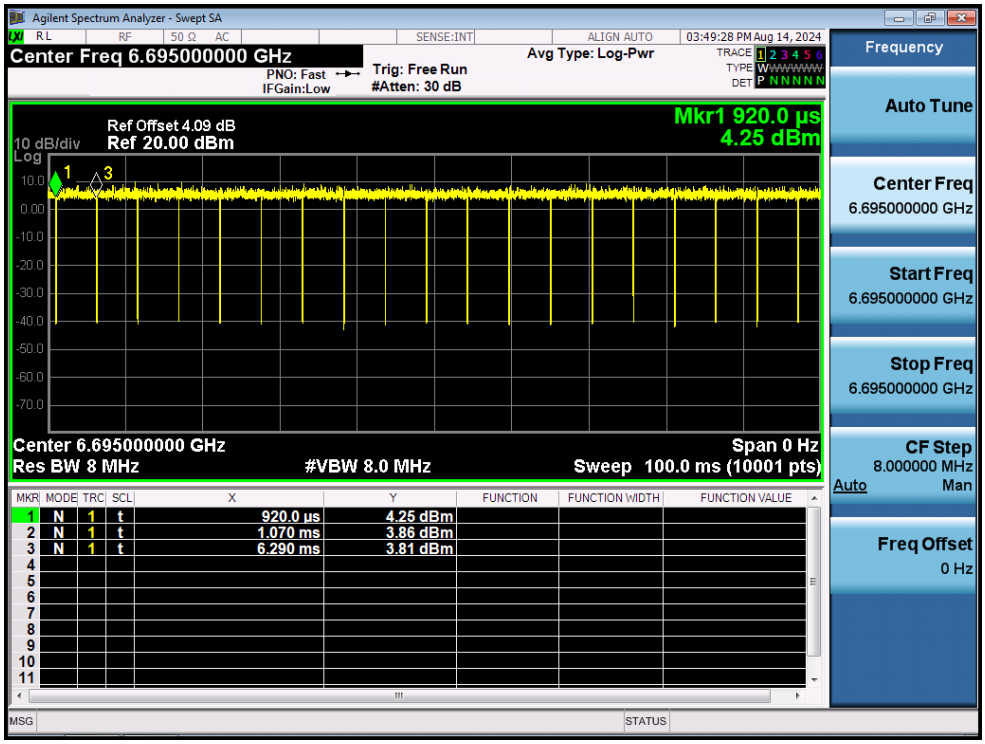
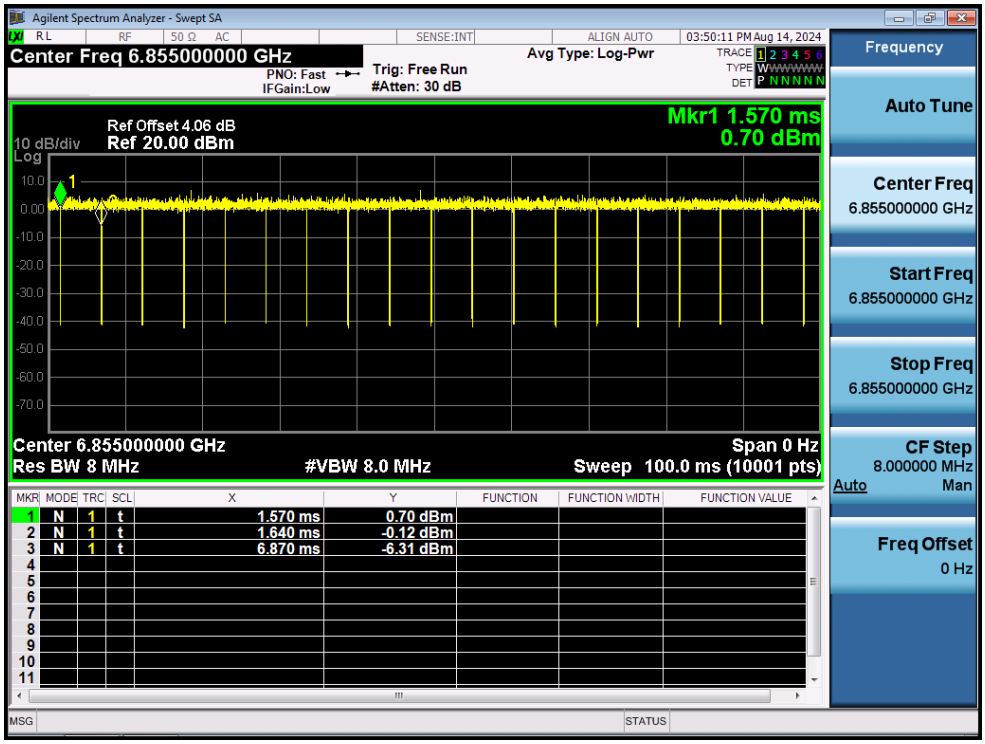


