

4x4MIMO antenna 6ID

Appendix

Report No.: BCTC2407217909-1E

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 3

Appendix 2: Maximum conducted output power 210

Appendix 3: Maximum power spectral density 220

Appendix 1: Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax20	5955	Ant1	97.94	0.09	0.19
		6175		98.31	0	0.19
		6415		97.57	0.11	0.19
		6435		97.57	0.11	0.19
		6475		97.94	0.09	0.19
		6515		98.12	0	0.19
		6535		98.87	0	0.19
		6695		98.12	0	0.19
		6855		98.86	0	0.19
		6875		98.68	0	0.19
		6895		98.68	0	0.19
		6995		97.39	0.11	0.19
		7115		97.75	0.1	0.19
		5955	Ant2	98.49	0	0.19
		6175		97.21	0.12	0.19
		6415		98.49	0	0.19
		6435		97.75	0.1	0.19
		6475		96.67	0.15	0.19
		6515		97.39	0.11	0.19
		6535		97.03	0.13	0.19
		6695		96.67	0.15	0.19
		6855		97.57	0.11	0.19
		6875		98.68	0	0.19
		6895		98.49	0	0.19
		6995		96.85	0.14	0.19
		7115		98.86	0	0.19
		5955	Ant3	98.87	0	0.19
		6175		98.68	0	0.19
		6415		97.39	0.11	0.19
		6435		98.68	0	0.19
		6475		97.39	0.11	0.19
		6515		97.03	0.13	0.19
		6535		98.49	0	0.19
		6695		98.31	0	0.19
		6855		96.67	0.15	0.19
		6875		98.68	0	0.19
		6895		98.68	0	0.19
		6995		98.31	0	0.19
		7115		98.68	0	0.19
		5955	Ant4	97.21	0.12	0.19

		6175		97.57	0.11	0.19
		6415		97.03	0.13	0.19
		6435		98.49	0	0.19
		6475		96.55	0.15	17.86
		6515		98.68	0	0.19
		6535		97.21	0.12	0.19
		6695		98.86	0	0.19
		6855		98.12	0	0.19
		6875		97.21	0.12	0.19
		6895		97.03	0.13	0.19
		6995		97.75	0.1	0.19
		7115		97.57	0.11	0.19
		5955	Sum	97.21	0.12	0.19
		6175		97.39	0.11	0.19
		6415		98.86	0	0.19
		6435		96.85	0.14	0.19
		6475		97.57	0.11	0.19
		6515		97.75	0.1	0.19
		6535		98.87	0	0.19
		6695		98.12	0	0.19
		6855		97.03	0.13	0.19
		6875		98.86	0	0.19
		6895		97.94	0.09	0.19
		6995		98.49	0	0.19
		7115		98.49	0	0.19
		6415	Ant1	97.94	0.09	0.19
		6435		97.21	0.12	0.19
		6475		98.86	0	0.19
		6515		97.94	0.09	0.19
		6535		96.85	0.14	0.19
		6695		97.57	0.11	0.19
		6855		97.94	0.09	0.19
		6875		97.75	0.1	0.19
		6895		98.31	0	0.19
		6995		98.68	0	0.19
		7115		98.86	0	0.19
		5955	Ant2	97.39	0.11	0.19
		6175		98.31	0	0.19
		6415		96.67	0.15	0.19
		6435		98.86	0	0.19
		6475		97.21	0.12	0.19
		6515		98.68	0	0.19
		6535		98.87	0	0.19
		6695		97.57	0.11	0.19

		6855		98.68	0	0.19
		6875		97.21	0.12	0.19
		6895		96.67	0.15	0.19
		6995		97.75	0.1	0.19
		7115		97.57	0.11	0.19
		5955	Ant3	97.39	0.11	0.19
		6175		96.85	0.14	0.19
		6415		98.31	0	0.19
		6435		98.49	0	0.19
		6475		97.57	0.11	0.19
		6515		97.21	0.12	0.19
		6535		98.12	0	0.19
		6695		97.94	0.09	0.19
		6855		98.31	0	0.19
		6875		97.21	0.12	0.19
		6995		98.49	0	0.19
		7115		97.21	0.12	0.19
		5955	Ant4	97.39	0.11	0.19
		6175		98.31	0	0.19
		6415		98.49	0	0.19
		6475		98.68	0	0.19
		6515		97.94	0.09	0.19
		6535		98.86	0	0.19
		6695		98.12	0	0.19
		6855		98.49	0	0.19
		6875		96.85	0.14	0.19
		6895		97.39	0.11	0.19
		6995		98.49	0	0.19
		7115		96.85	0.14	0.19
	ax40	5965	Ant1	97.64	0.1	0.19
		6165		97.28	0.12	0.19
		6405		98.9	0	0.19
		6445		97.81	0.1	0.19
		6485		97.99	0.09	0.19
		6525		97.63	0.1	0.19
		6565		97.81	0.1	0.19
		6685		97.81	0.1	0.19
		6845		97.28	0.12	0.19
		6885		97.64	0.1	0.19
		6925		97.81	0.1	0.19
		6965		97.81	0.1	0.19
		7085		98.9	0	0.19
		5965	Ant2	98.17	0	0.19
		6165		98.35	0	0.19

		6405		97.1	0.13	0.19
		6445		97.46	0.11	0.19
		6485		96.93	0.14	0.19
		6525		96.75	0.14	0.19
		6565		97.1	0.13	0.19
		6685		97.28	0.12	0.19
		6845		98.17	0	0.19
		6885		98.53	0	0.19
		6925		97.28	0.12	0.19
		6965		96.75	0.14	0.19
		7085		98.89	0	0.19
		5965	Ant3	98.53	0	0.19
		6165		98.9	0	0.19
		6405		97.28	0.12	0.19
		6445		96.76	0.14	0.19
		6485		98.9	0	0.19
		6525		98.53	0	0.19
		6565		96.75	0.14	0.19
		6685		97.46	0.11	0.19
		6845		97.28	0.12	0.19
		6885		97.99	0.09	0.19
		6925		97.45	0.11	0.19
		6965		98.35	0	0.19
		7085		98.71	0	0.19
		5965	Ant4	96.76	0.14	0.19
		6165		98.71	0	0.19
		6405		98.89	0	0.19
		6445		98.35	0	0.19
		6485		98.71	0	0.19
		6525		97.81	0.1	0.19
		6565		98.53	0	0.19
		6685		97.28	0.12	0.19
		6845		97.11	0.13	0.19
		6885		98.89	0	0.19
		6925		98.35	0	0.19
		6965		97.11	0.13	0.19
		7085		97.28	0.12	0.19
		5965	Sum	98.53	0	0.19
		6165		98.71	0	0.19
		6405		98.17	0	0.19
		6445		98.53	0	0.19
		6485		98.89	0	0.19
		6525		98.71	0	0.19
		6565		98.89	0	0.19