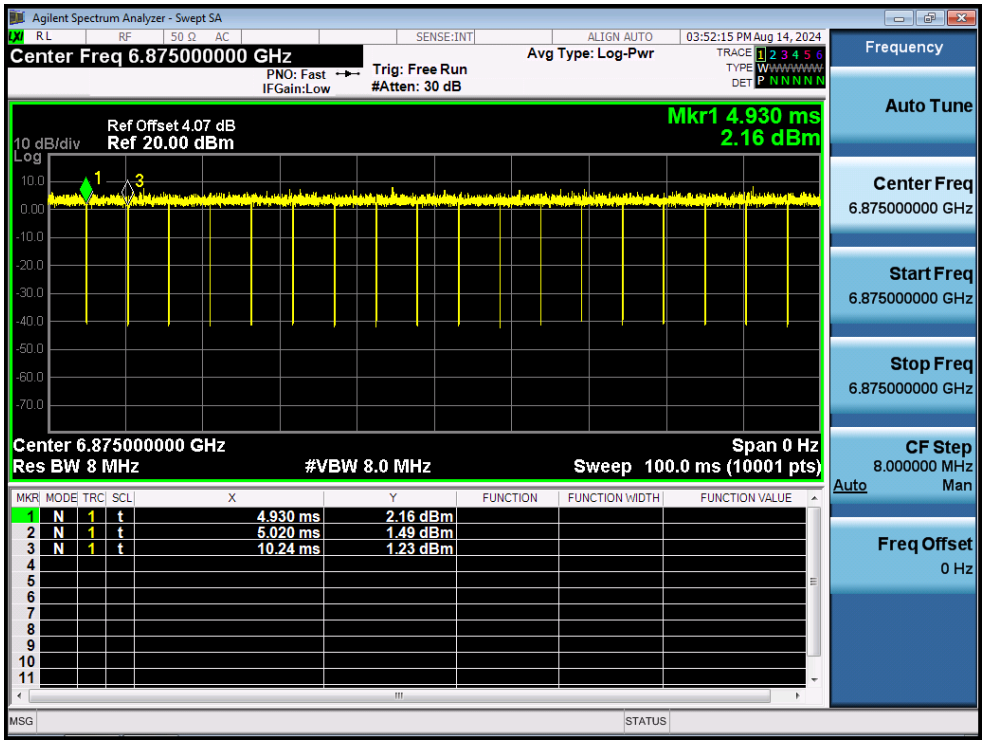
Duty Cycle NVNT ax20 6695MHz Ant1



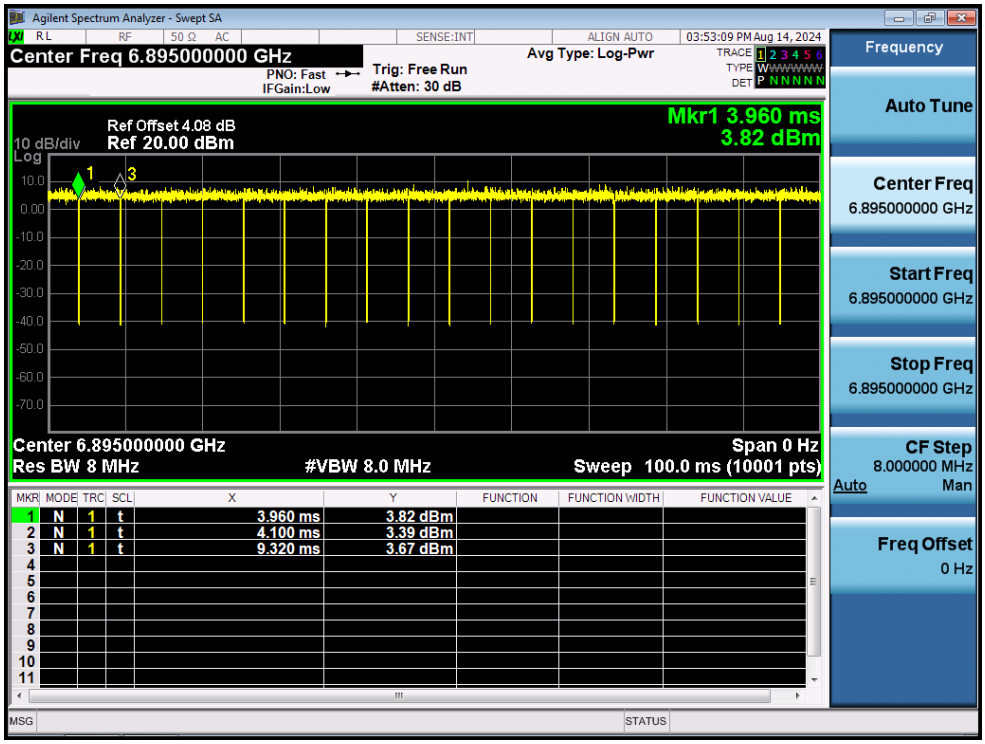
Duty Cycle NVNT ax20 6855MHz Ant1



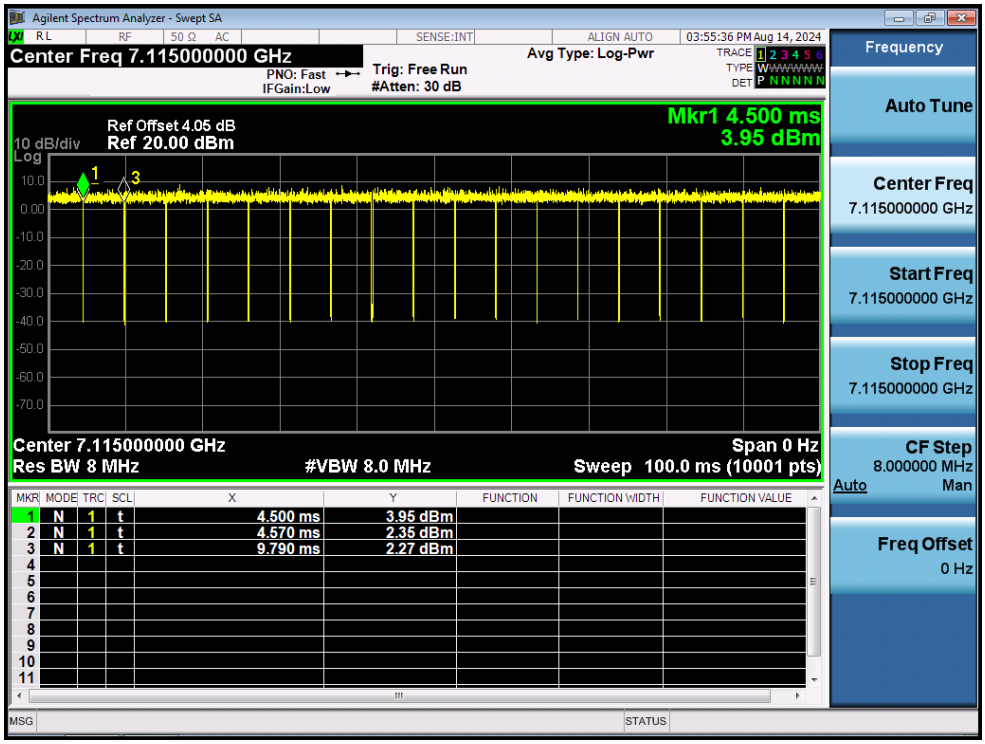
Duty Cycle NVNT ax20 6875MHz Ant1



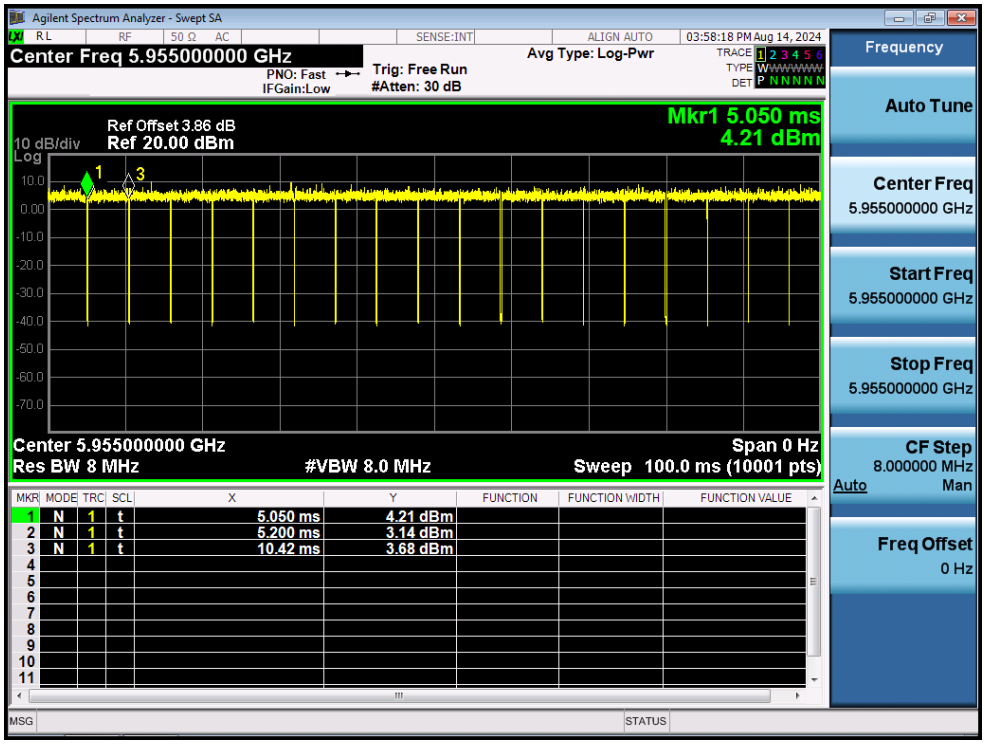
Duty Cycle NVNT ax20 6895MHz Ant1



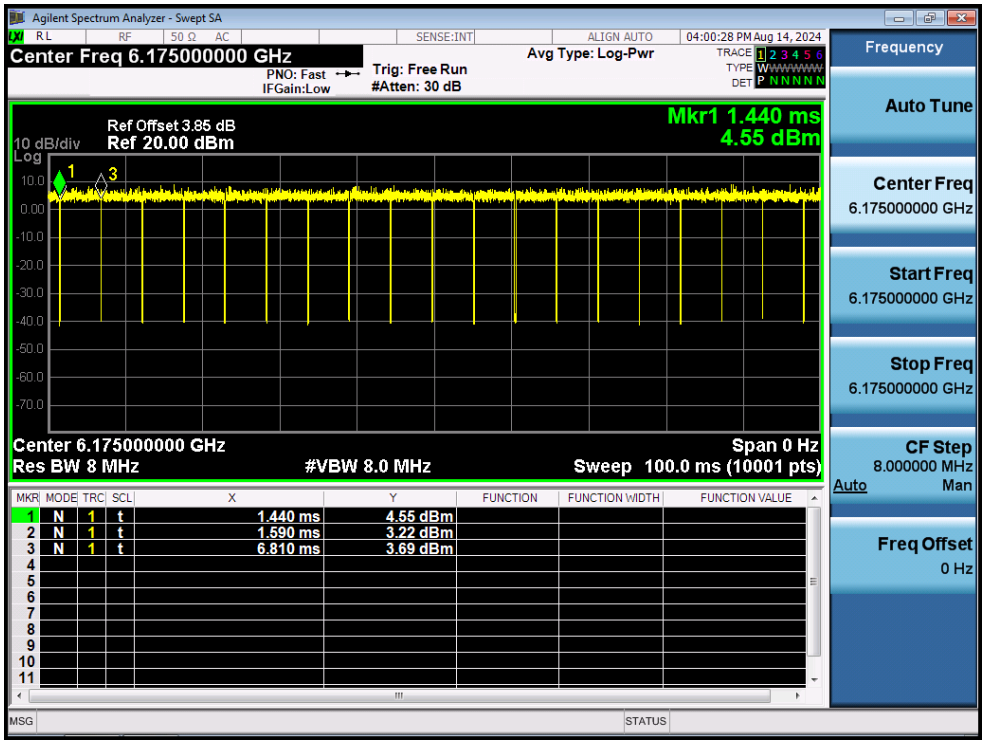
Duty Cycle NVNT ax20 7115MHz Ant1



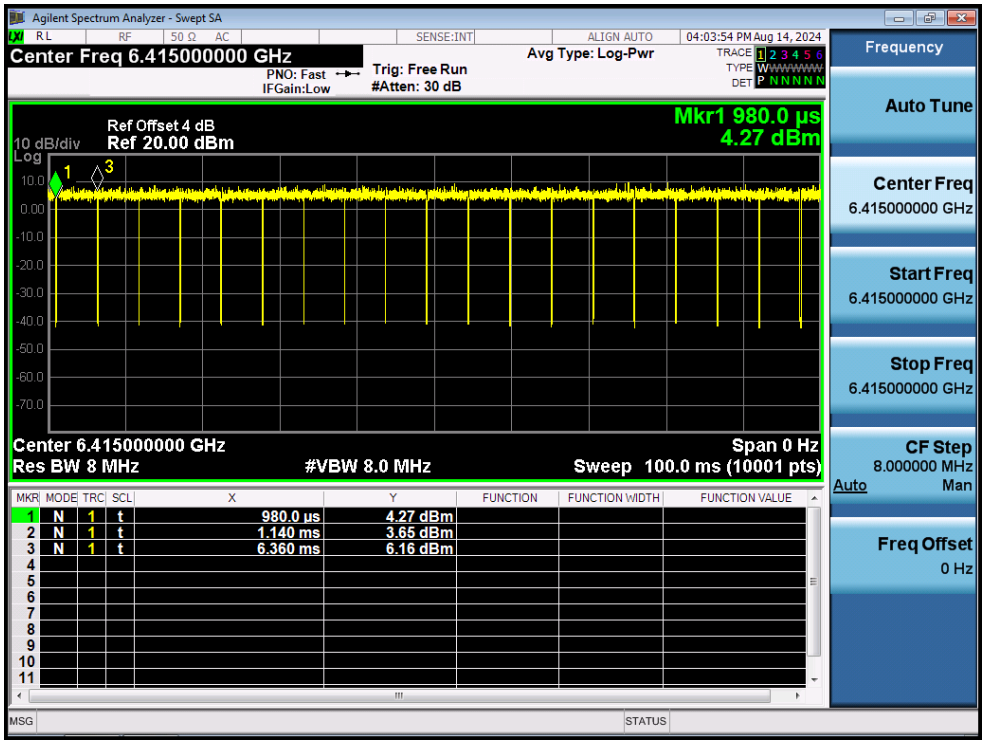
Duty Cycle NVNT ax20 5955MHz Ant2



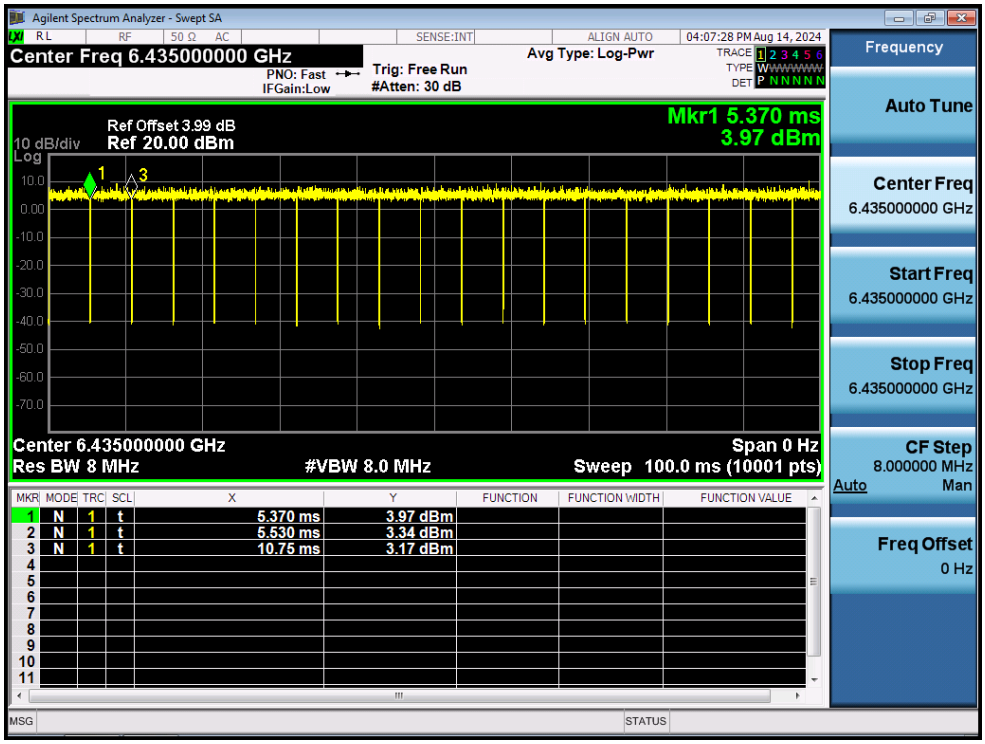
Duty Cycle NVNT ax20 6175MHz Ant2



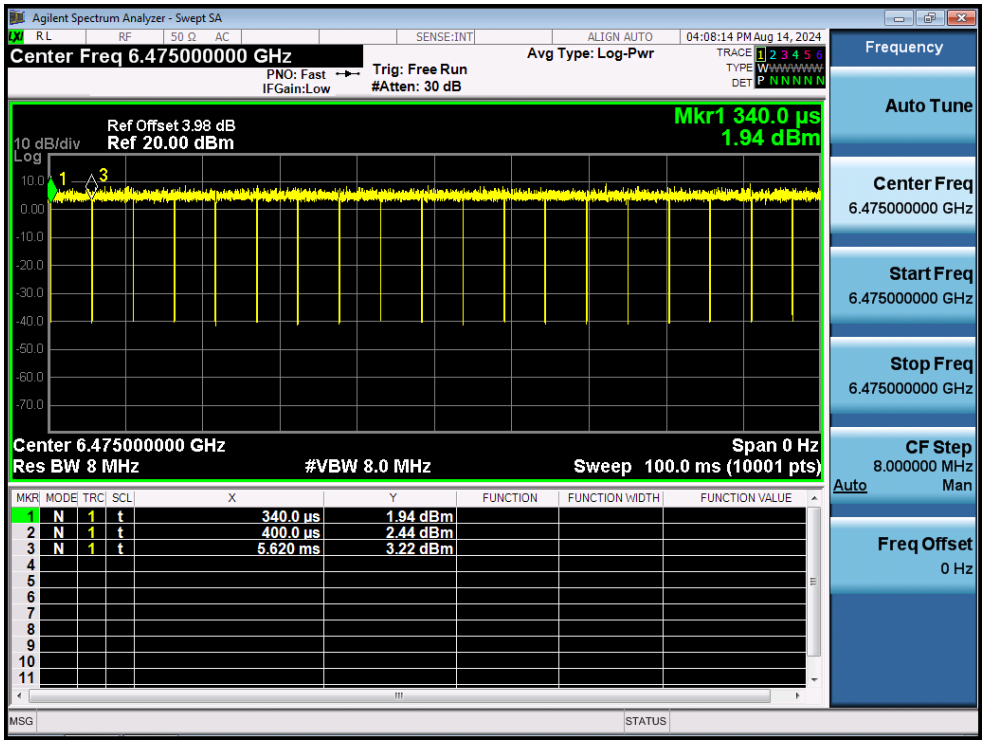
Duty Cycle NVNT ax20 6415MHz Ant2



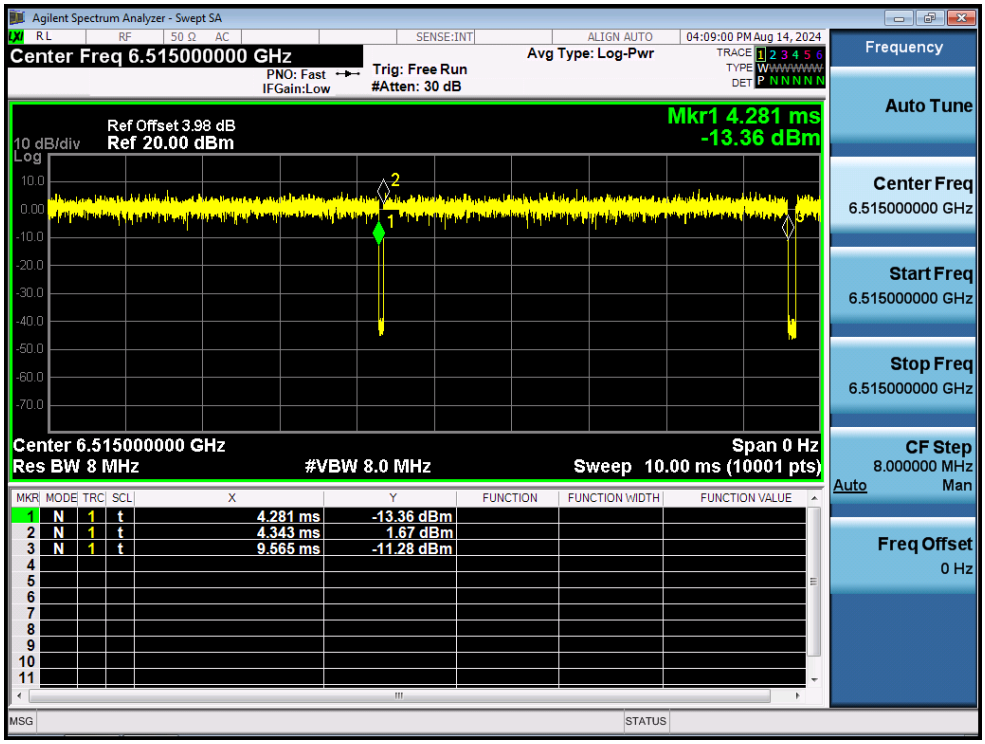
Duty Cycle NVNT ax20 6435MHz Ant2



Duty Cycle NVNT ax20 6475MHz Ant2



Duty Cycle NVNT ax20 6515MHz Ant2



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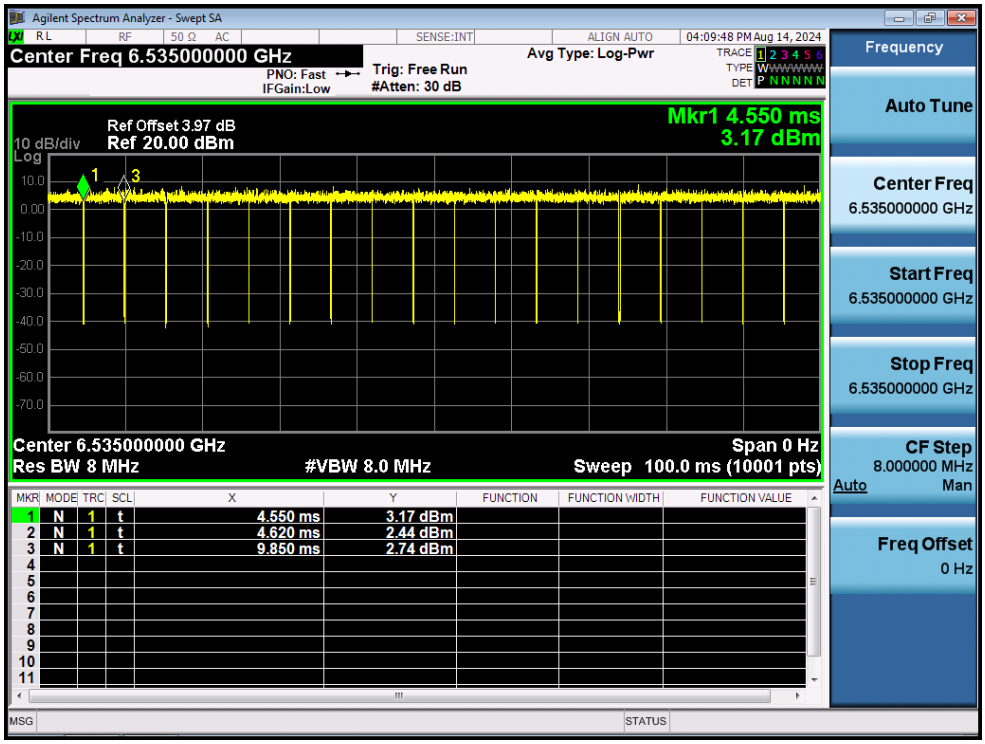
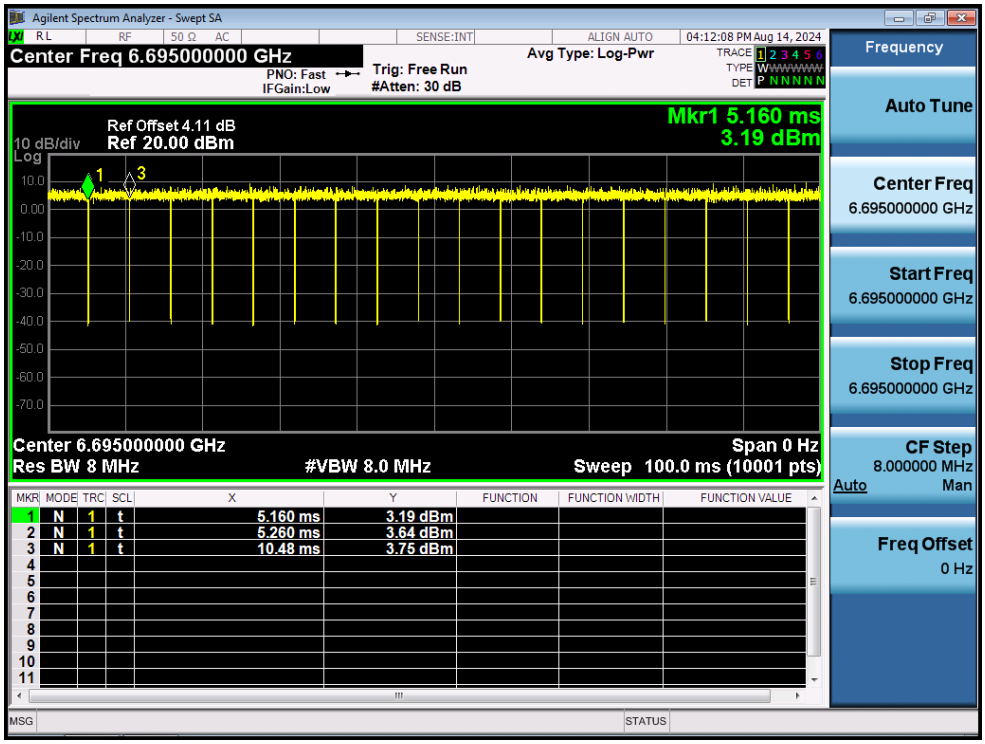
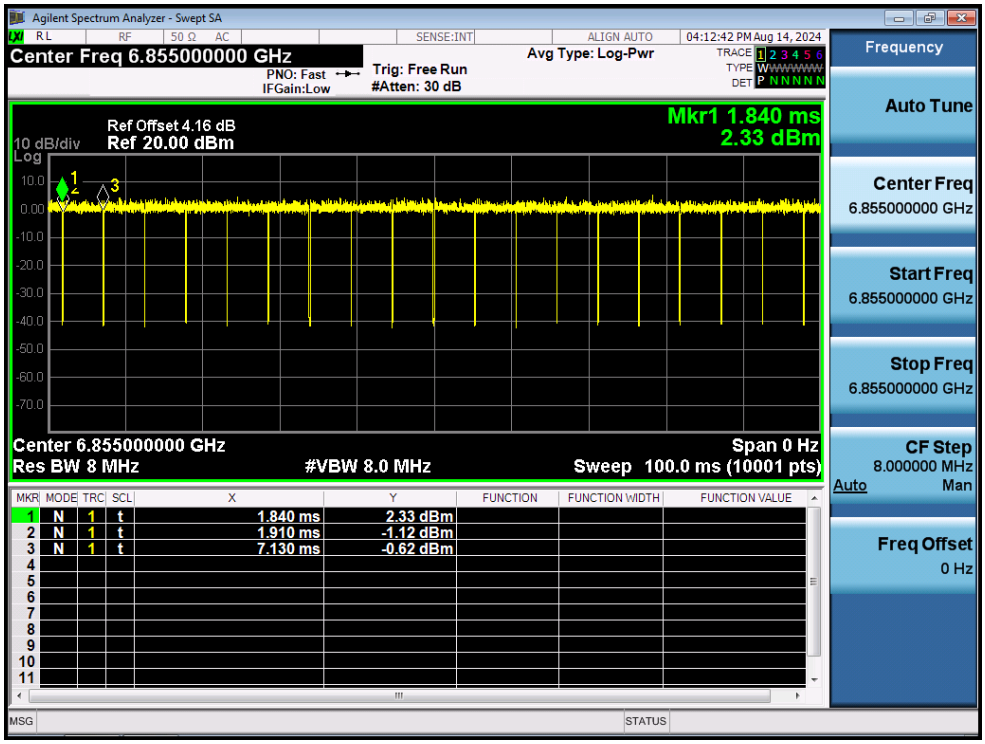


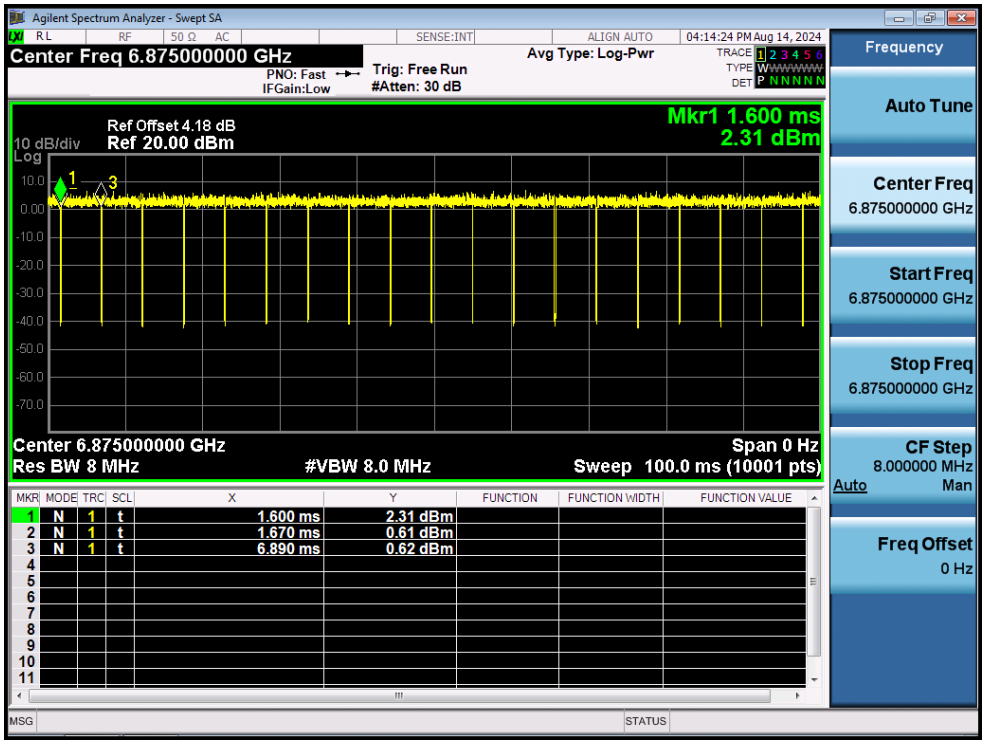
Duty Cycle NVNT ax20 6695MHz Ant2



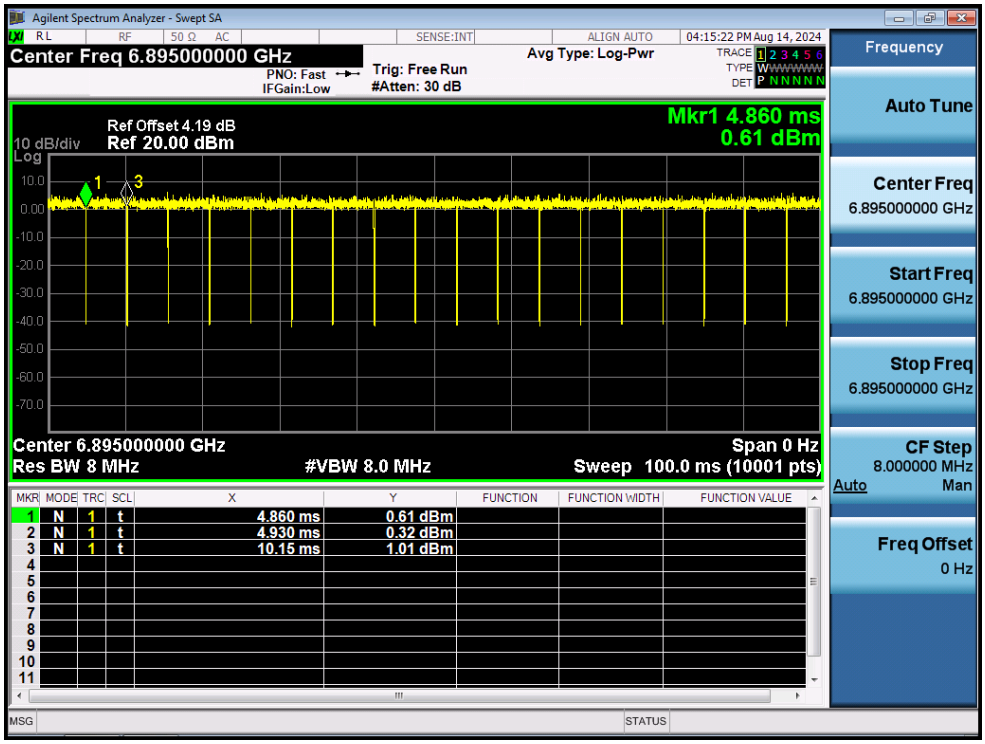
Duty Cycle NVNT ax20 6855MHz Ant2



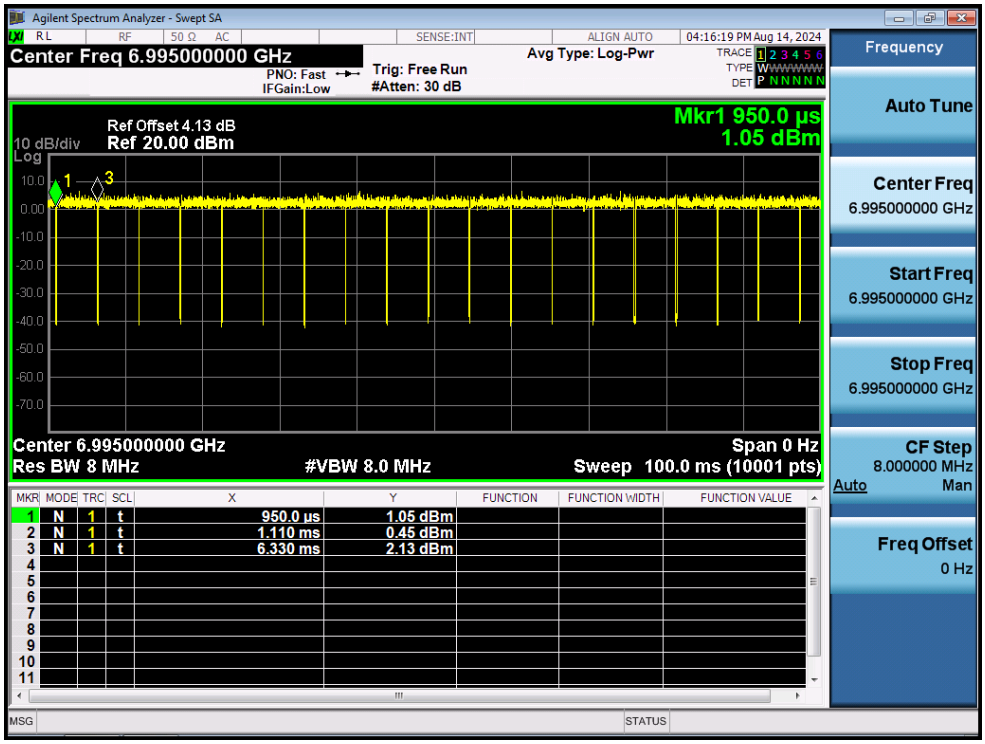
Duty Cycle NVNT ax20 6875MHz Ant2



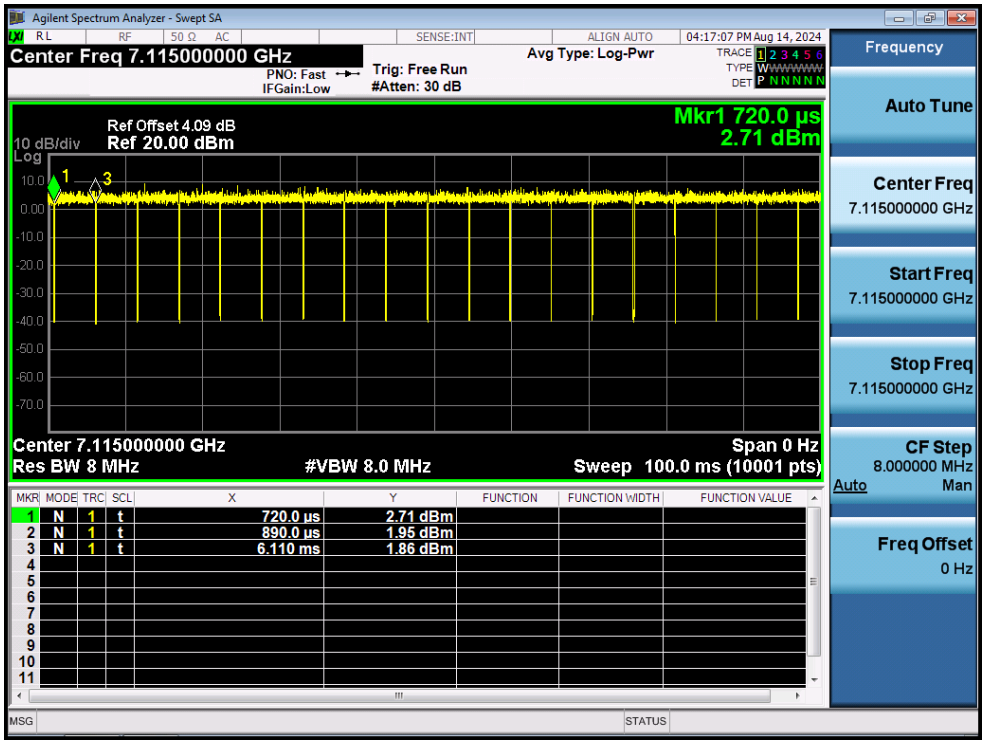
Duty Cycle NVNT ax20 6895MHz Ant2



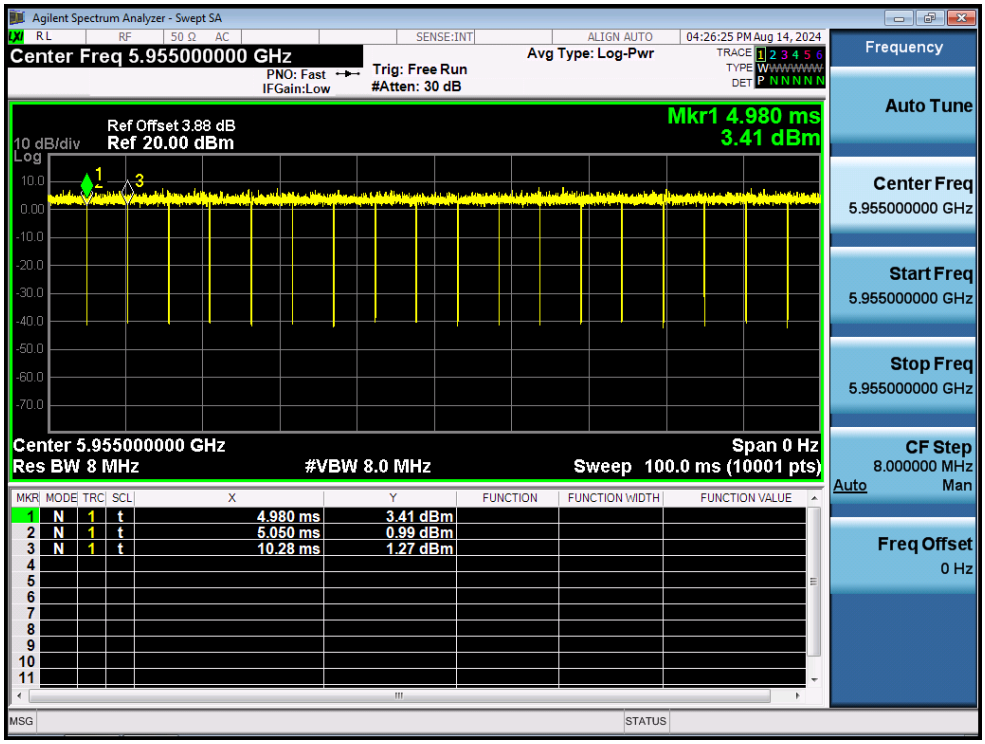
Duty Cycle NVNT ax20 6995MHz Ant2



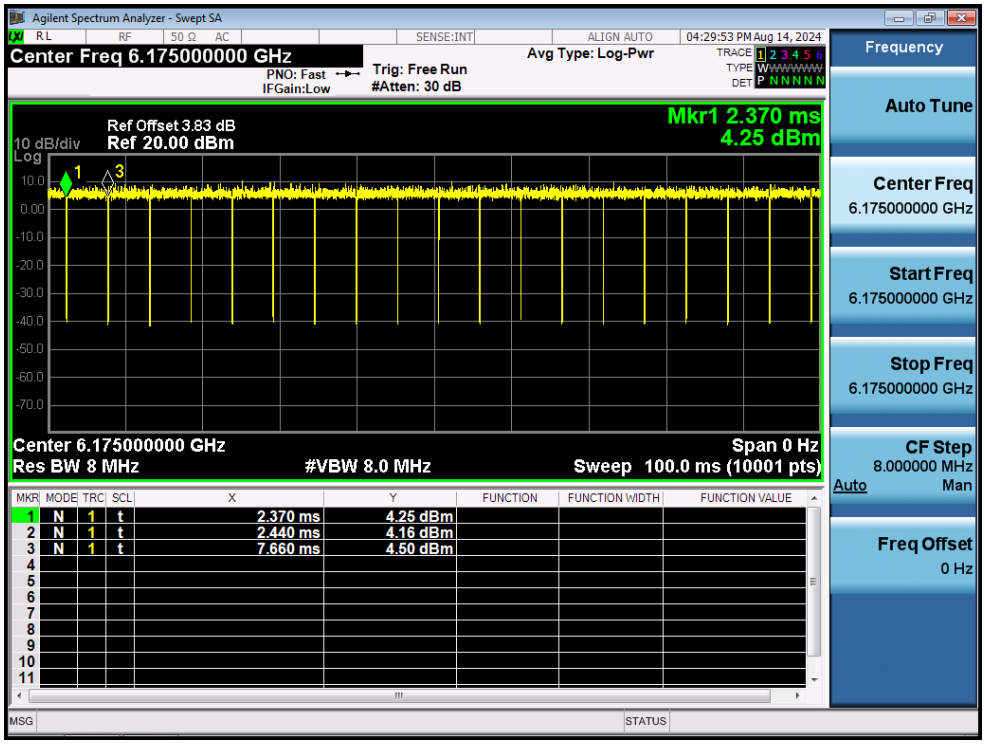
Duty Cycle NVNT ax20 7115MHz Ant2



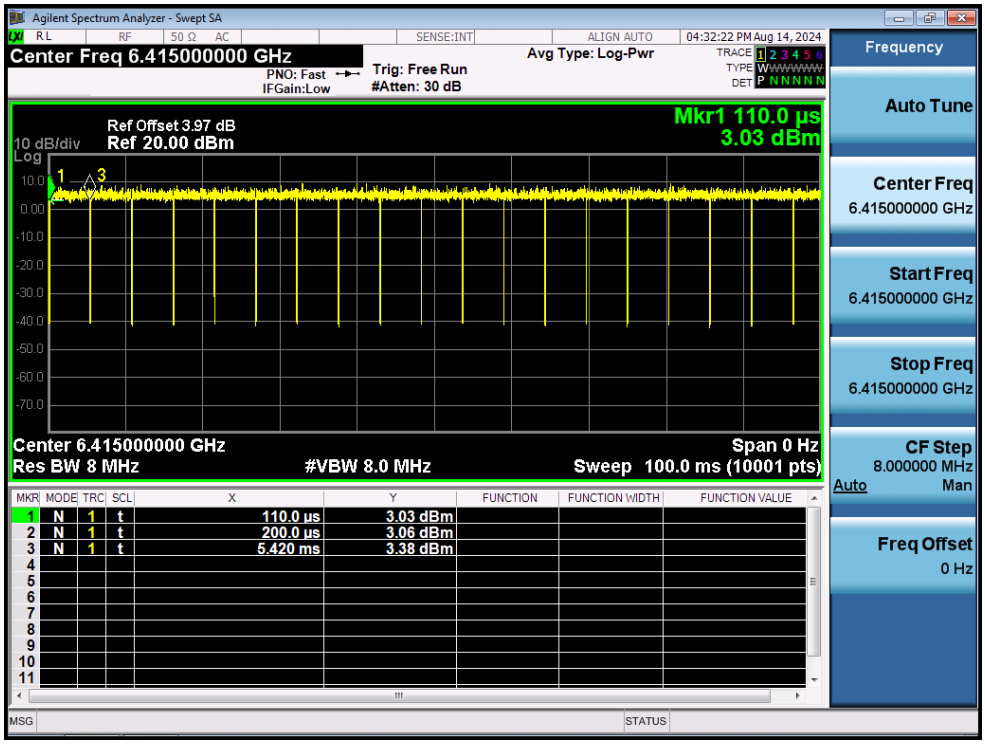
Duty Cycle NVNT ax20 5955MHz Ant3



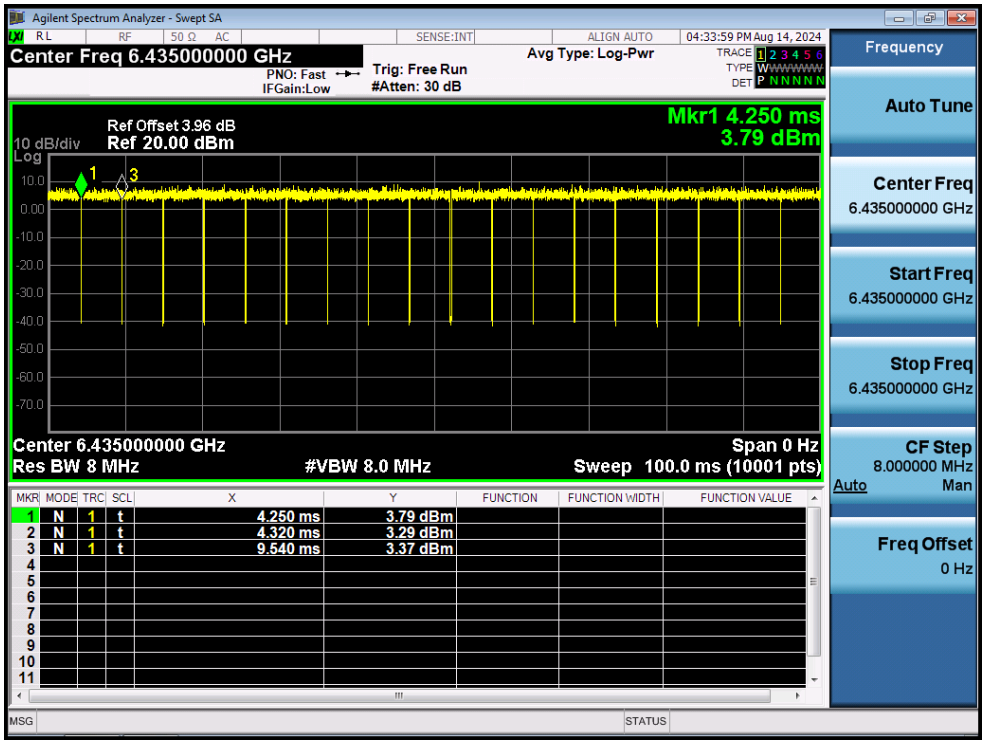
Duty Cycle NVNT ax20 6175MHz Ant3



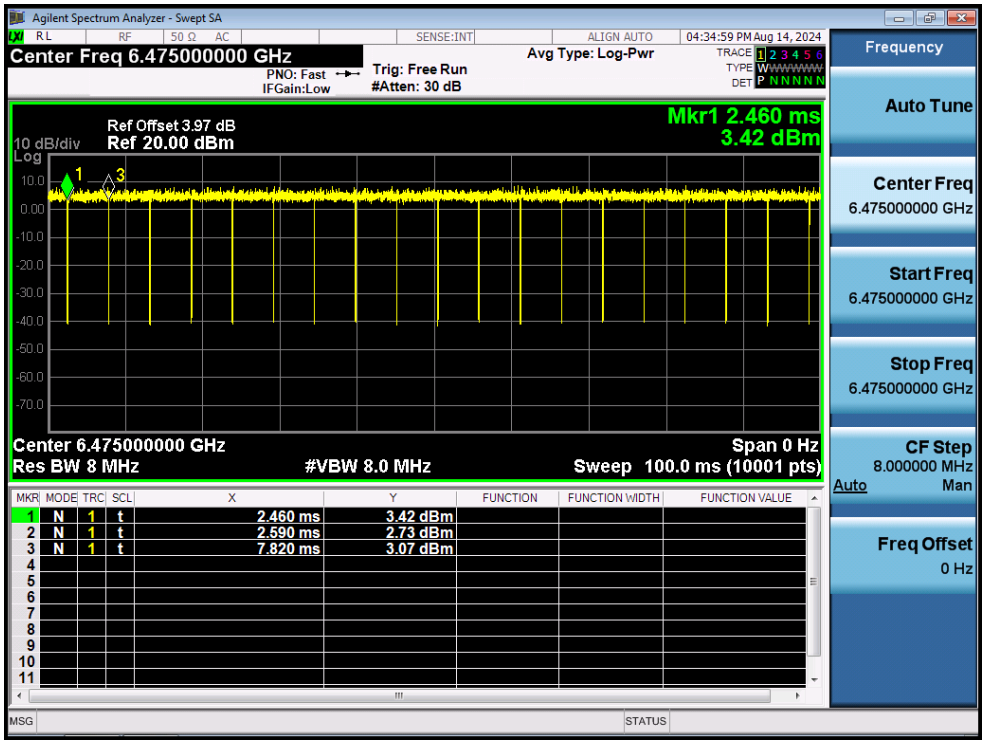
Duty Cycle NVNT ax20 6415MHz Ant3



Duty Cycle NVNT ax20 6435MHz Ant3



Duty Cycle NVNT ax20 6475MHz Ant3



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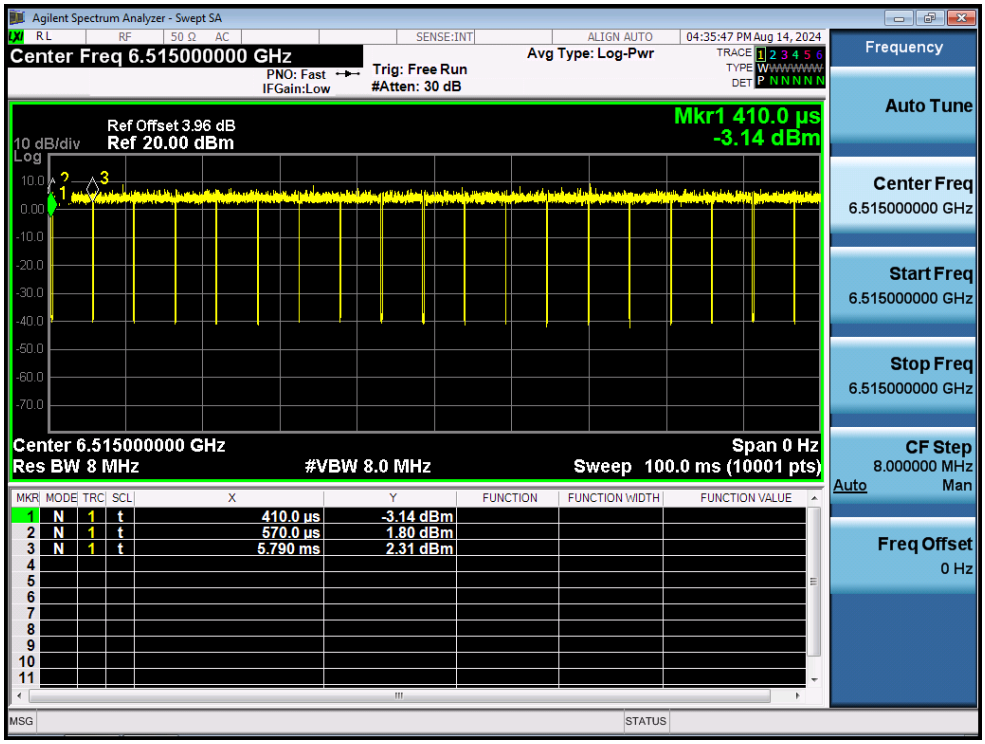
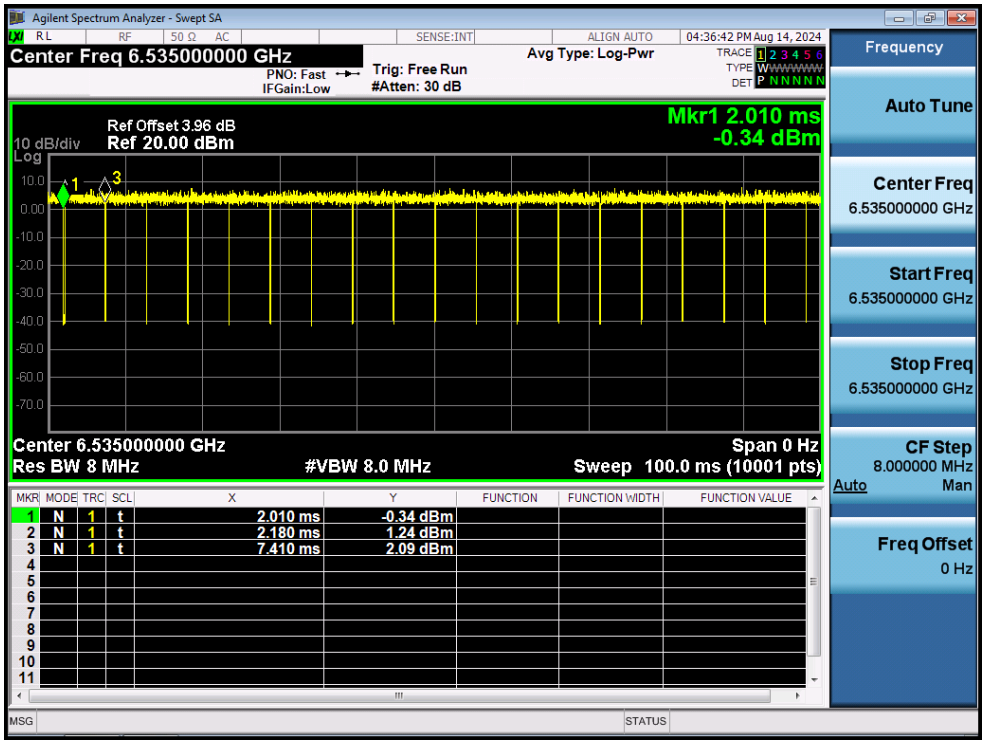
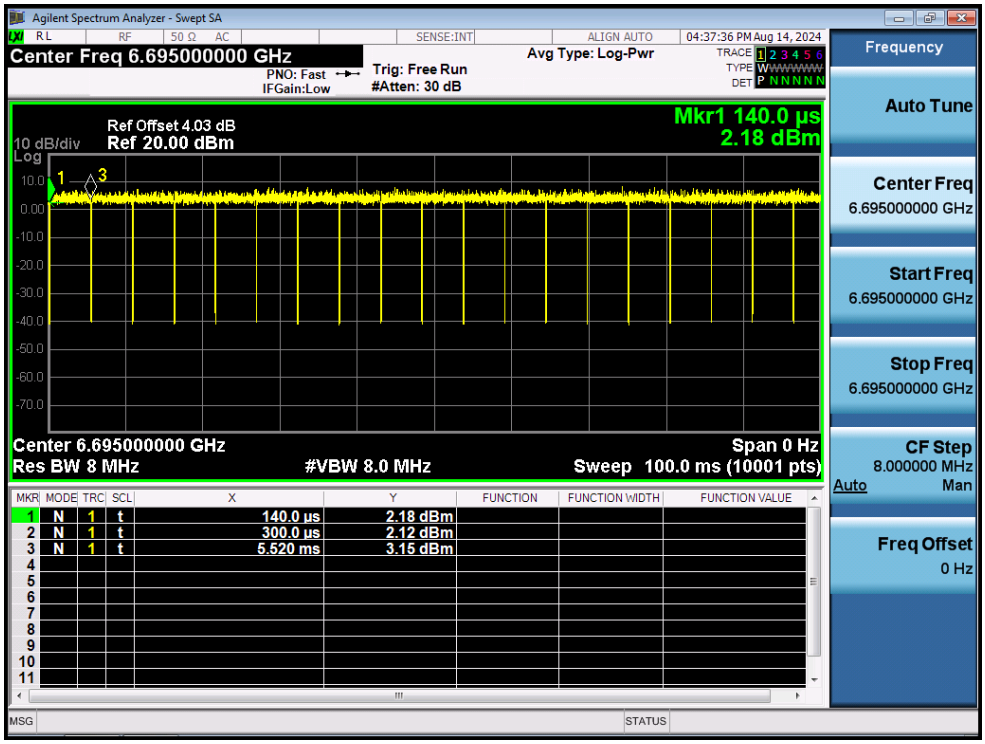