		6685		98.9	0	0.19
		6845		98.35	0	0.19
		6885		97.11	0.13	0.19
		6925		98.17	0	0.19
		6965		98.9	0	0.19
		7085		97.1	0.13	0.19
		5965	Ant1	97.46	0.11	0.19
		6165		96.76	0.14	0.19
		6405		97.1	0.13	0.19
		6445		97.99	0.09	0.19
		6485		98.35	0	0.19
		6525		98.35	0	0.19
		6565		97.99	0.09	0.19
		6685		97.1	0.13	0.19
		6845		98.71	0	0.19
		6885		98.17	0	0.19
		6925		97.28	0.12	0.19
		7085		98.71	0	0.19
		5965	Ant2	97.81	0.1	0.19
		6165		97.28	0.12	0.19
		6405		97.99	0.09	0.19
		6445		97.63	0.1	0.19
		6485		96.76	0.14	0.19
		6525		97.45	0.11	0.19
		6565		97.81	0.1	0.19
		6685		97.11	0.13	0.19
		6845		97.28	0.12	0.19
		6885		98.9	0	0.19
		6925		98.89	0	0.19
		6965		98.53	0	0.19
		7085		98.71	0	0.19
		5965	Ant3	96.75	0.14	0.19
		6165		97.28	0.12	0.19
		6405		98.35	0	0.19
		6445		98.71	0	0.19
		6485		98.35	0	0.19
		6525		96.93	0.14	0.19
		6565		97.81	0.1	0.19
		6685		97.28	0.12	0.19
		6845		97.99	0.09	0.19
		6885		97.63	0.1	0.19
		6925		96.93	0.14	0.19
		7085		98.53	0	0.19
		5965	Ant4	97.99	0.09	0.19

		6165		98.89	0	0.19
		6405		97.99	0.09	0.19
		6445		98.71	0	0.19
		6485		98.35	0	0.19
		6525		96.75	0.14	0.19
		6565		97.1	0.13	0.19
		6685		98.71	0	0.19
		6845		97.45	0.11	0.19
		6885		97.28	0.12	0.19
		6925		98.53	0	0.19
		6965		96.75	0.14	0.19
		7085		97.81	0.1	0.19
	ax80	5985	Ant1	98.72	0	0.19
		6145		98.18	0	0.19
		6385		98.9	0	0.18
		6465		96.95	0.13	0.19
		6545		98.72	0	0.18
		6625		98.54	0	0.18
		6705		97.65	0.1	0.19
		6785		96.95	0.13	0.19
		6865		97.83	0.1	0.19
		6945		98.72	0	0.19
		7025		98.72	0	0.19
		5985	Ant2	97.65	0.1	0.19
		6145		98.9	0	0.18
		6385		98.18	0	0.19
		6465		98.54	0	0.19
		6545		98.18	0	0.19
		6625		98.9	0	0.18
		6705		98.01	0	0.18
		6785		98	0	0.19
		6865		98.36	0	0.19
		6945		97.13	0.13	0.18
		7025		96.95	0.13	0.18
		5985	Ant3	98.54	0	0.19
		6145		98	0	0.19
		6385		97.47	0.11	0.19
		6465		96.77	0.14	0.19
		6545		97.3	0.12	0.19
		6625		98.18	0	0.19
		6705		98.54	0	0.19
		6785		96.95	0.13	0.18
		6865		97.83	0.1	0.18
		6945		97.65	0.1	0.19

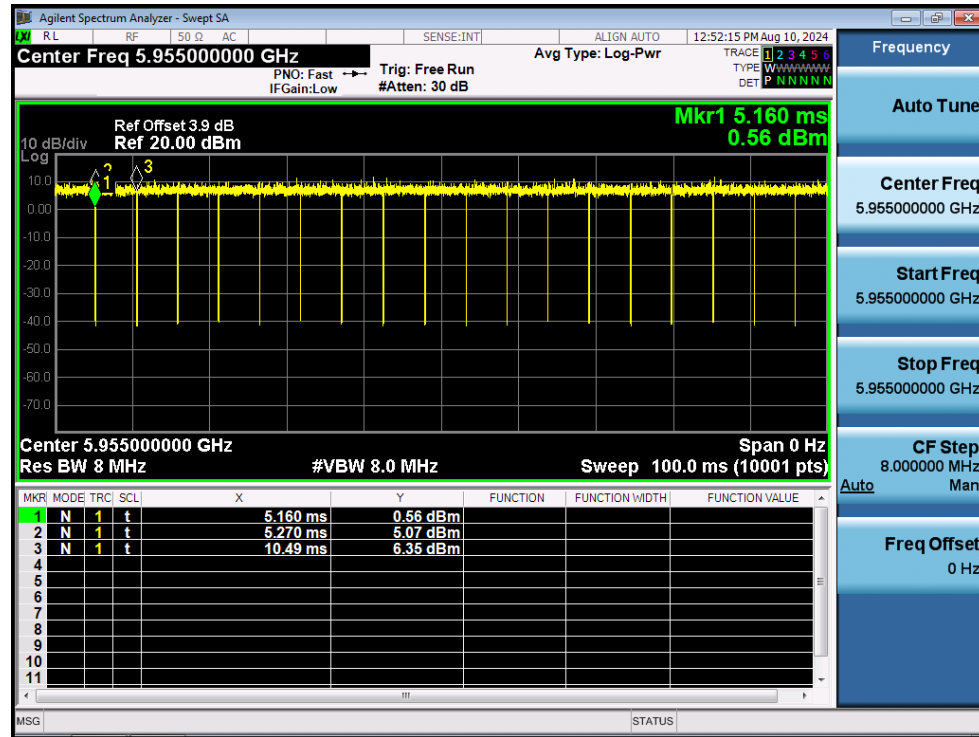
		7025		98.72	0	0.19
		5985		98.9	0	0.19
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		6465		97.3	0.12	0.19
		6545		98.72	0	0.18
		6625	Ant4	97.65	0.1	0.19
		6705		98.36	0	0.19
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		6145		98.54	0	0.19
		6385		97.48	0.11	0.18
		6465		96.77	0.14	0.19
		6545		97.3	0.12	0.19
		6625	Sum	97.65	0.1	0.19
		6705		97.13	0.13	0.18
		6785		97.83	0.1	0.19
		6865		97.3	0.12	0.19
		6945		98.54	0	0.19
		7025		98.19	0	0.18
		5985		98.72	0	0.18
		6145		98.9	0	0.18
		6385		98.36	0	0.19
		6465		98.72	0	0.18
		6545		96.95	0.13	0.19
		6625	Ant1	97.65	0.1	0.19
		6705		98.9	0	0.18
		6785		97.12	0.13	0.19
		6865		98.54	0	0.19
		6945		96.95	0.13	0.18
		7025		98.19	0	0.18
		5985		96.77	0.14	0.19
		6385		97.3	0.12	0.19
		6465		97.3	0.12	0.18
		6545		98.72	0	0.19
		6625	Ant2	97.83	0.1	0.19
		6705		98.54	0	0.19
		6785		97.65	0.1	0.19
		6865		97.83	0.1	0.19
		6945		98.72	0	0.18
		5985	Ant3	96.95	0.13	0.18