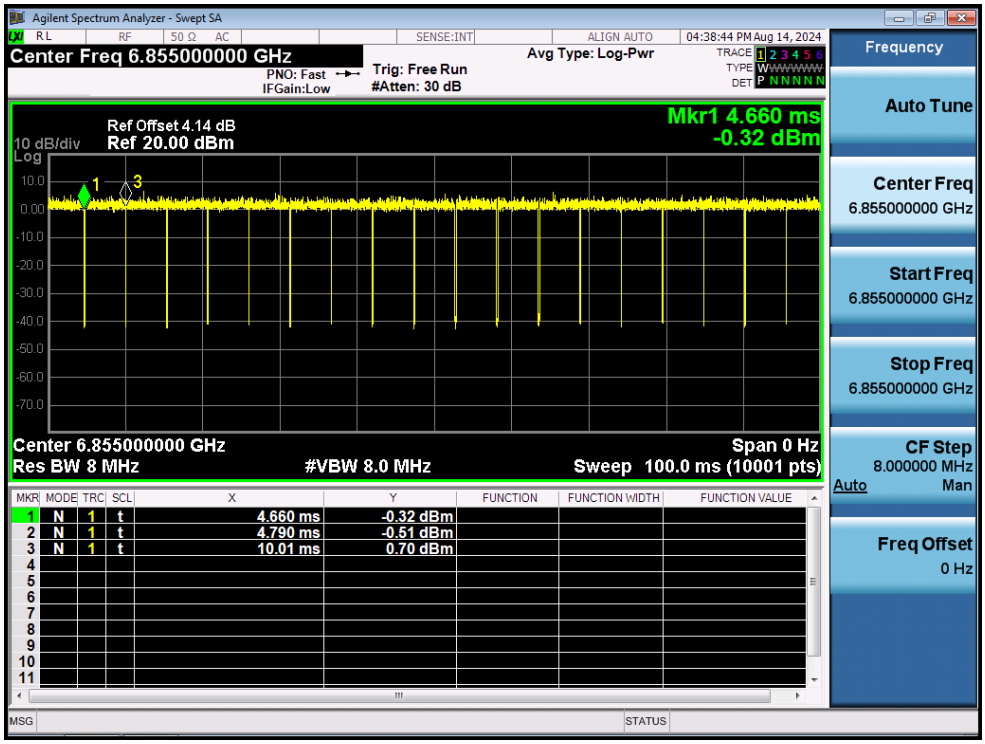
Duty Cycle NVNT ax20 6535MHz Ant3



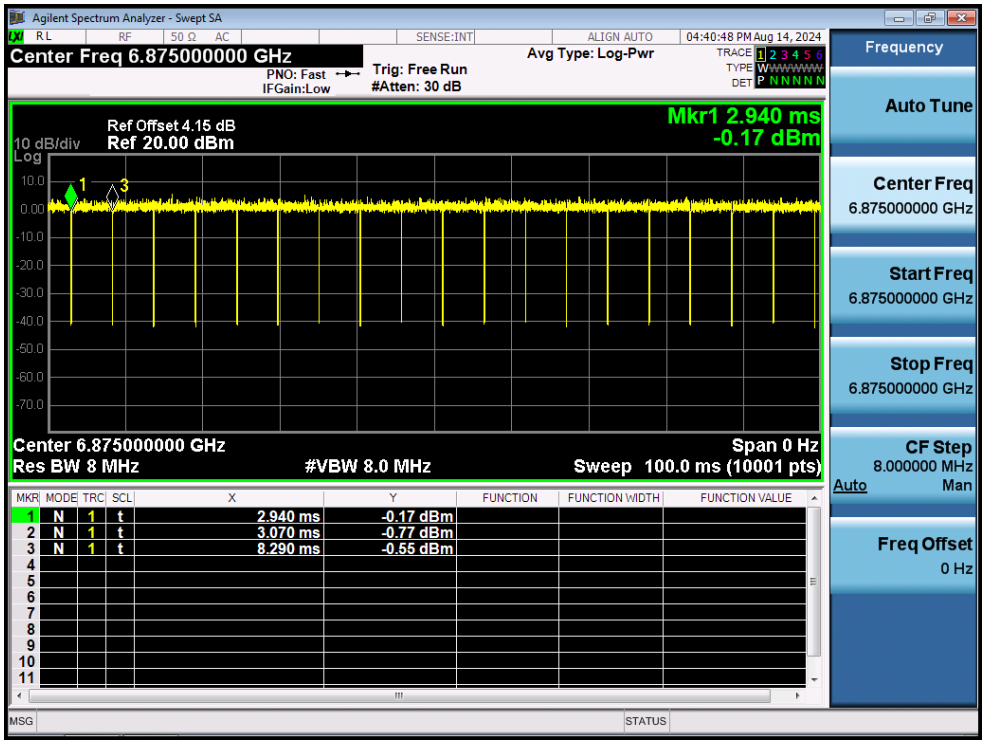
Duty Cycle NVNT ax20 6695MHz Ant3



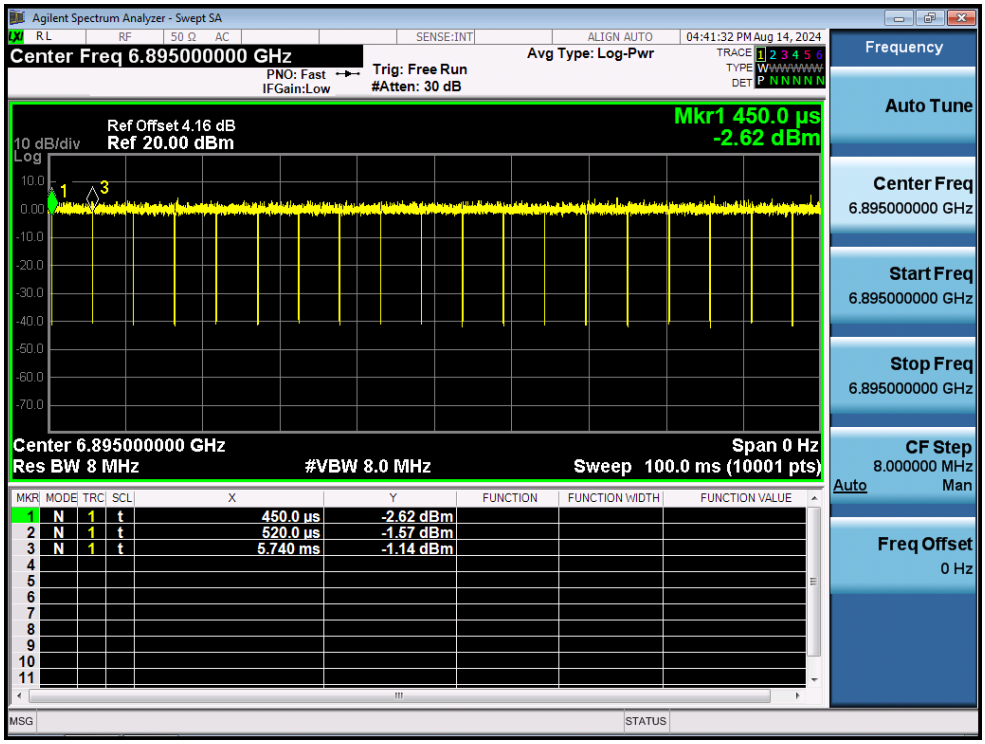
Duty Cycle NVNT ax20 6855MHz Ant3



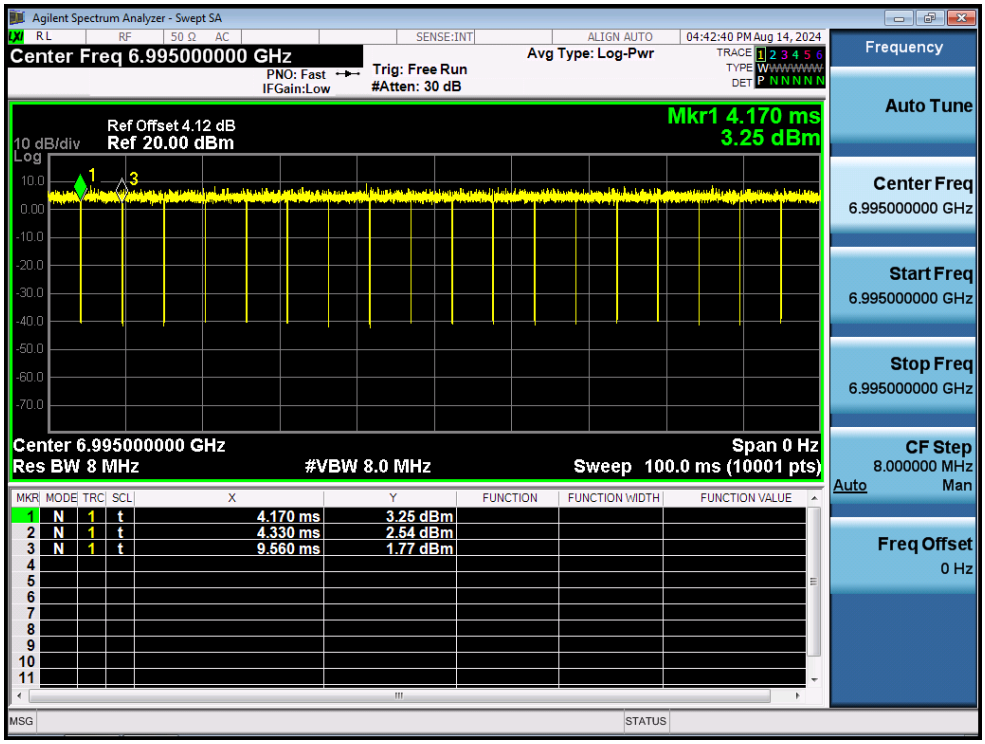
Duty Cycle NVNT ax20 6875MHz Ant3



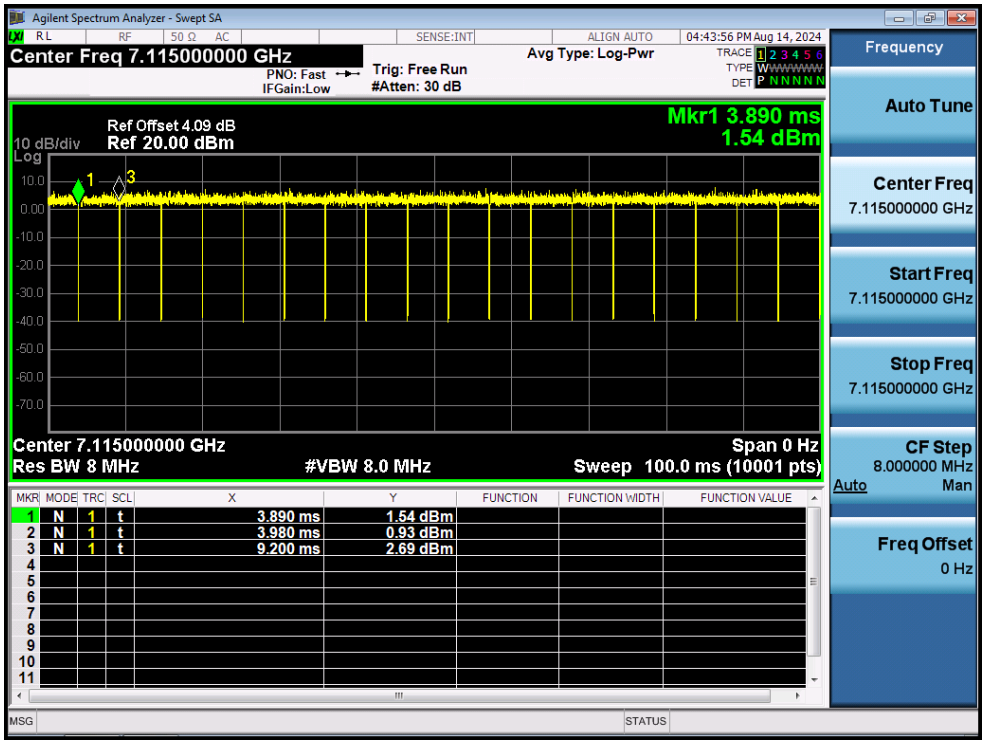
Duty Cycle NVNT ax20 6895MHz Ant3



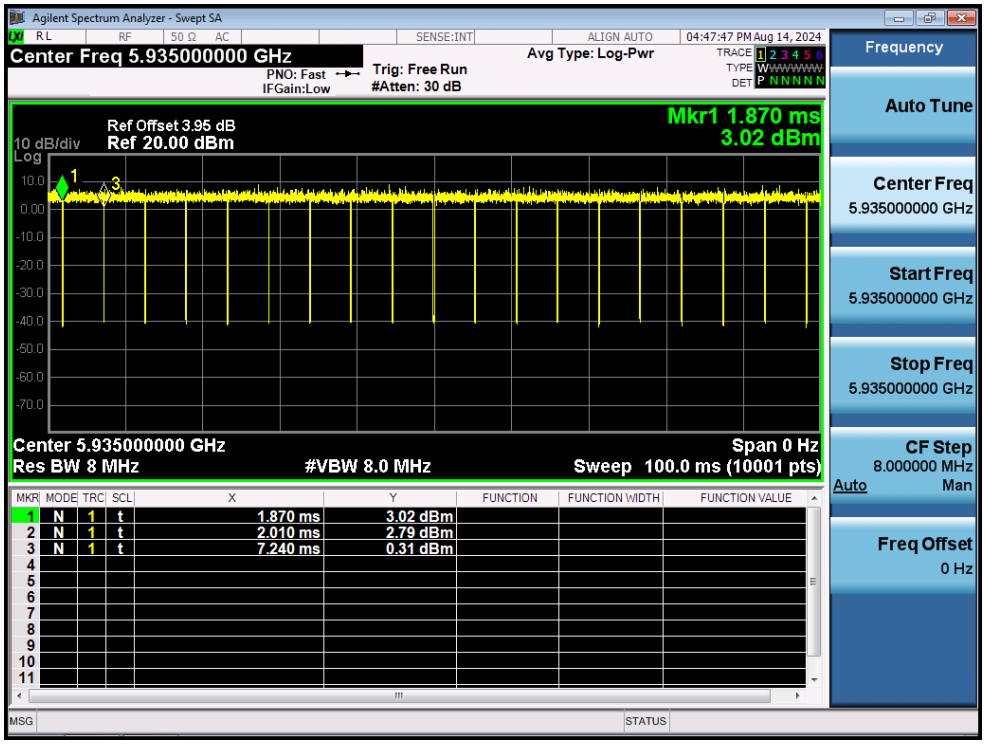
Duty Cycle NVNT ax20 6995MHz Ant3



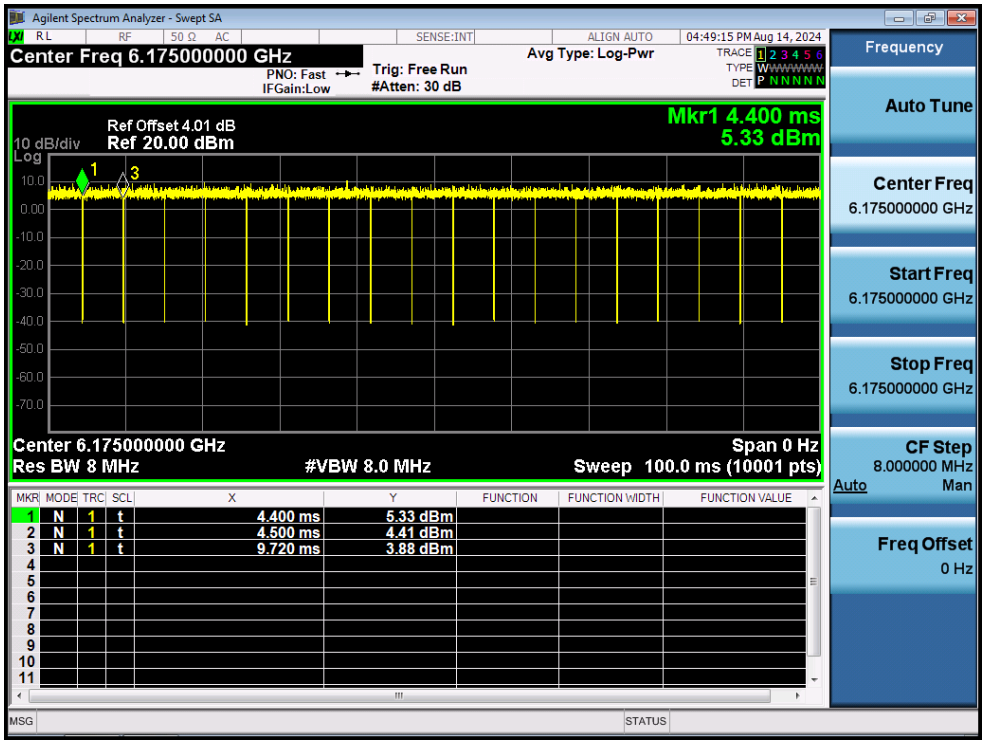
Duty Cycle NVNT ax20 7115MHz Ant3



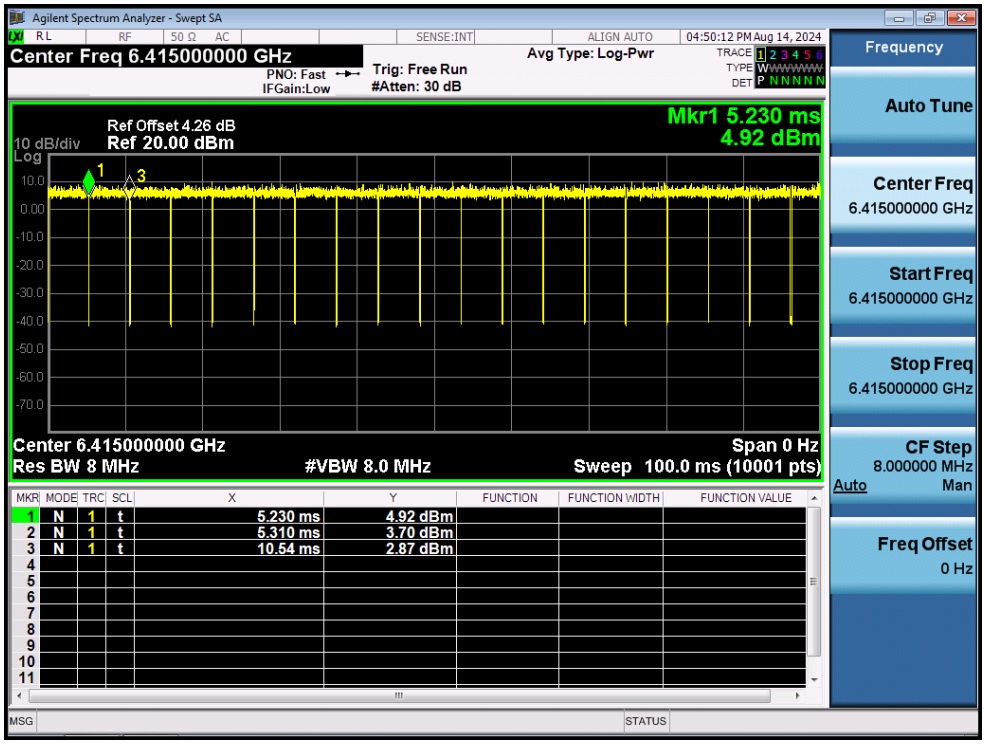
Duty Cycle NVNT ax20 5935MHz Ant4



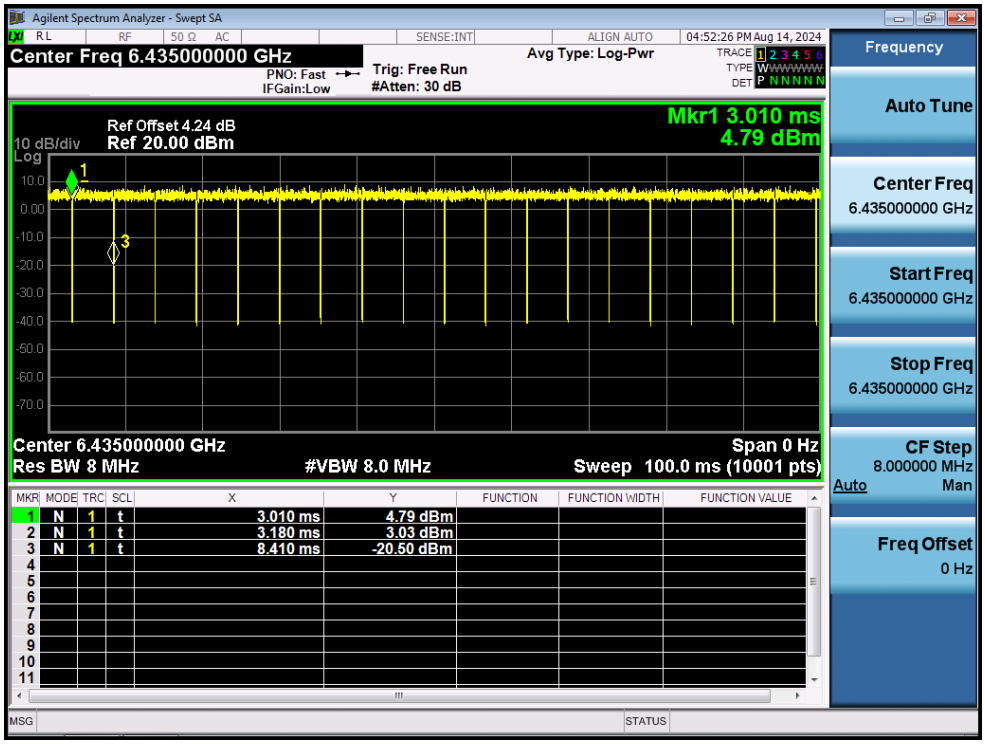
Duty Cycle NVNT ax20 6175MHz Ant4



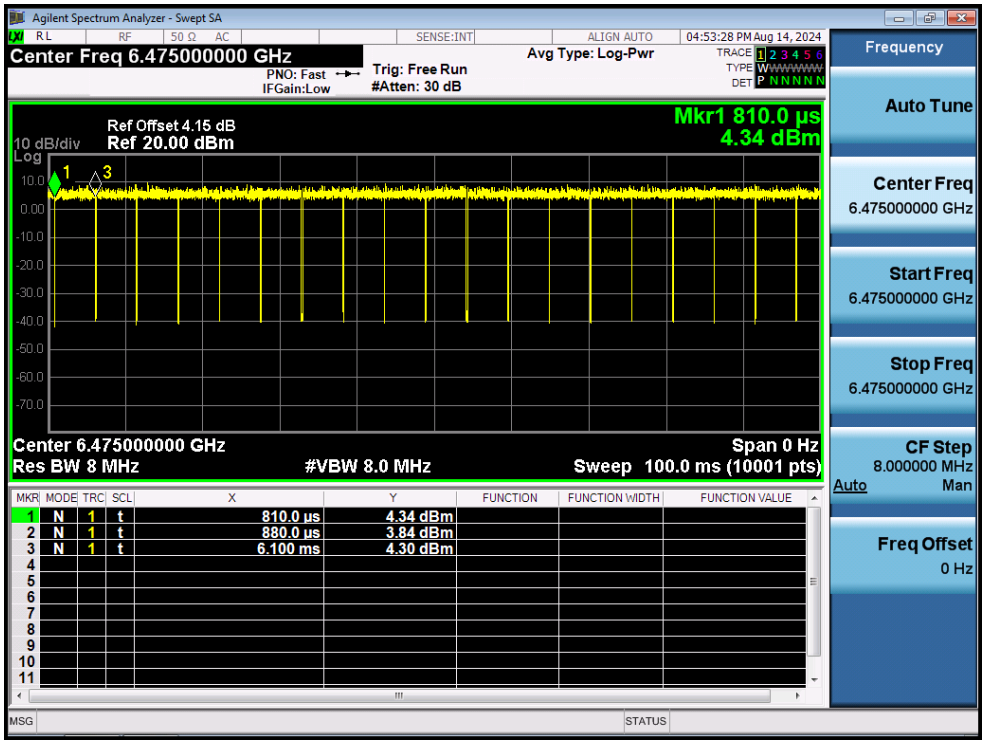
Duty Cycle NVNT ax20 6415MHz Ant4



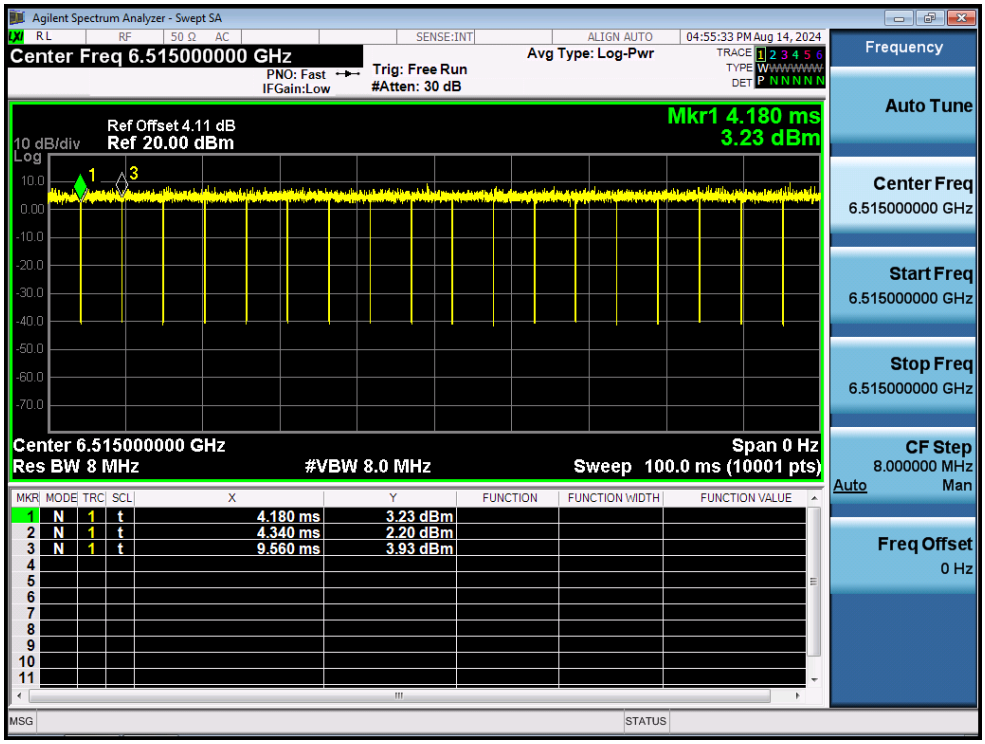
Duty Cycle NVNT ax20 6435MHz Ant4



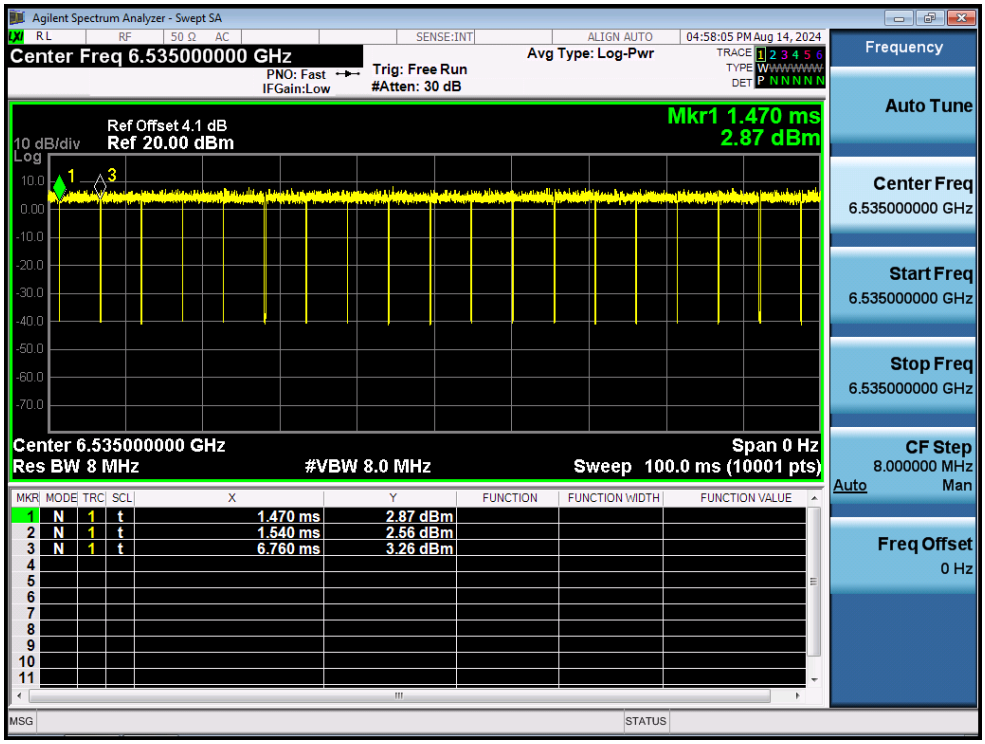
Duty Cycle NVNT ax20 6475MHz Ant4



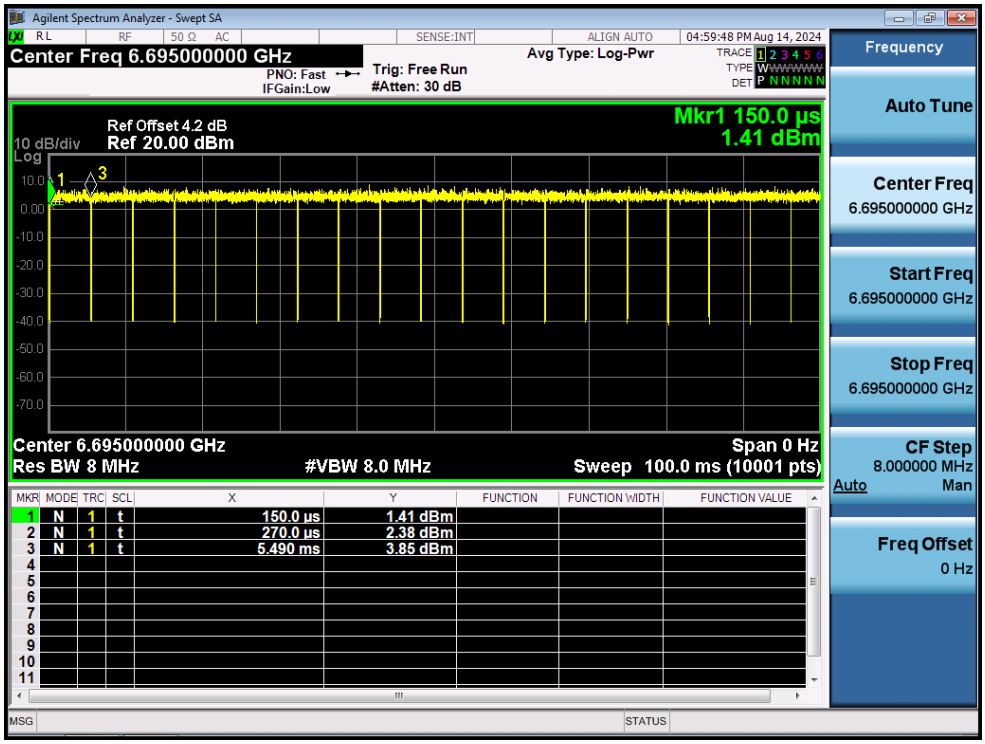
Duty Cycle NVNT ax20 6515MHz Ant4



Duty Cycle NVNT ax20 6535MHz Ant4



Duty Cycle NVNT ax20 6695MHz Ant4



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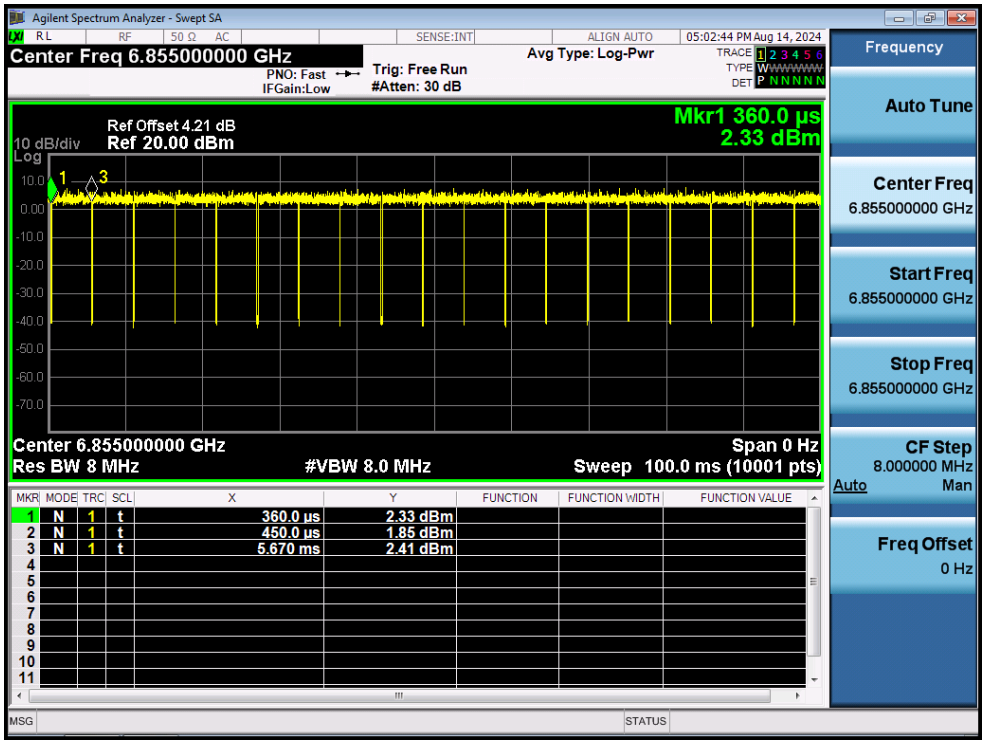
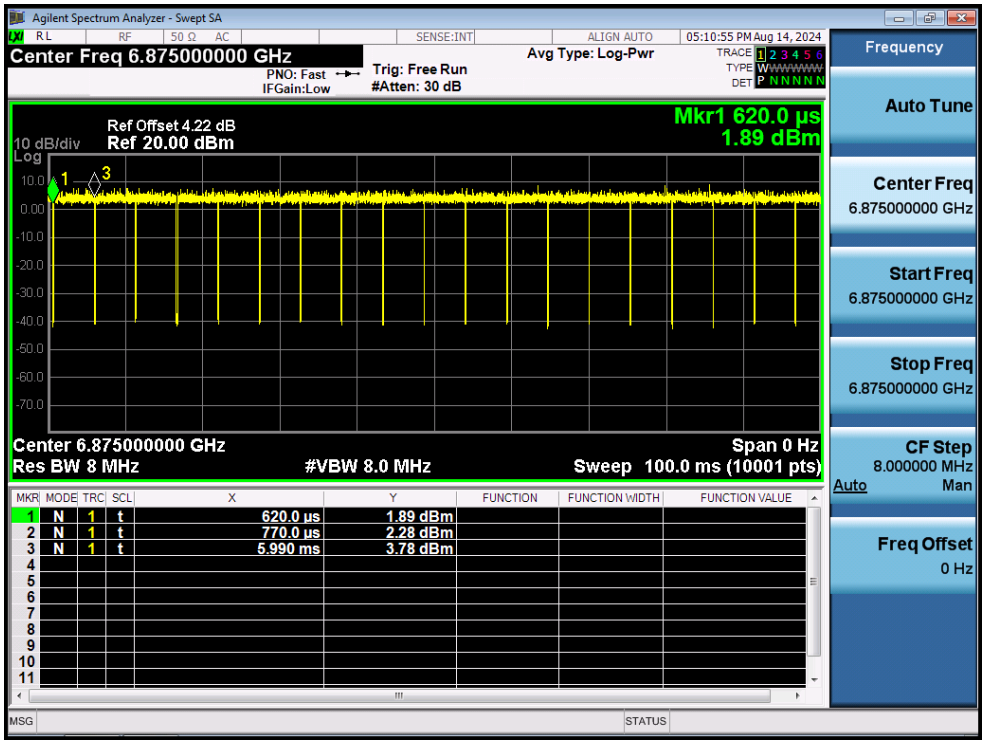


Duty Cycle NVNT ax20 6875MHz Ant4



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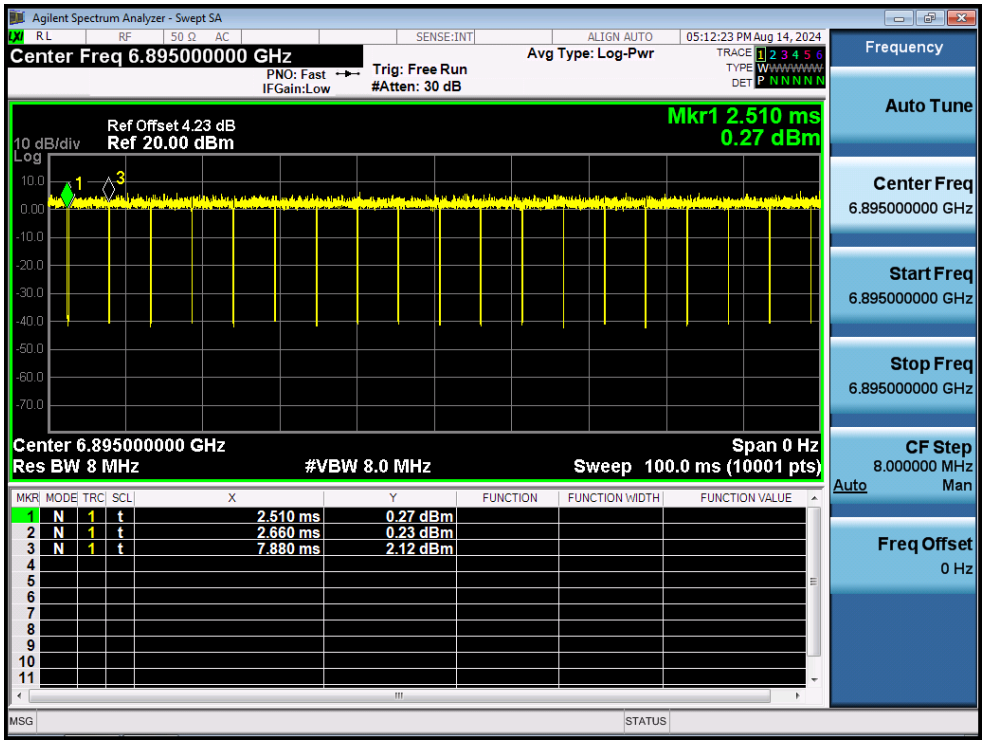
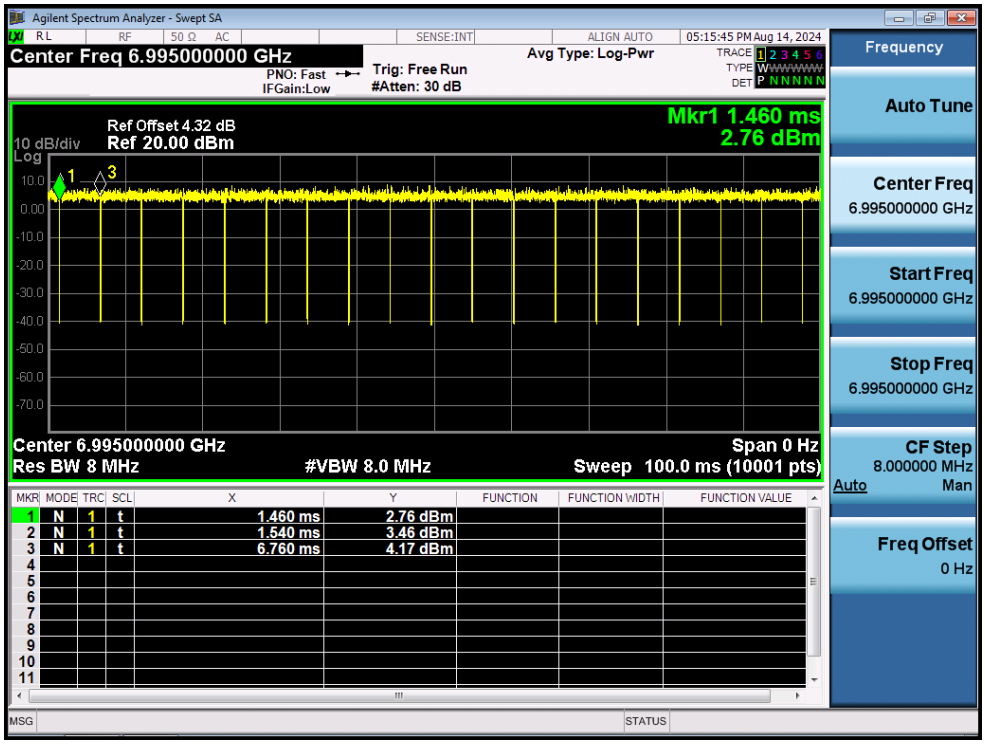
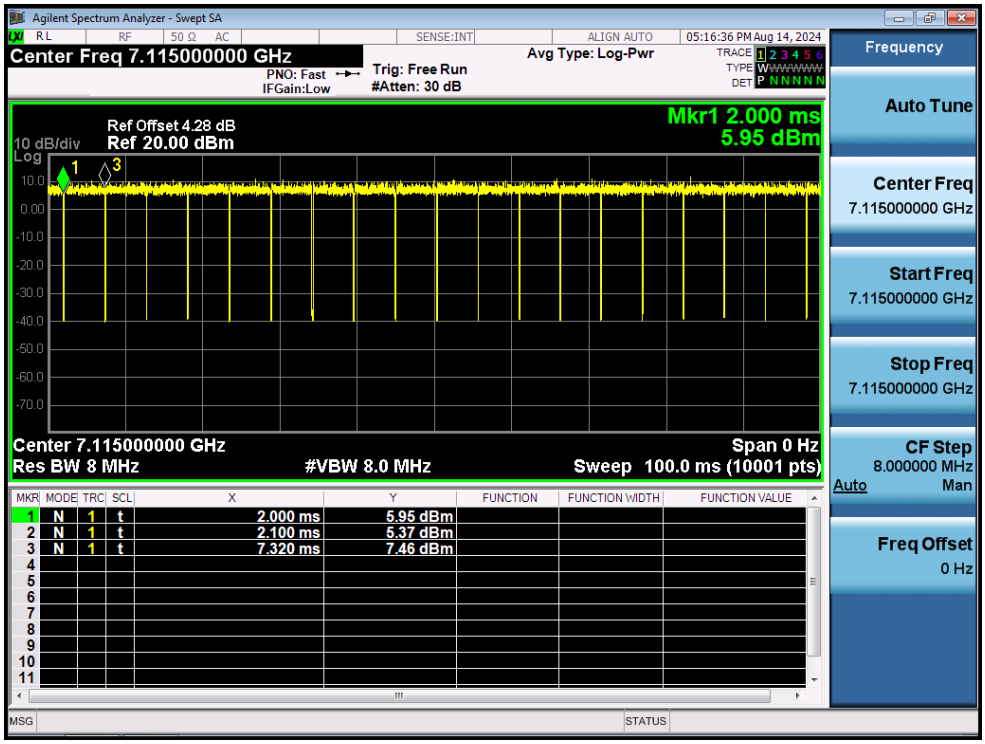