		6145		97.3	0.12	0.18
		6385		98.9	0	0.18
		6545		97.65	0.1	0.19
		6625		98.9	0	0.19
		6705		97.13	0.13	0.18
		6865		97.12	0.13	0.19
		7025		97.47	0.11	0.19
		5985	Ant4	97.65	0.1	0.19
		6385		97.3	0.12	0.19
		6465		98	0	0.19
		6545		97.3	0.12	0.18
		6625		98.36	0	0.19
		6705		97.12	0.13	0.19
		6785		97.12	0.13	0.19
		6865		97.48	0.11	0.18
		7025		98.18	0	0.19
	ax160	6025	Ant1	97.8	0.1	0.22
		6185		96.53	0.15	0.22
		6345		96.74	0.14	0.22
		6505		97.37	0.12	0.22
		6665		96.32	0.16	0.22
		6825		97.8	0.1	0.22
		6985		98.67	0	0.23
		6025	Ant2	98.45	0	0.23
		6185		97.8	0.1	0.22
		6345		97.16	0.13	0.23
		6505		98.02	0	0.22
		6665		97.89	0.09	0.22
		6825		98.23	0	0.22
		6985		96.73	0.14	0.23
		6025	Ant3	96.31	0.16	0.23
		6185		97.16	0.13	0.22
		6345		98.02	0	0.22
		6505		96.52	0.15	0.23
		6665		96.32	0.16	0.22
		6825		96.32	0.16	0.22
		6985		97.37	0.12	0.23
		6025	Ant4	97.8	0.1	0.22
		6185		98.45	0	0.23
		6345		96.73	0.14	0.23
		6505		97.16	0.13	0.23
		6665		98.45	0	0.22
		6825		98.45	0	0.23
		6985		98.01	0	0.23

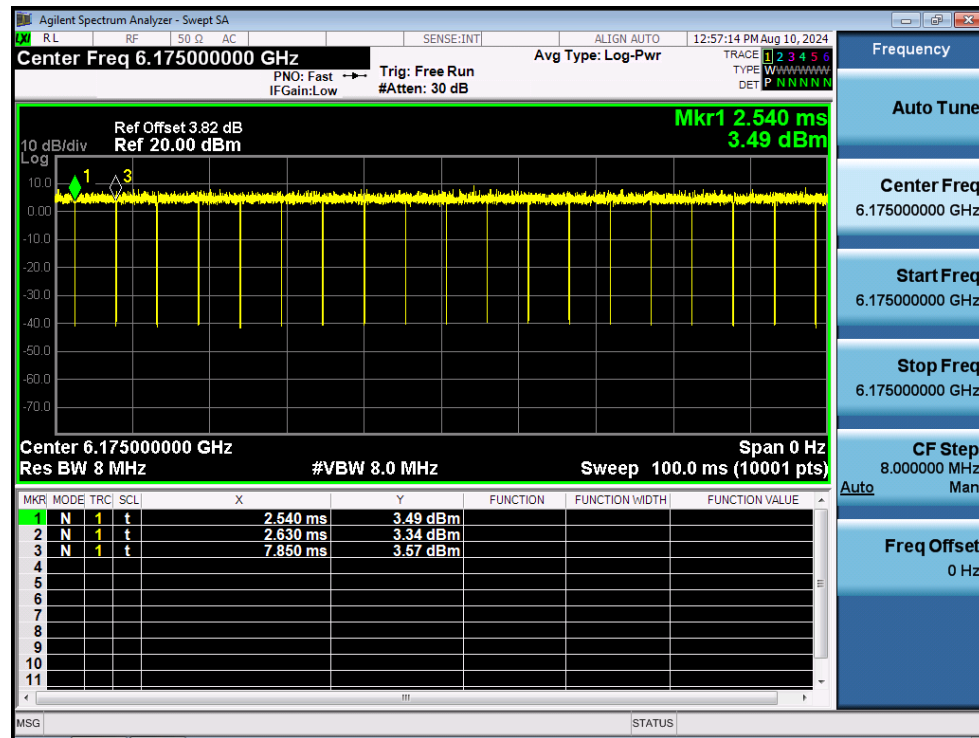
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		6185		98.45	0	0.23
		6345		98.23	0	0.23
		6505		98.45	0	0.22
		6665		98.67	0	0.23
		6825		97.37	0.12	0.23
		6985		98.23	0	0.22
		6025	Ant1	97.37	0.12	0.23
		6185		98.45	0	0.23
		6505		98.45	0	0.22
		6345		96.73	0.14	0.23
		6665		98.67	0	0.23
		6825		97.37	0.12	0.22
		6985		98.67	0	0.22
		6025	Ant2	98.23	0	0.23
		6185		97.37	0.12	0.23
		6505		98.02	0	0.22
		6345		97.58	0.11	0.23
		6665		98.28	0	0.22
		6825		96.74	0.14	0.22
		6985		98.45	0	0.23
		6025	Ant3	97.37	0.12	0.23
		6185		98.67	0	0.22
		6505		98.67	0	0.22
		6345		97.37	0.12	0.23
		6665		96.53	0.15	0.22
		6825		98.45	0	0.23
		6985		97.8	0.1	0.22
		6185	Ant4	96.95	0.13	0.22
		6345		96.31	0.16	0.23
		6505		97.16	0.13	0.22
		6665		96.95	0.13	0.22
		6825		97.37	0.12	0.23
		6985		96.73	0.14	0.23