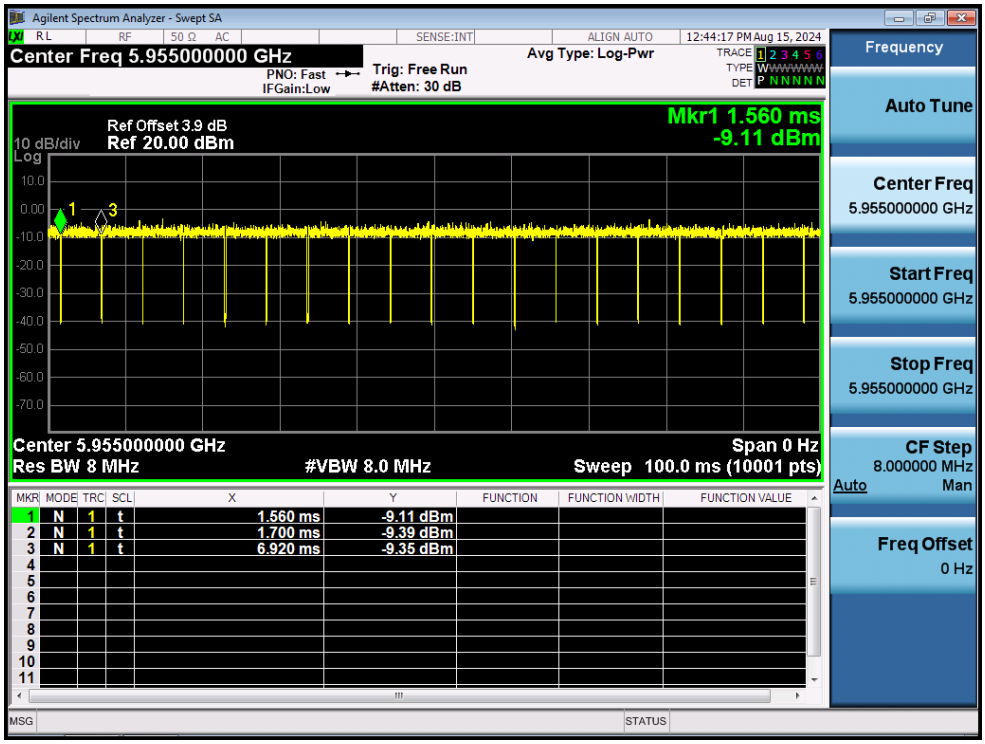
Duty Cycle NVNT ax20 6995MHz Ant4



Duty Cycle NVNT ax20 7115MHz Ant4



Duty Cycle NVNT ax20 5955MHz Sum



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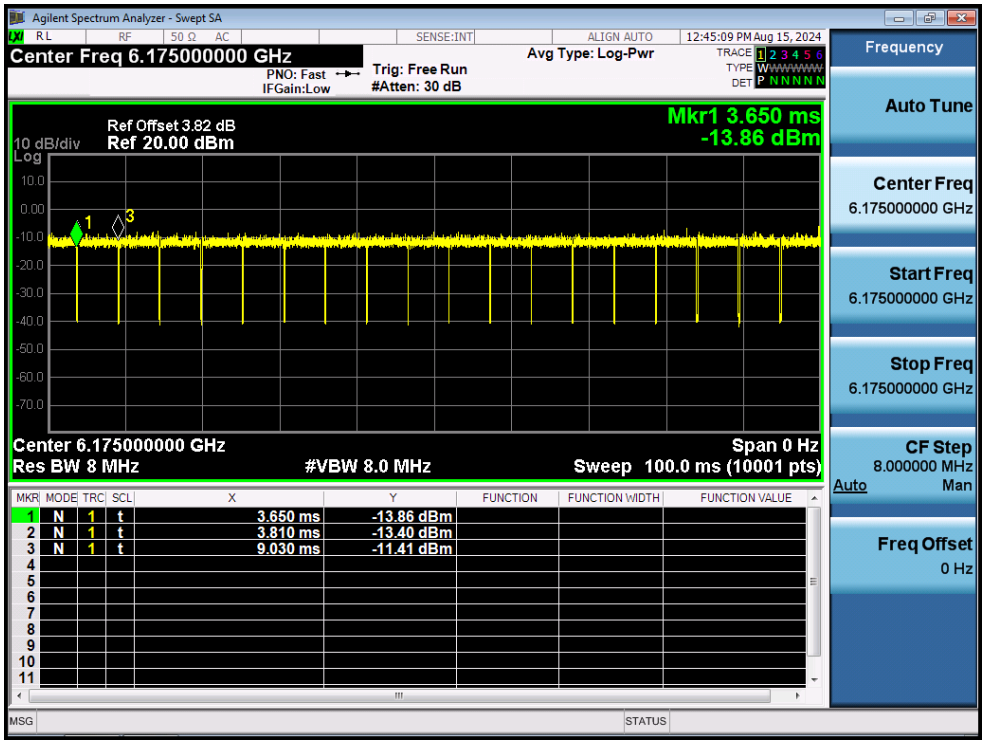
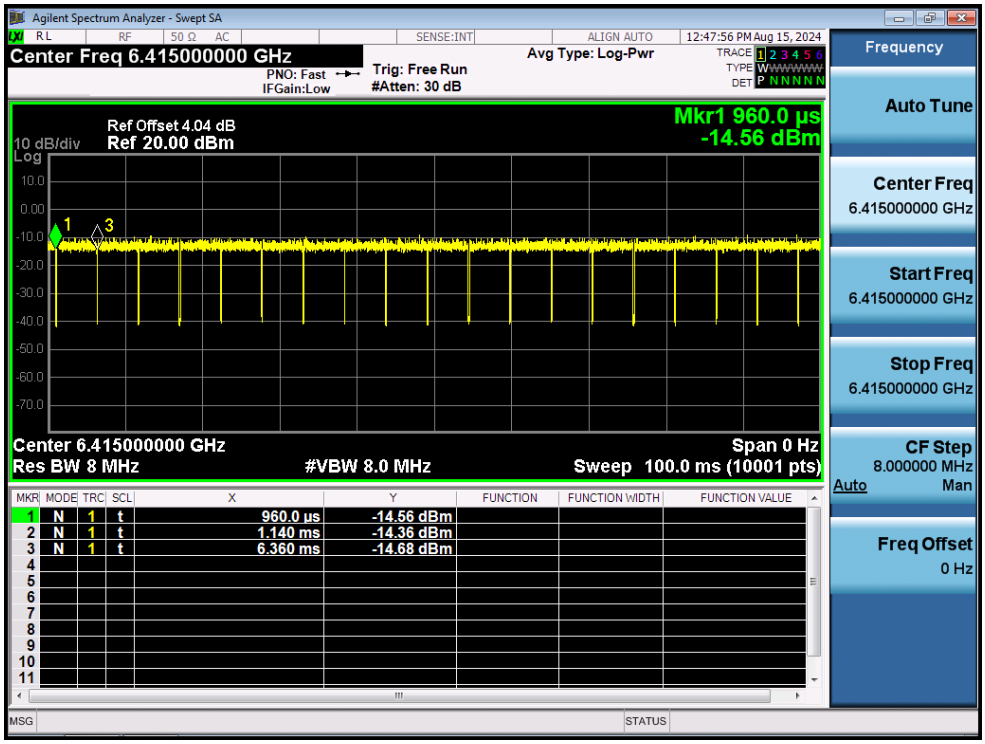


Duty Cycle NVNT ax20 6415MHz Sum



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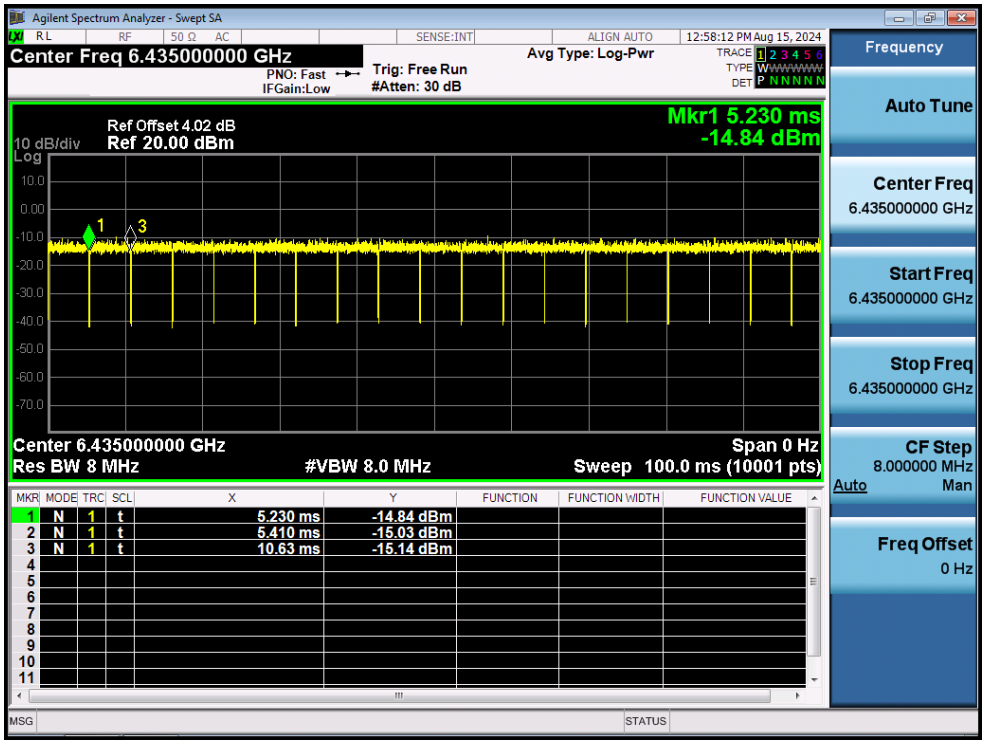

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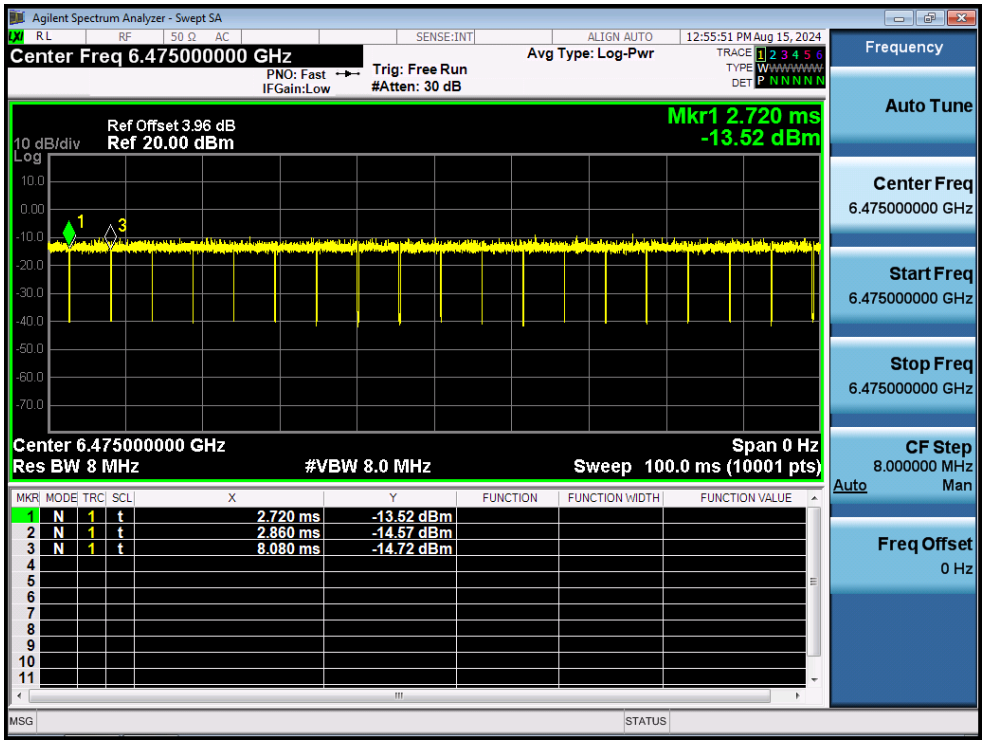

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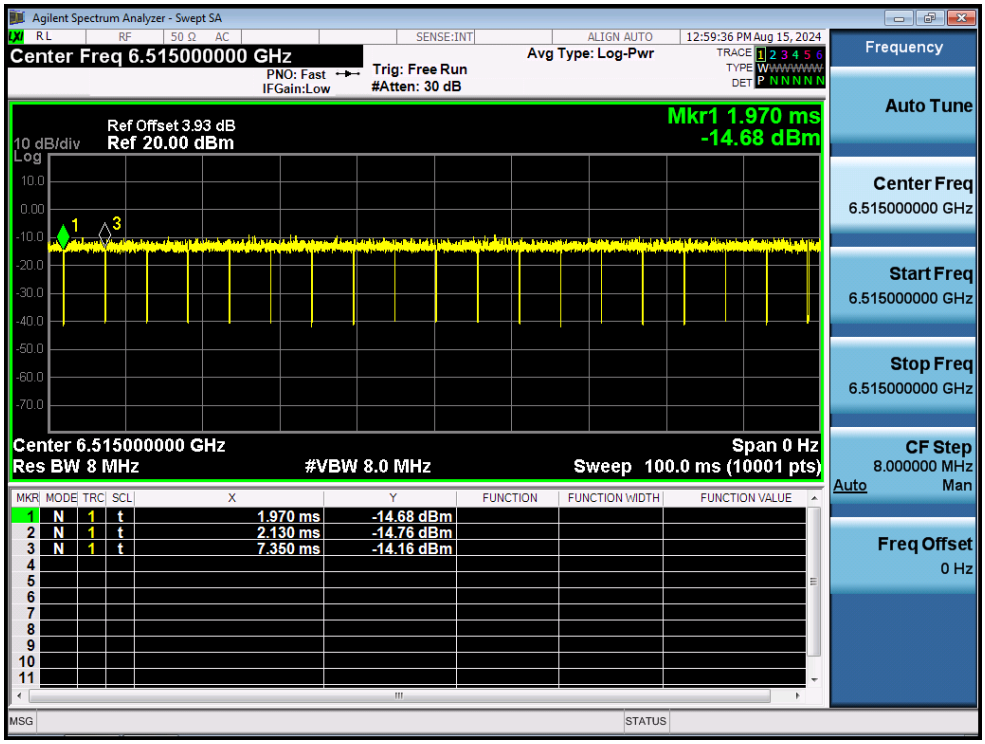
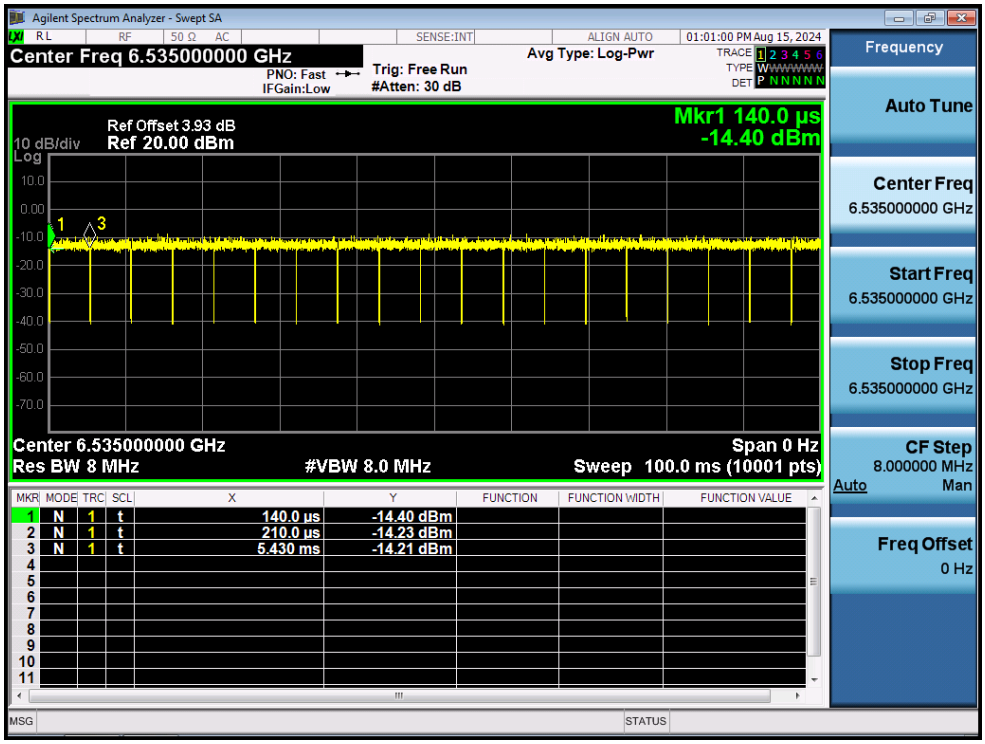


Duty Cycle NVNT ax20 6535MHz Sum



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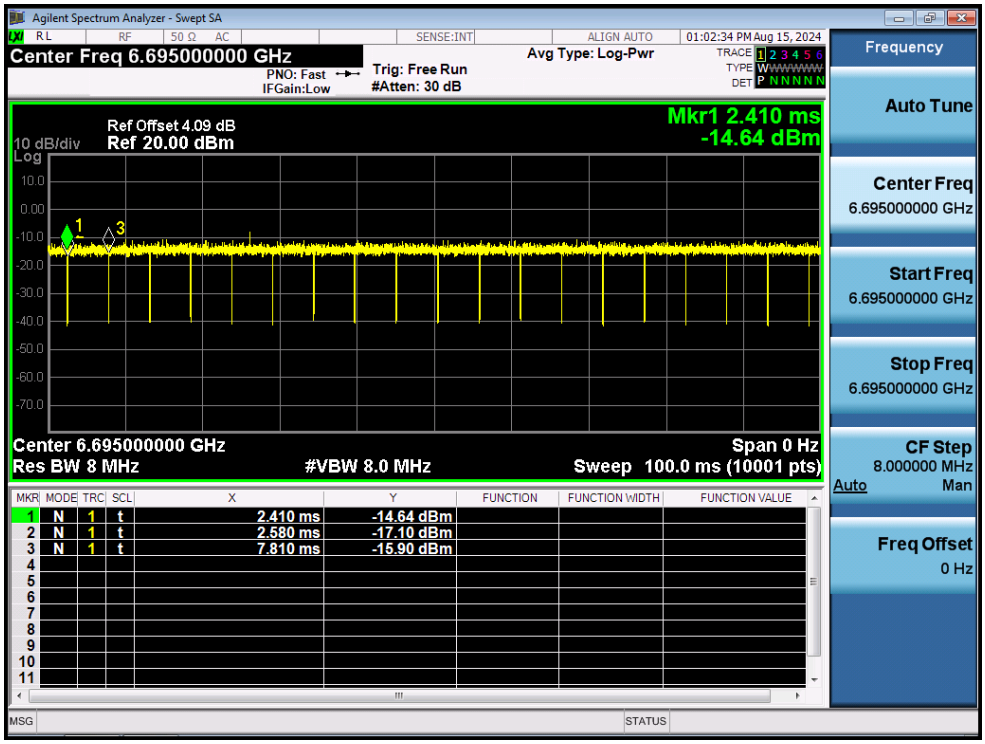
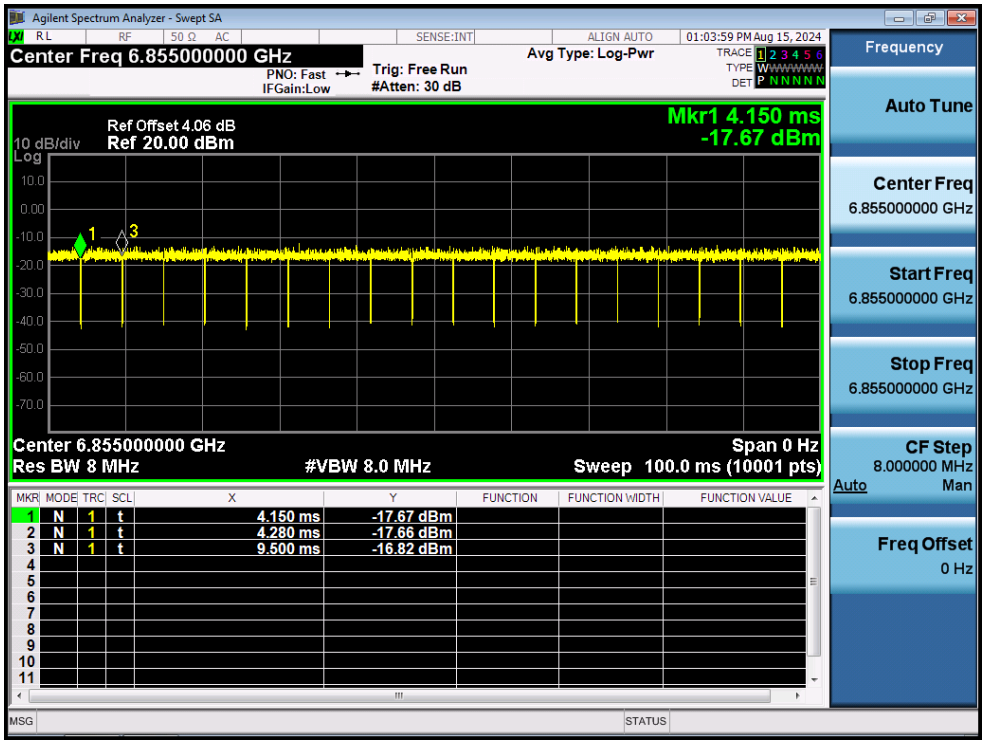
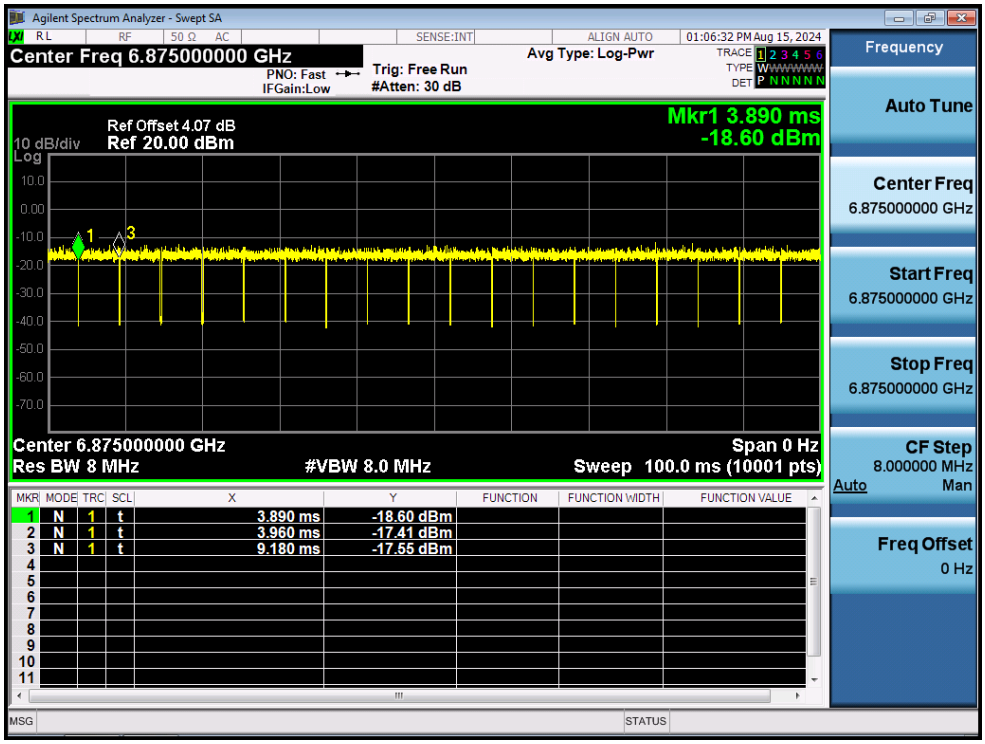