Test Graphs

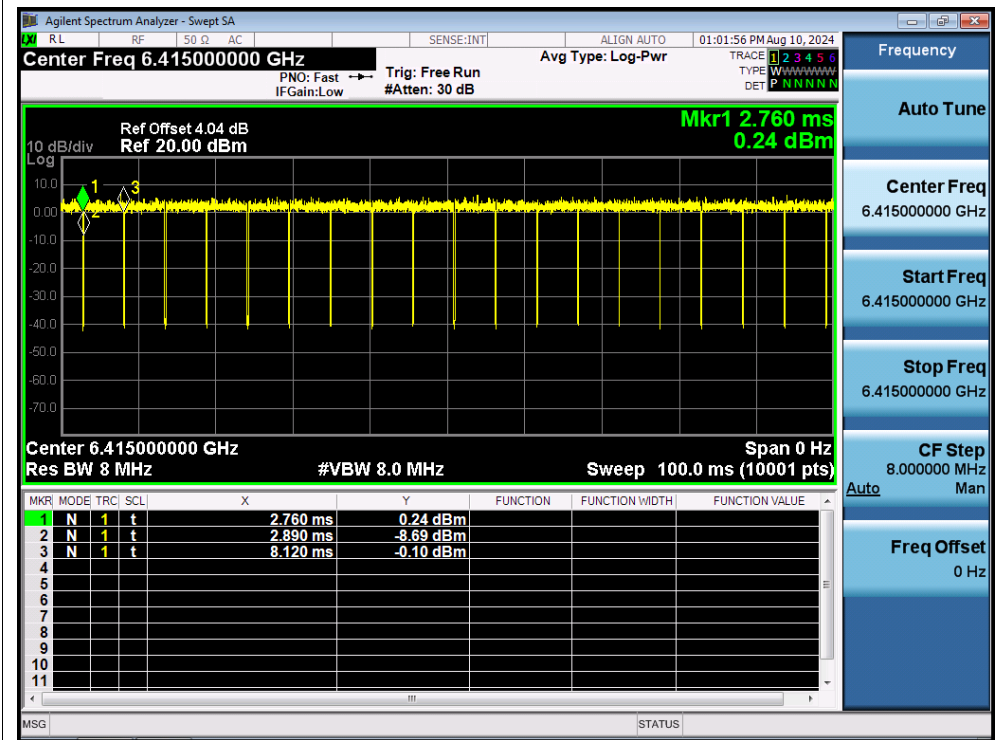
Duty Cycle NVNT ax20 5955MHz Ant1



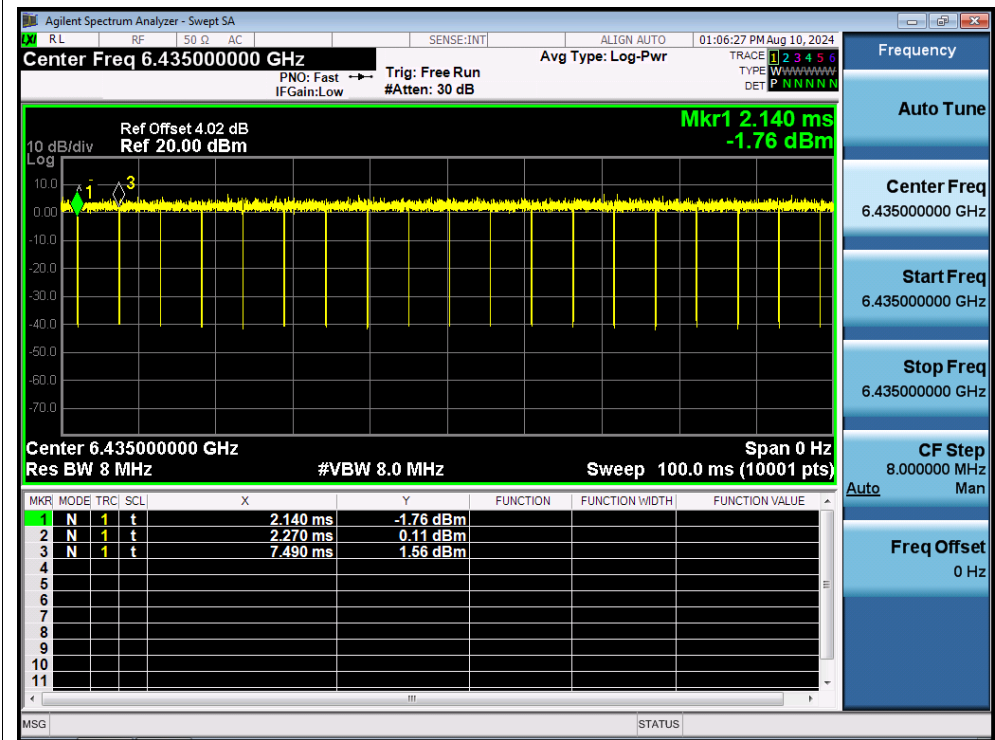
Duty Cycle NVNT ax20 6175MHz Ant1



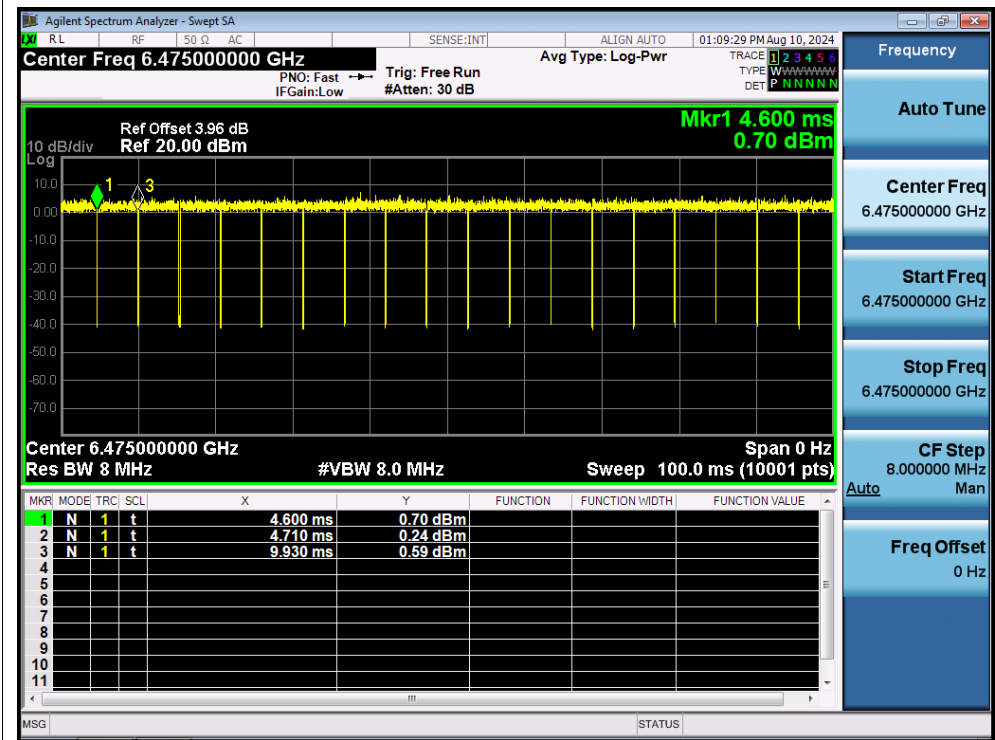
Duty Cycle NVNT ax20 6415MHz Ant1



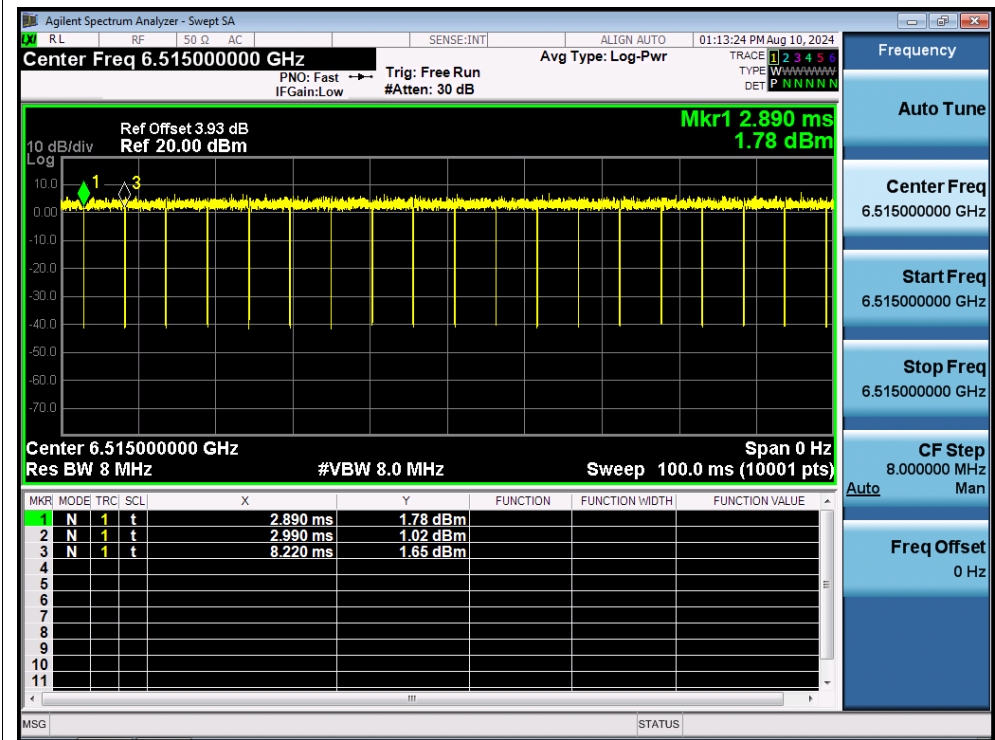
Duty Cycle NVNT ax20 6435MHz Ant1



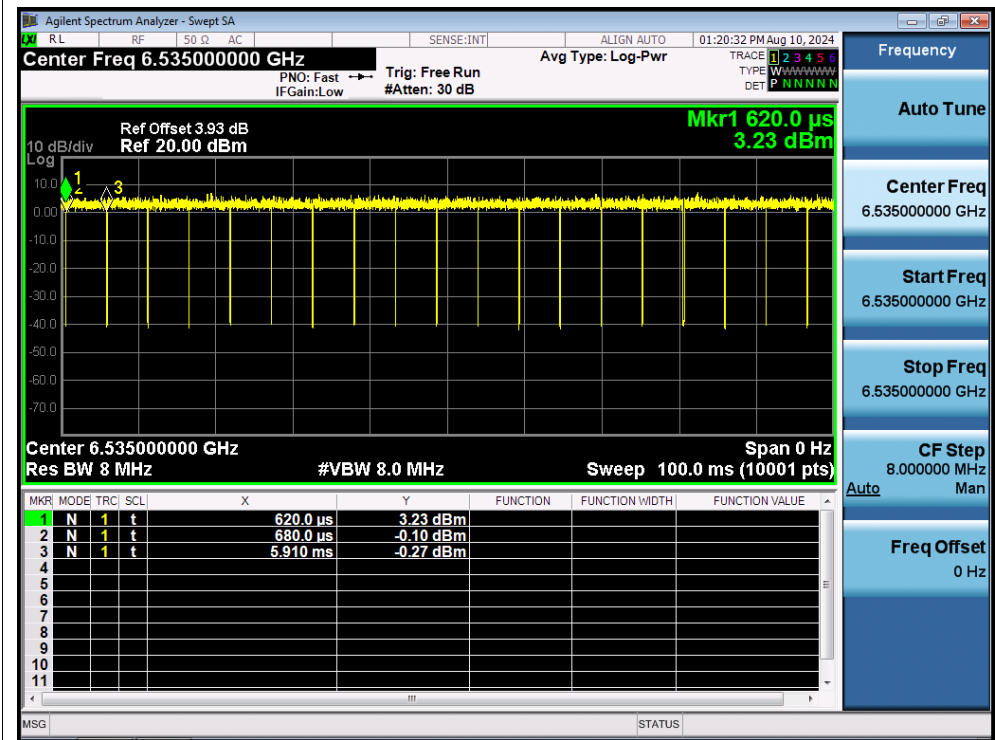
Duty Cycle NVNT ax20 6475MHz Ant1



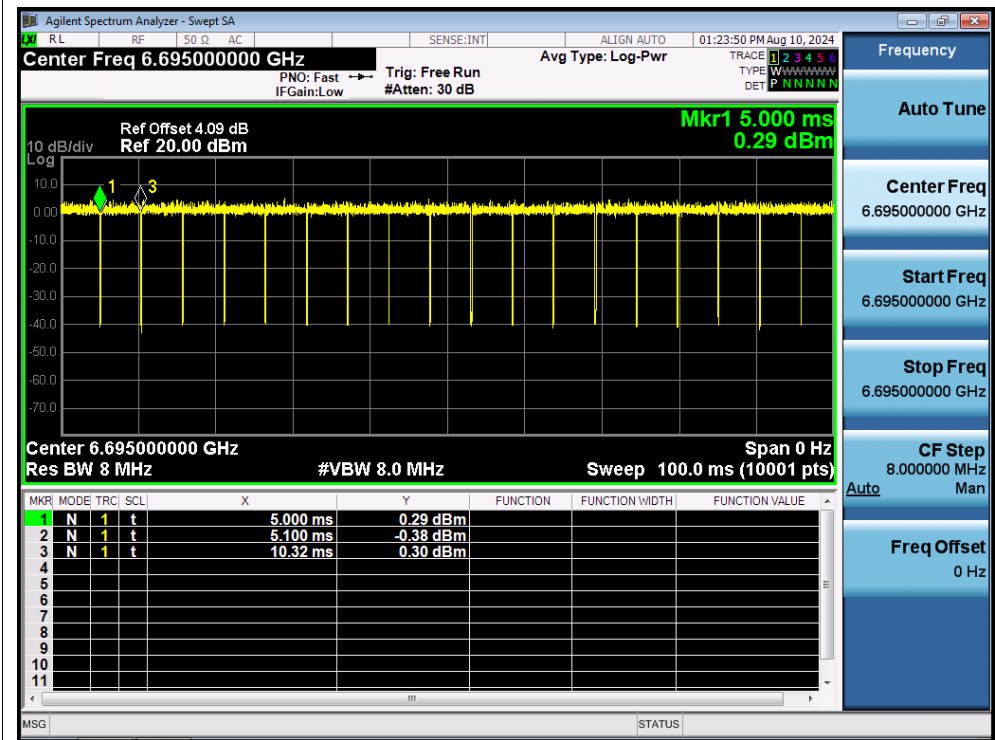
Duty Cycle NVNT ax20 6515MHz Ant1



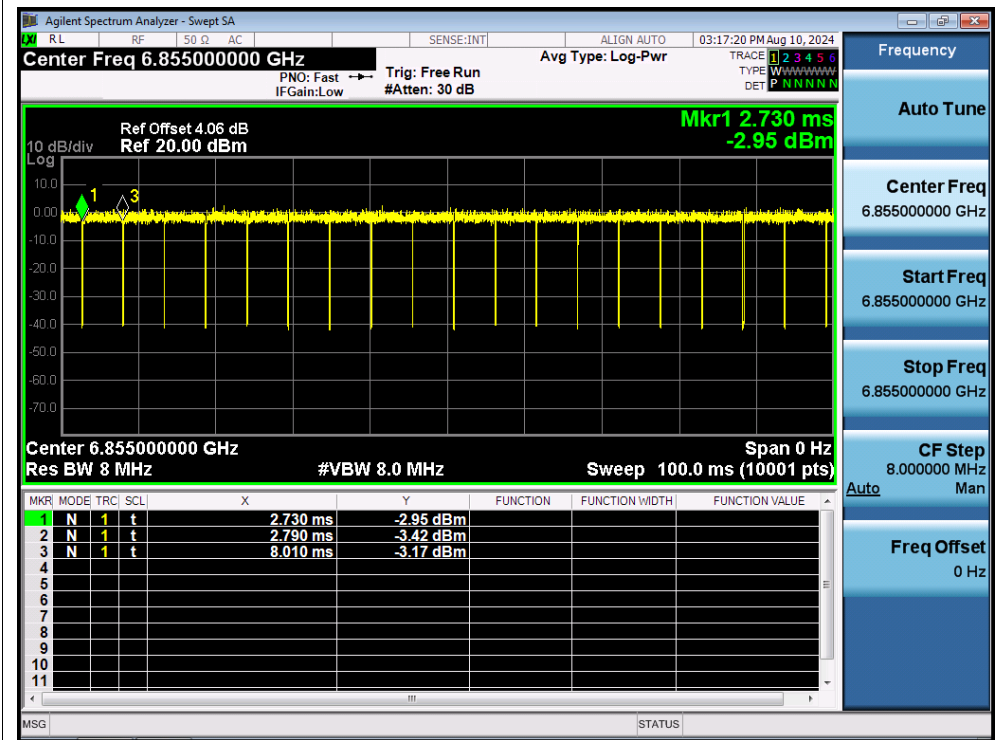
Duty Cycle NVNT ax20 6535MHz Ant1



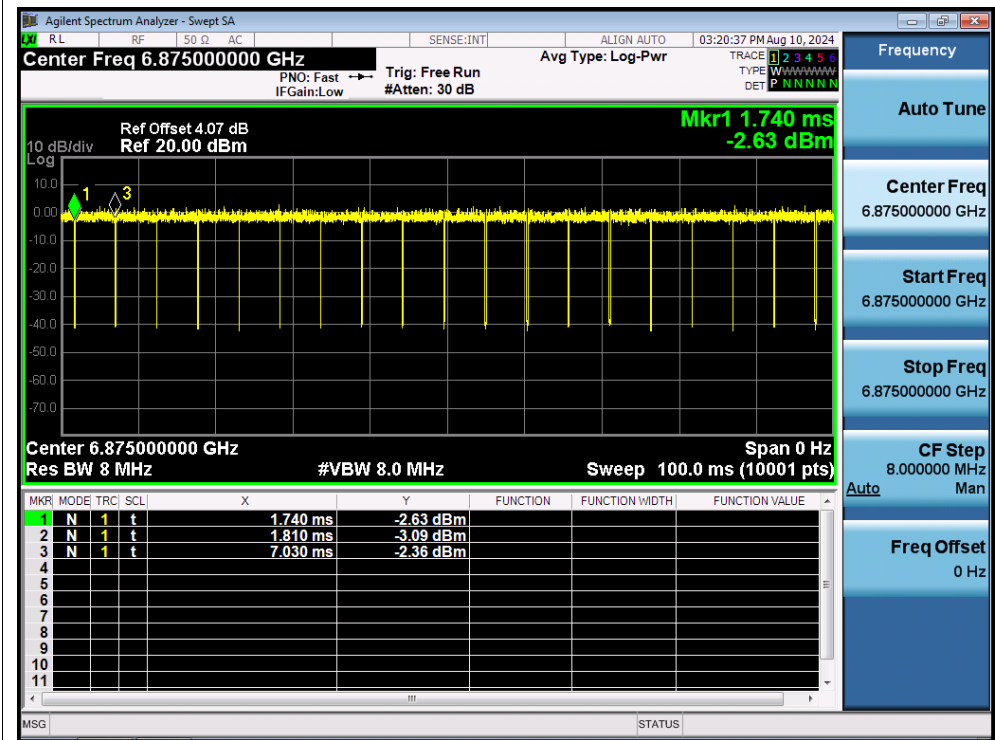
Duty Cycle NVNT ax20 6695MHz Ant1