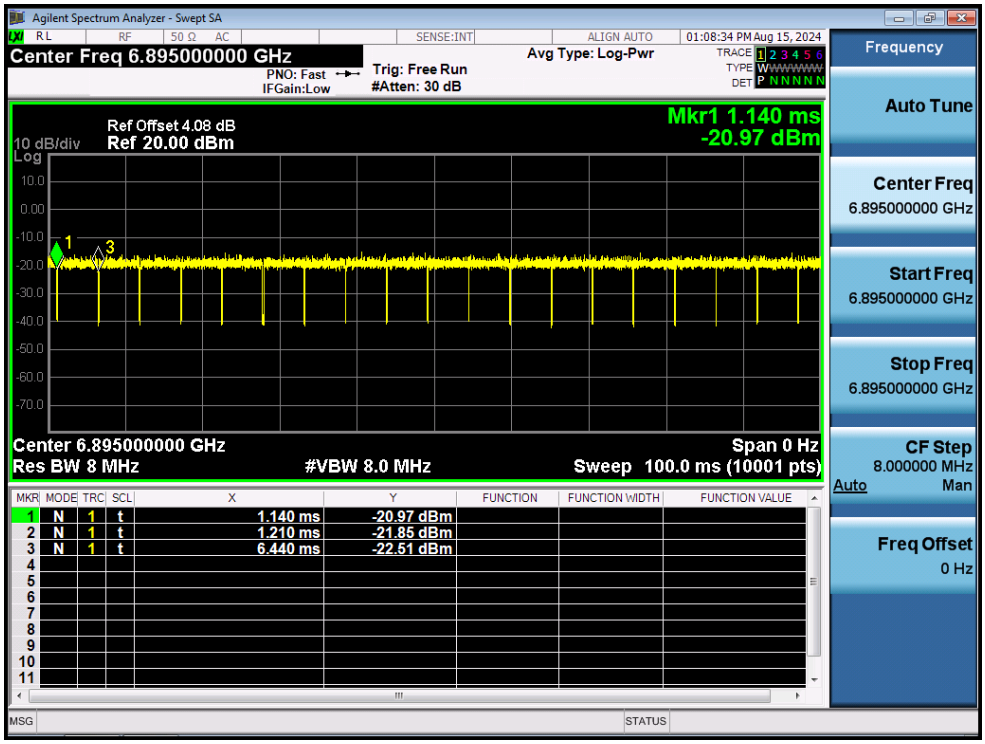
Duty Cycle NVNT ax20 6855MHz Sum



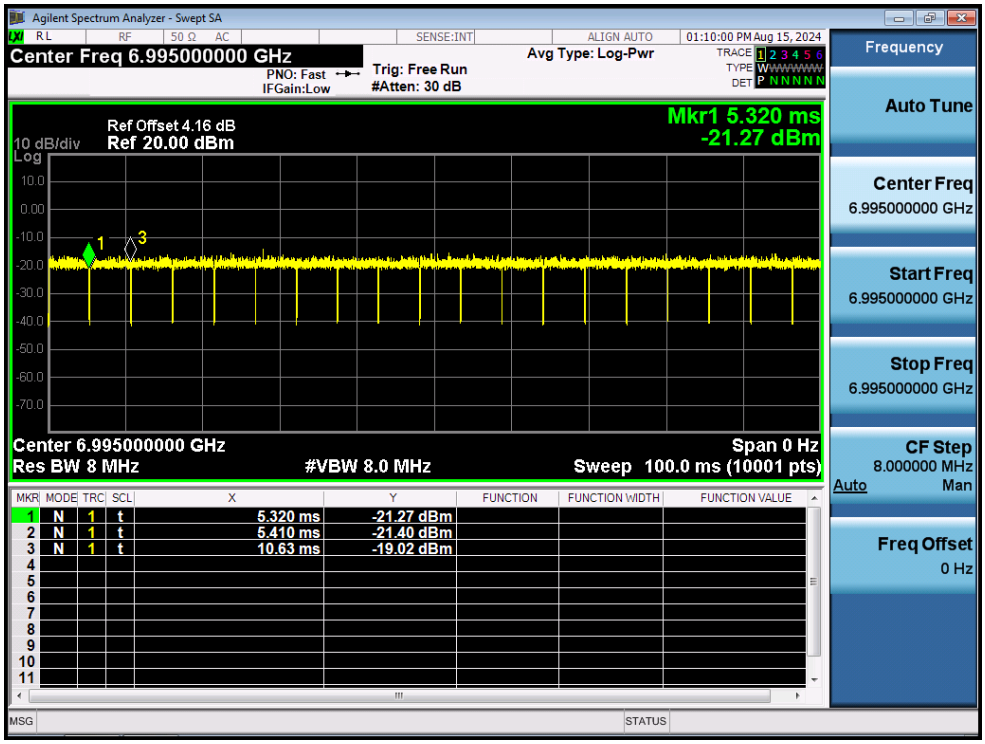
Duty Cycle NVNT ax20 6875MHz Sum



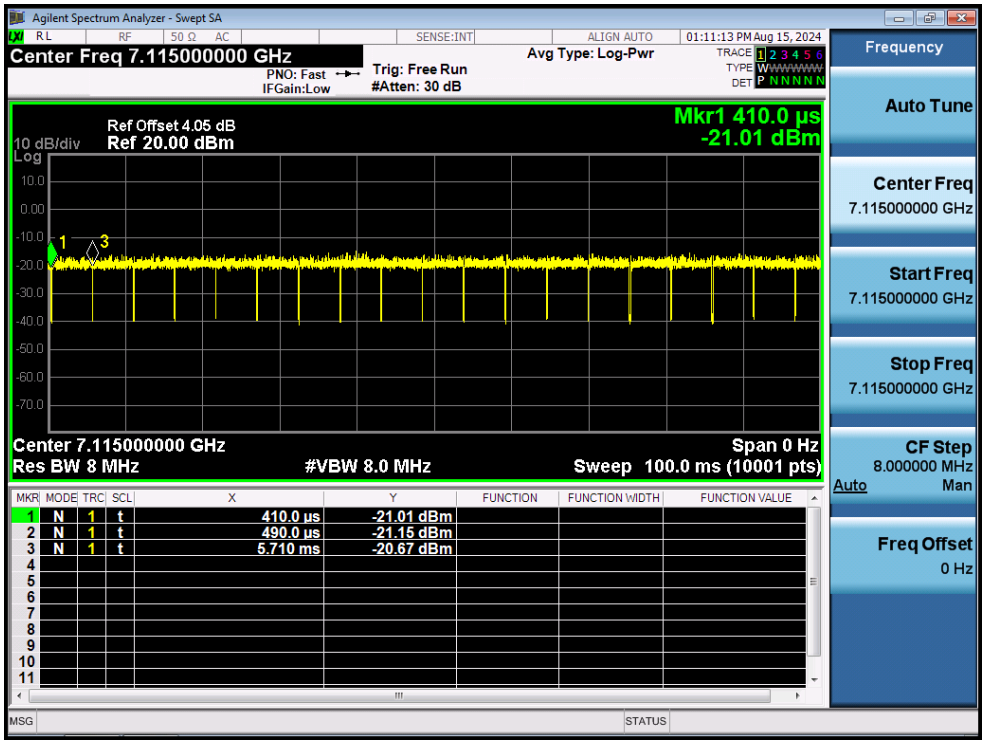
Duty Cycle NVNT ax20 6895MHz Sum



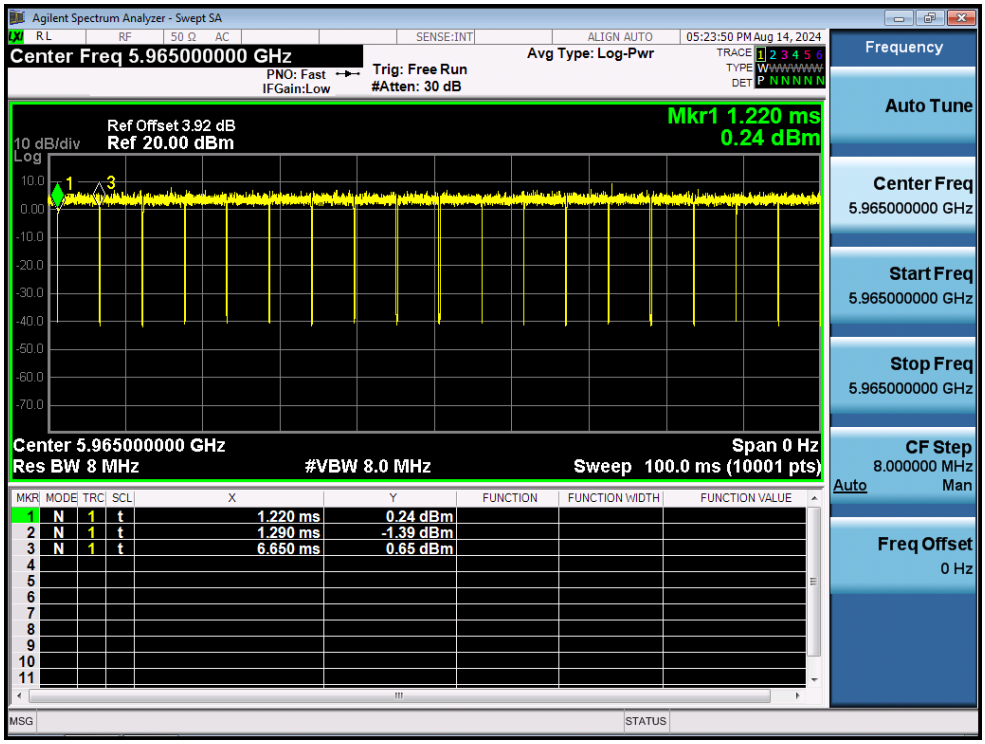
Duty Cycle NVNT ax20 6995MHz Sum



Duty Cycle NVNT ax20 7115MHz Sum



Duty Cycle NVNT ax40 5965MHz Ant1



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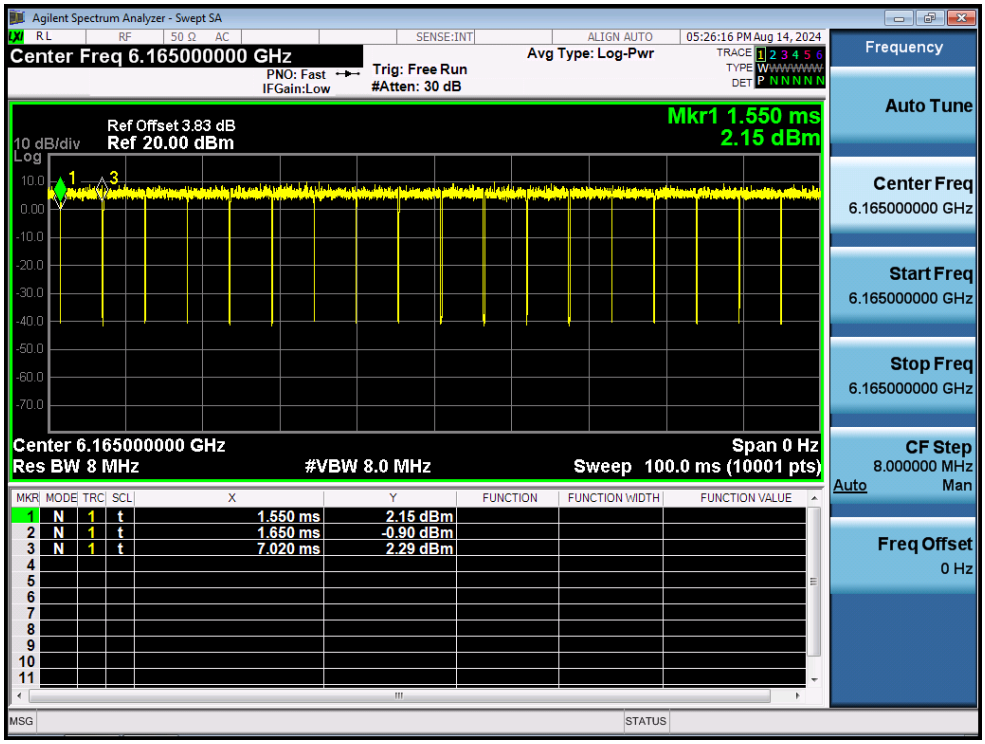

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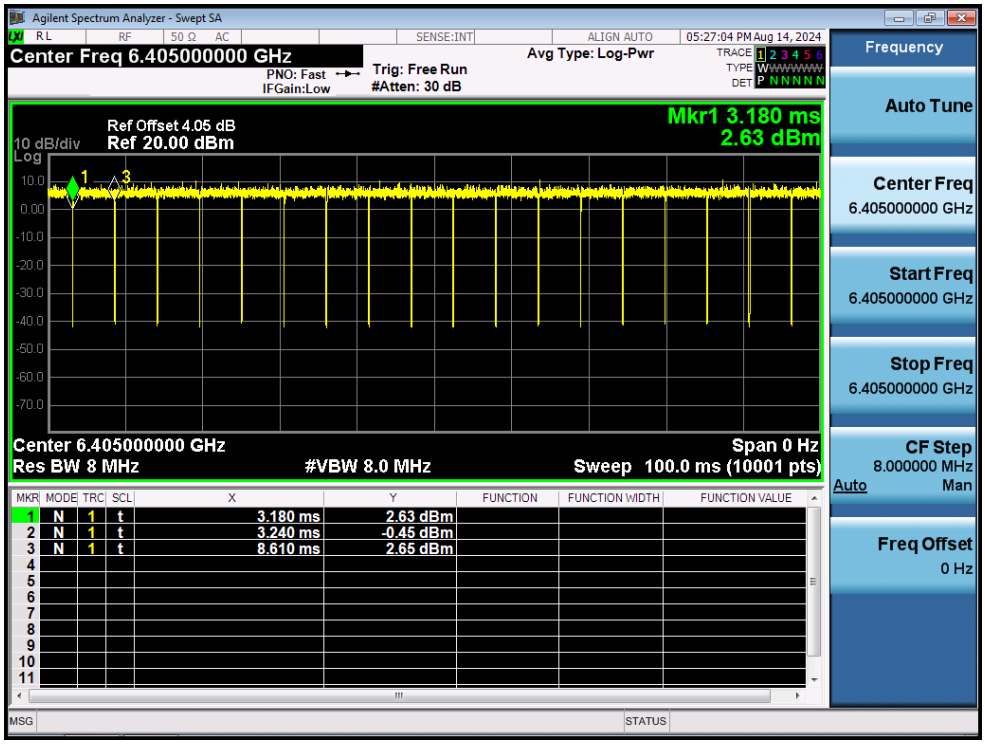
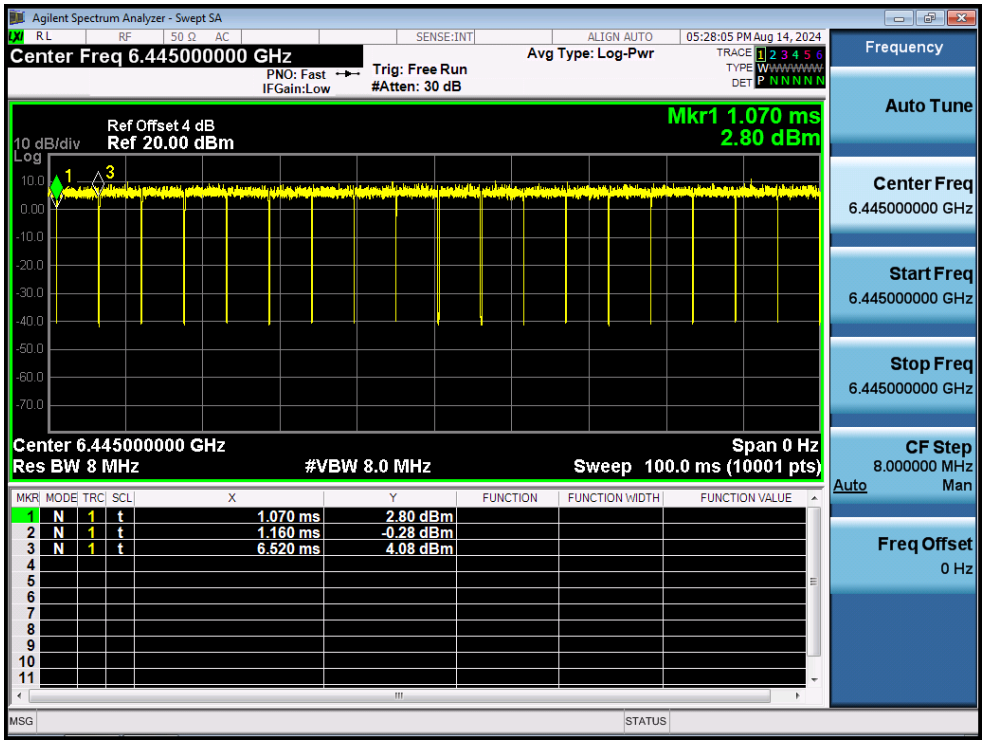
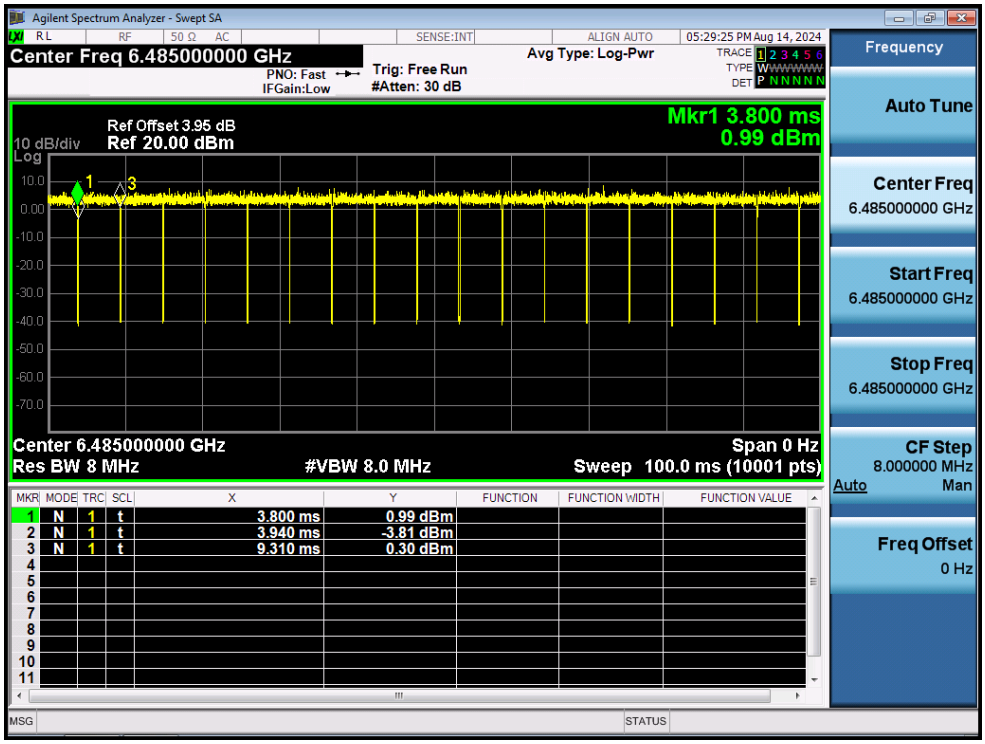