Duty Cycle NVNT ax20 6855MHz Ant1



Duty Cycle NVNT ax20 6875MHz Ant1



Duty Cycle NVNT ax20 6895MHz Ant1

Agilent Spectrum Analyzer - Sweep SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:23:48 PM Aug 10, 2024

Center Freq 6.895000000 GHz Avg Type: Log-Pwr

PN0: Fast Trig: Free Run
IF Gain: Low #Atten: 30 dB

Ref Offset 4.08 dB
Ref 20.00 dBm

Mkr1 4.600 ms
-4.49 dBm

Center Freq 6.895000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	4.600 ms	-4.49 dBm			
2	N	1	t	4.670 ms	-5.76 dBm			
3	N	1	t	9.900 ms	-4.77 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 6.895000000 GHz

Start Freq 6.895000000 GHz

Stop Freq 6.895000000 GHz

CF Step 8.000000 MHz

Man

Freq Offset 0 Hz

Duty Cycle NVNT ax20 6995MHz Ant1

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:26:34 PM Aug 10, 2024

Center Freq 6.995000000 GHz Avg Type: Log-Pwr

PN0: Fast → Trig: Free Run
IFGain:Low #Atten: 30 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W W W
DET P N N N N N

Ref Offset 4.16 dB
Ref 20.00 dBm

**Mkr1 3.280 ms
-4.03 dBm**

10 dB/div
Log

Center 6.995000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	3.280 ms	-4.03 dBm			
2	N	1	t	3.420 ms	-4.15 dBm			
3	N	1	t	8.650 ms	-5.15 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 6.995000000 GHz

Start Freq 6.995000000 GHz

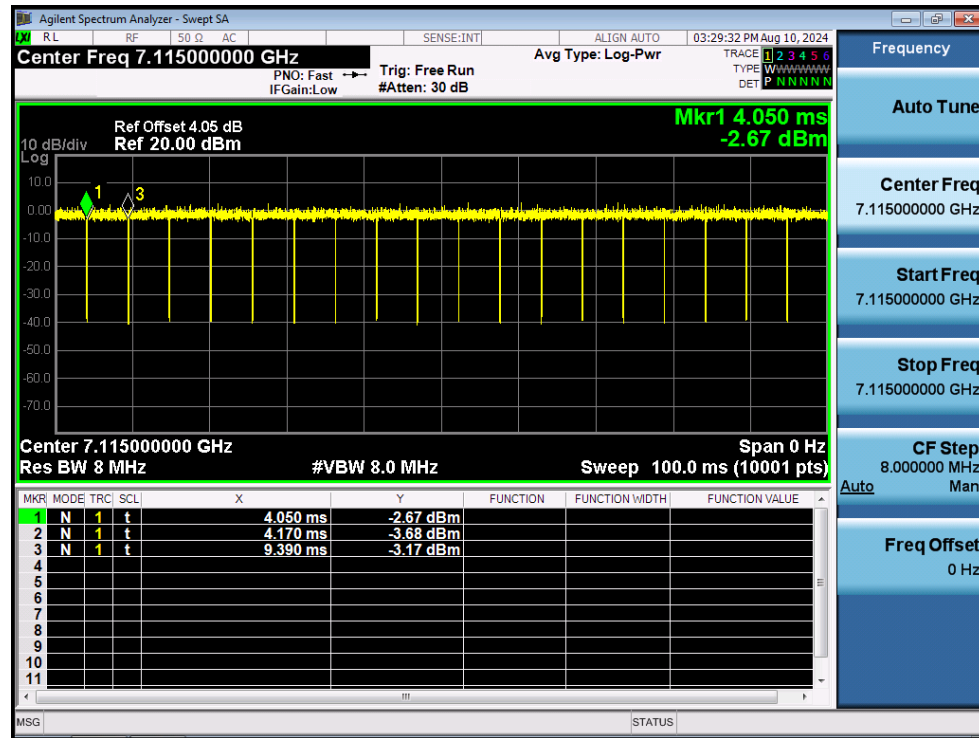
Stop Freq 6.995000000 GHz

CF Step 8.000000 MHz Man

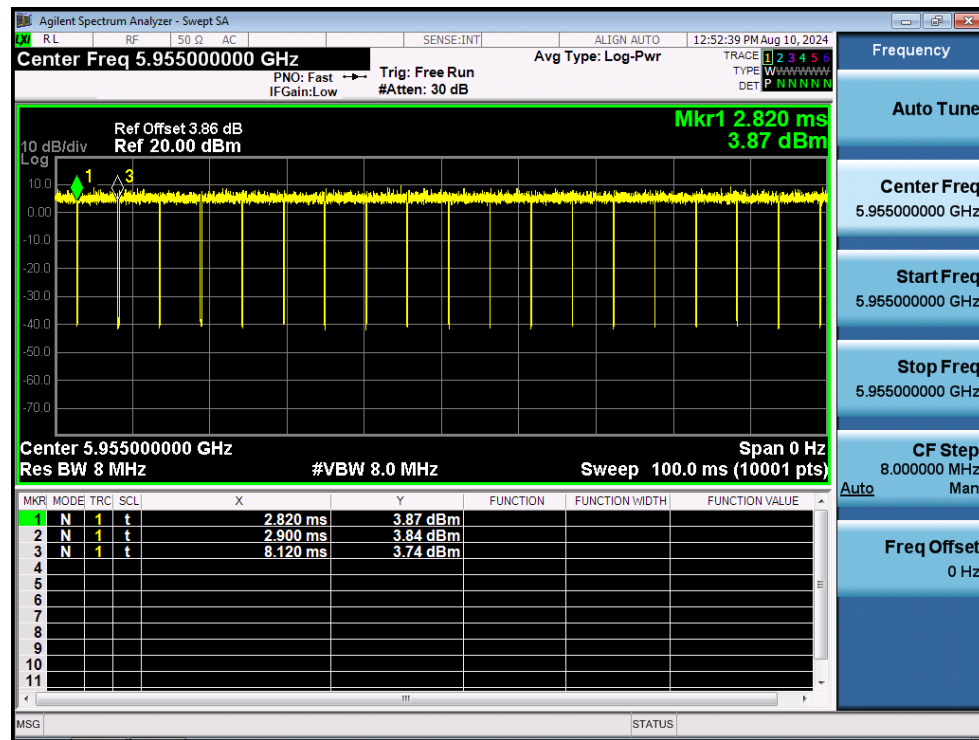
Freq Offset 0 Hz

Auto

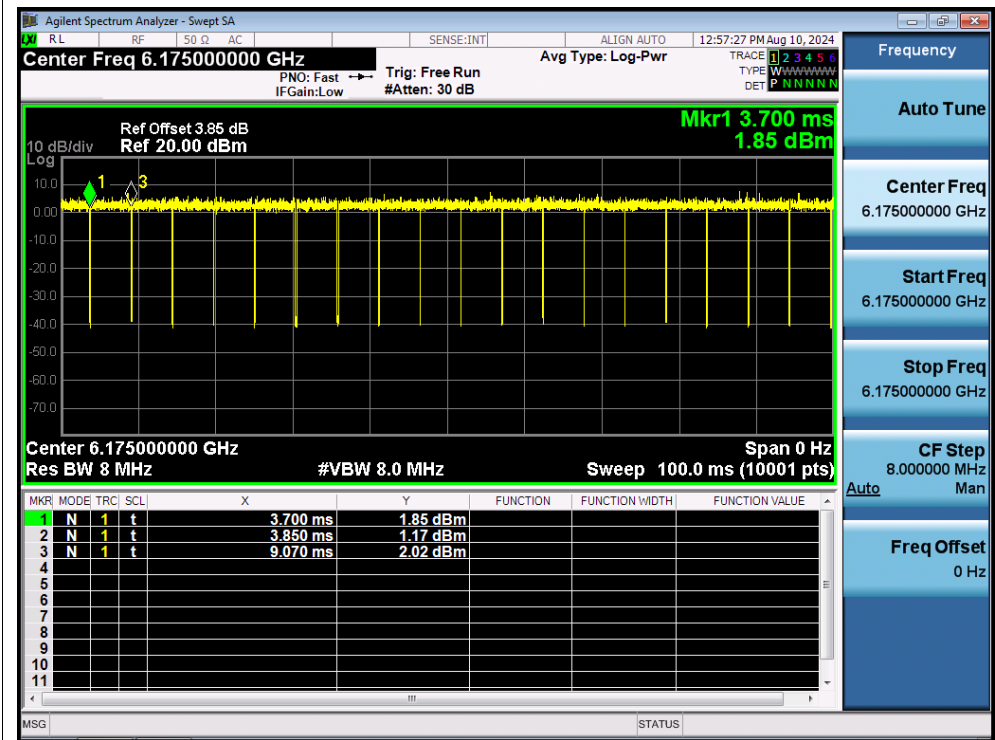
Duty Cycle NVNT ax20 7115MHz Ant1



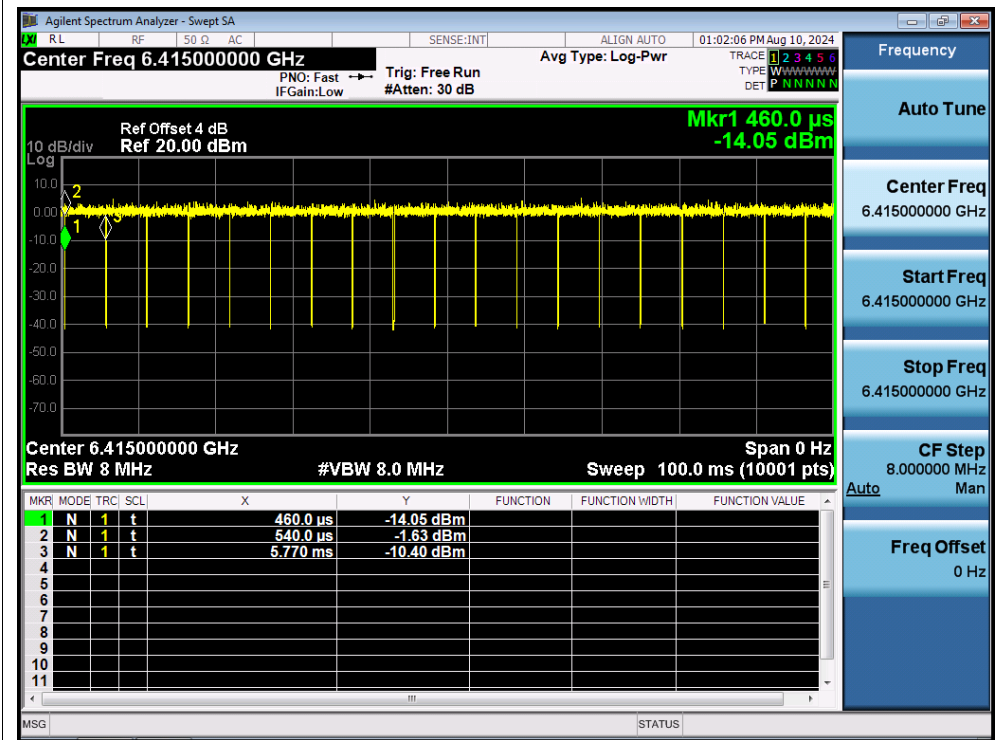