Duty Cycle NVNT ax40 6445MHz Ant1



Duty Cycle NVNT ax40 6485MHz Ant1



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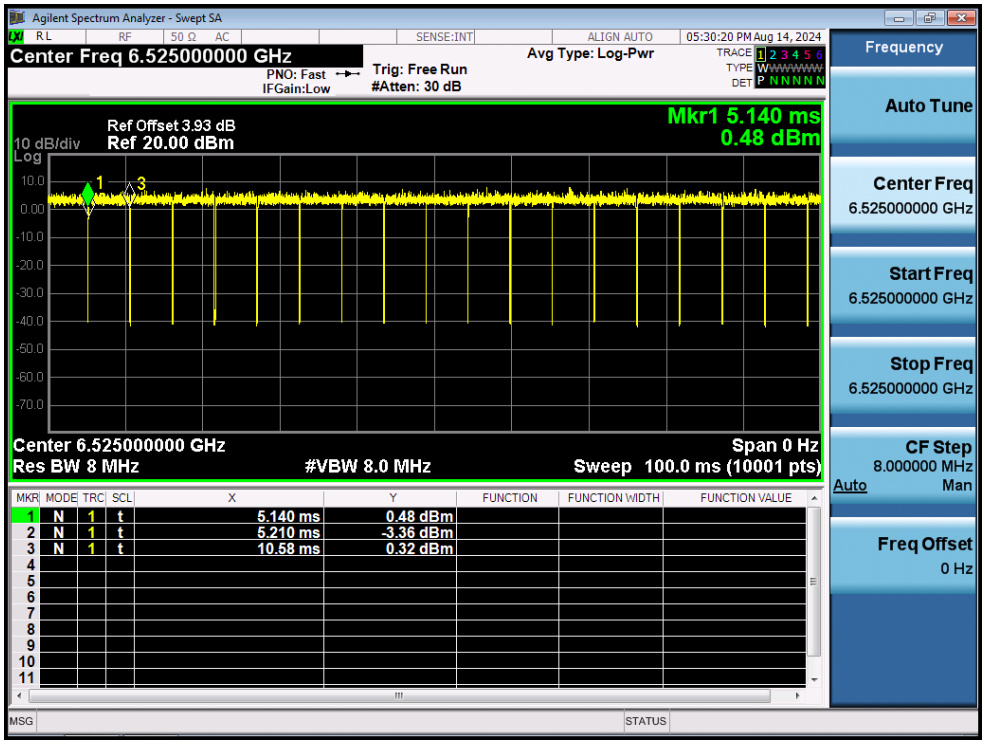
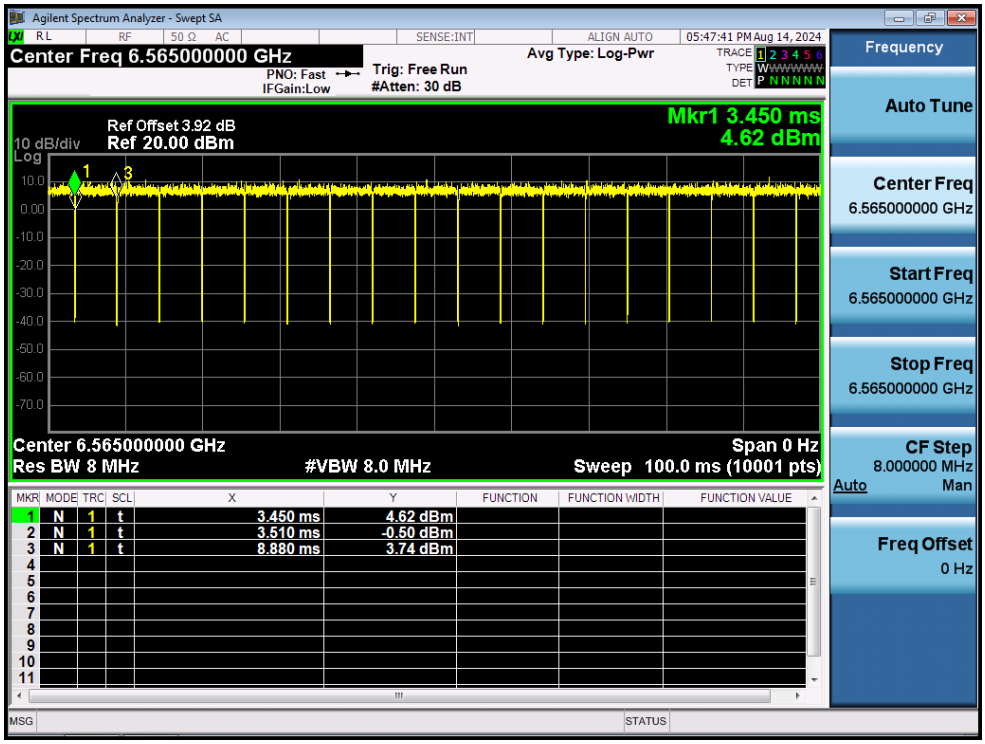
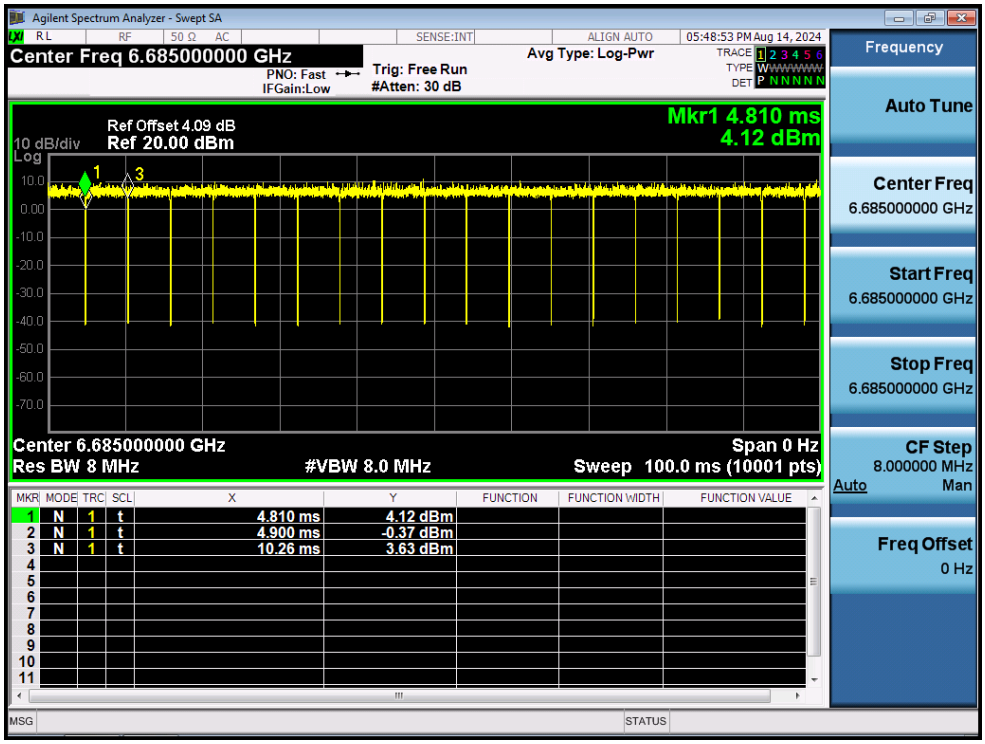


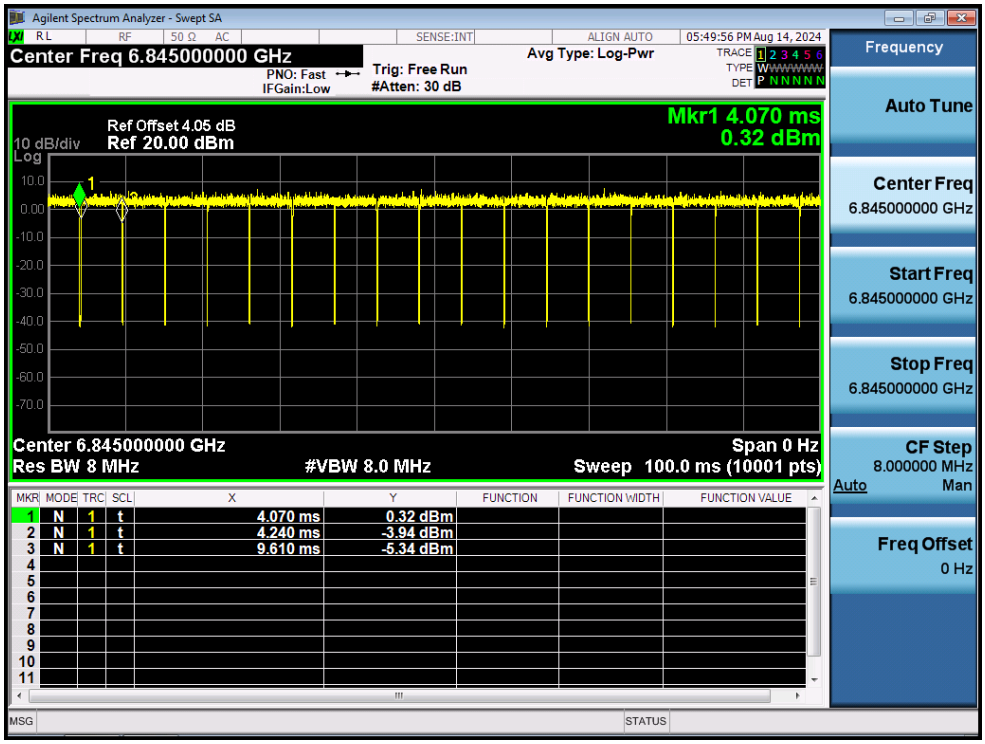
Duty Cycle NVNT ax40 6565MHz Ant1



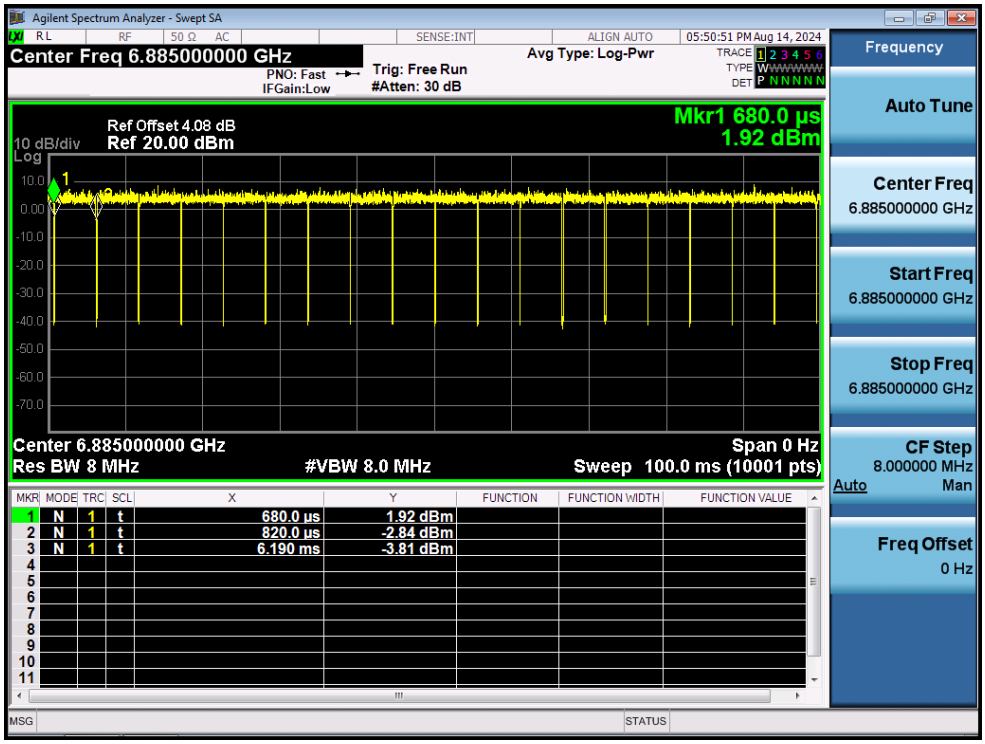
Duty Cycle NVNT ax40 6685MHz Ant1



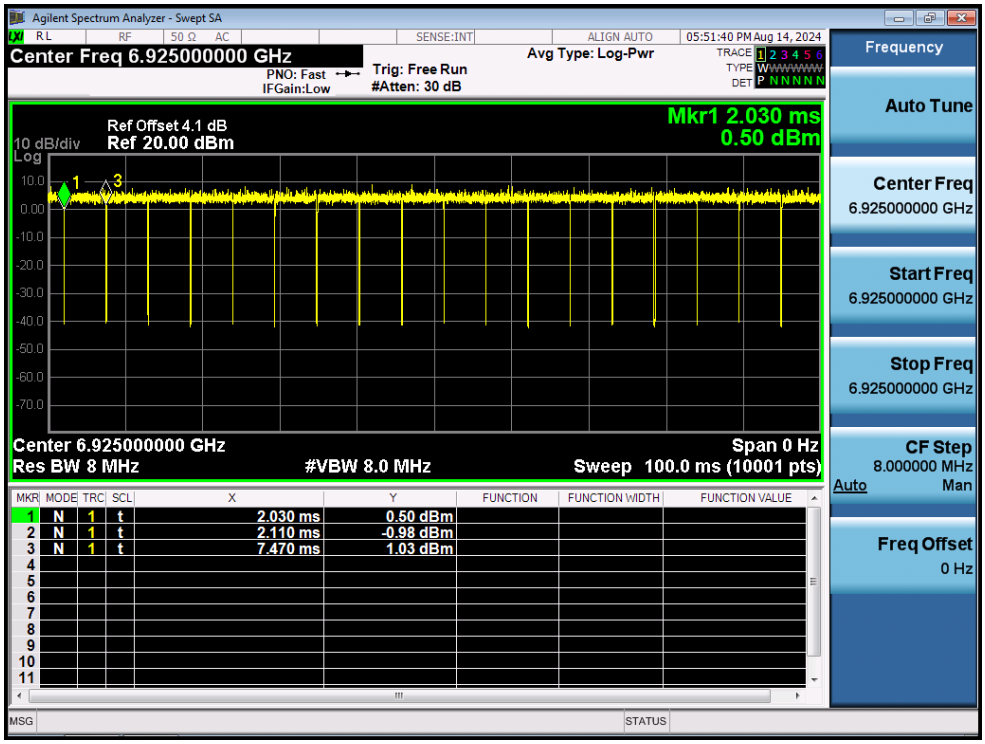
Duty Cycle NVNT ax40 6845MHz Ant1



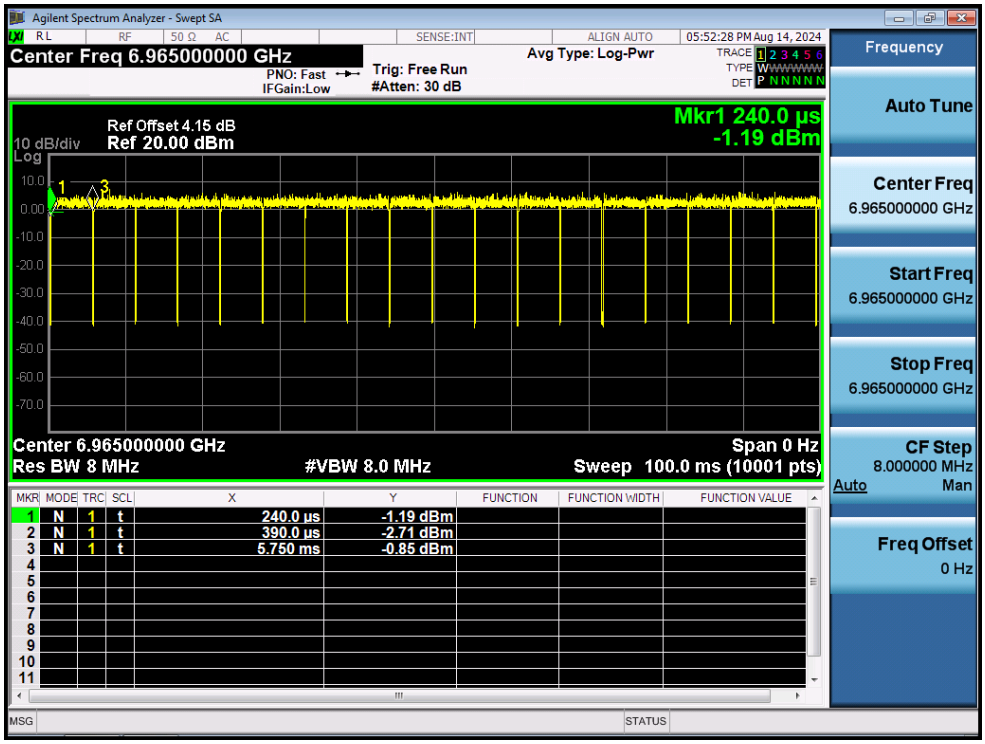
Duty Cycle NVNT ax40 6885MHz Ant1



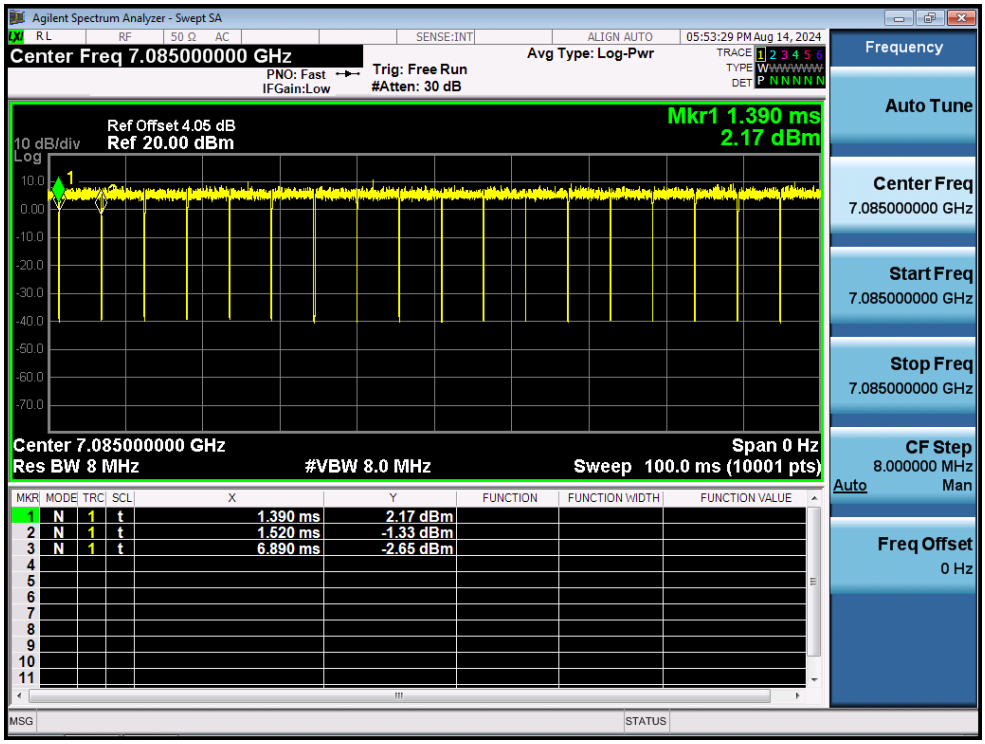
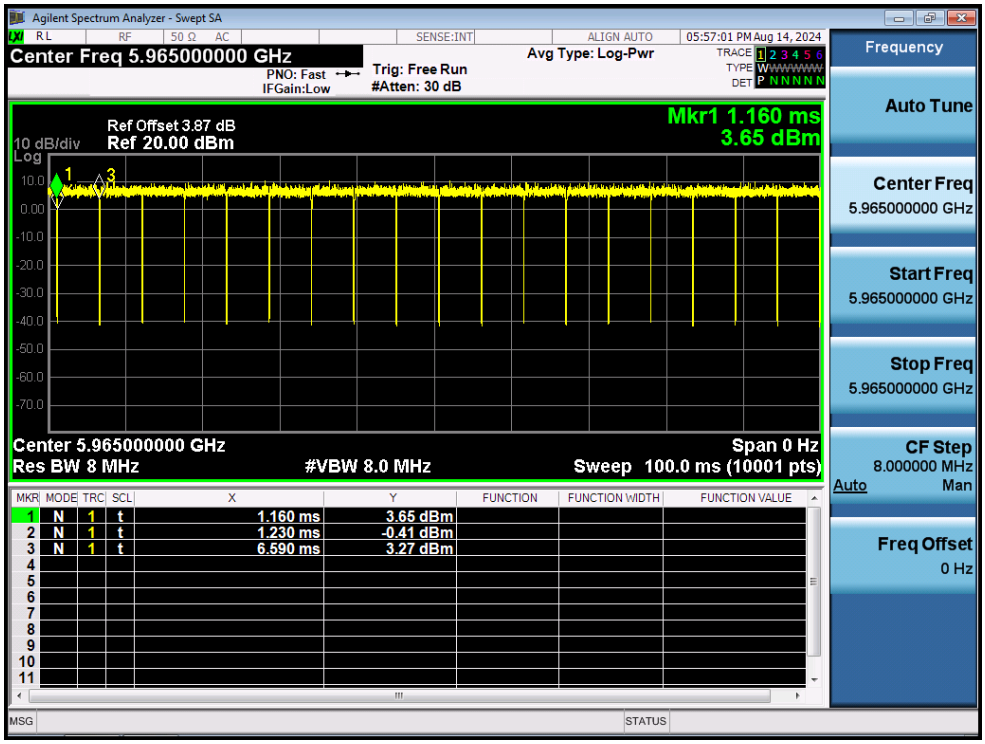
Duty Cycle NVNT ax40 6925MHz Ant1



Duty Cycle NVNT ax40 6965MHz Ant1



Duty Cycle NVNT ax40 7085MHz Ant1



Duty Cycle NVNT ax40 5965MHz Ant2