Duty Cycle NVNT ax20 5955MHz Ant2



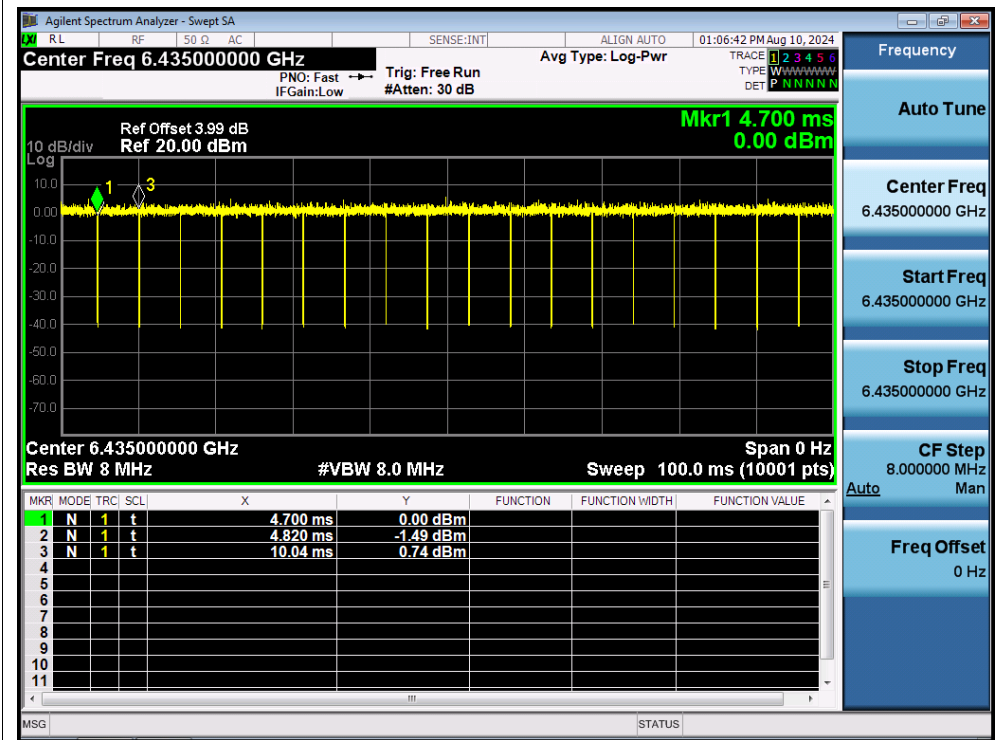
Duty Cycle NVNT ax20 6175MHz Ant2



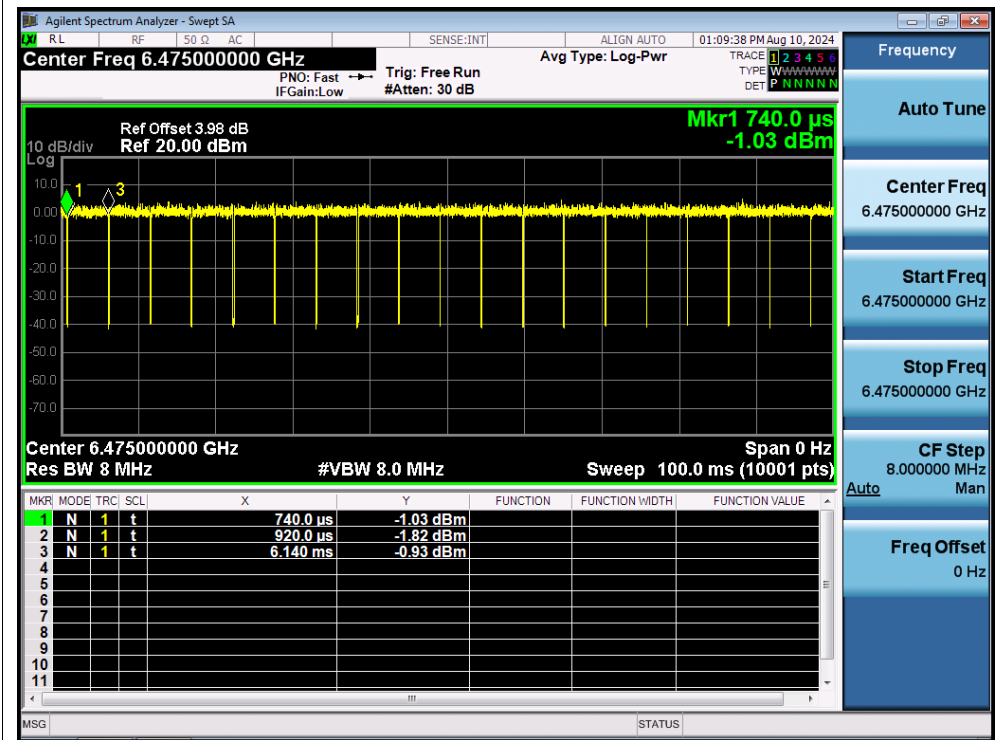
Duty Cycle NVNT ax20 6415MHz Ant2



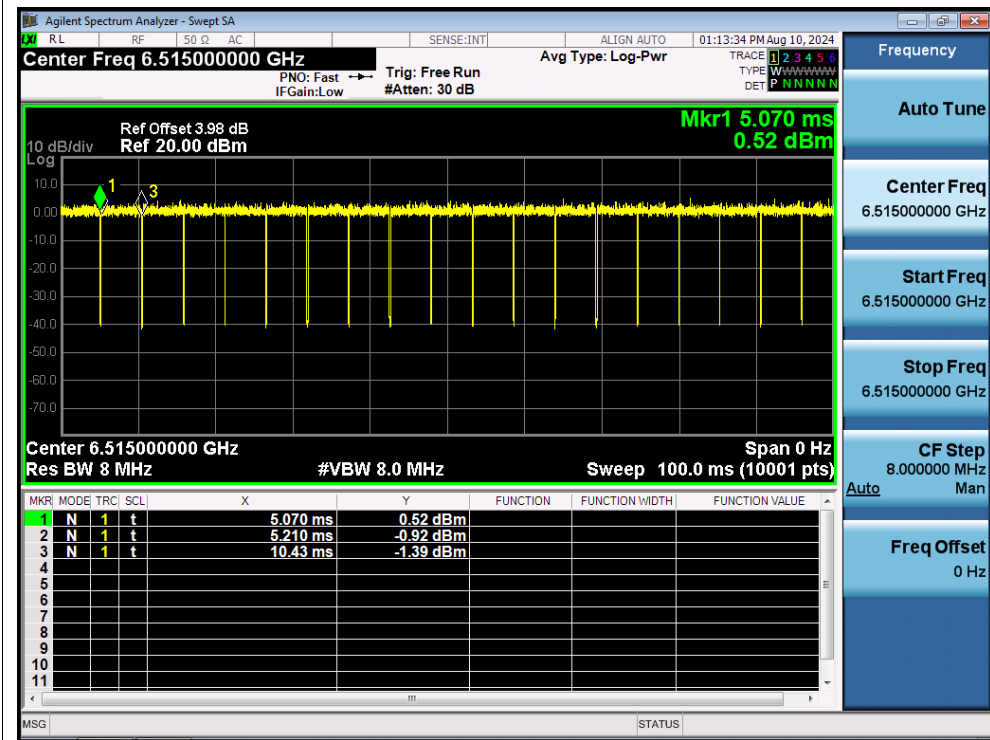
Duty Cycle NVNT ax20 6435MHz Ant2



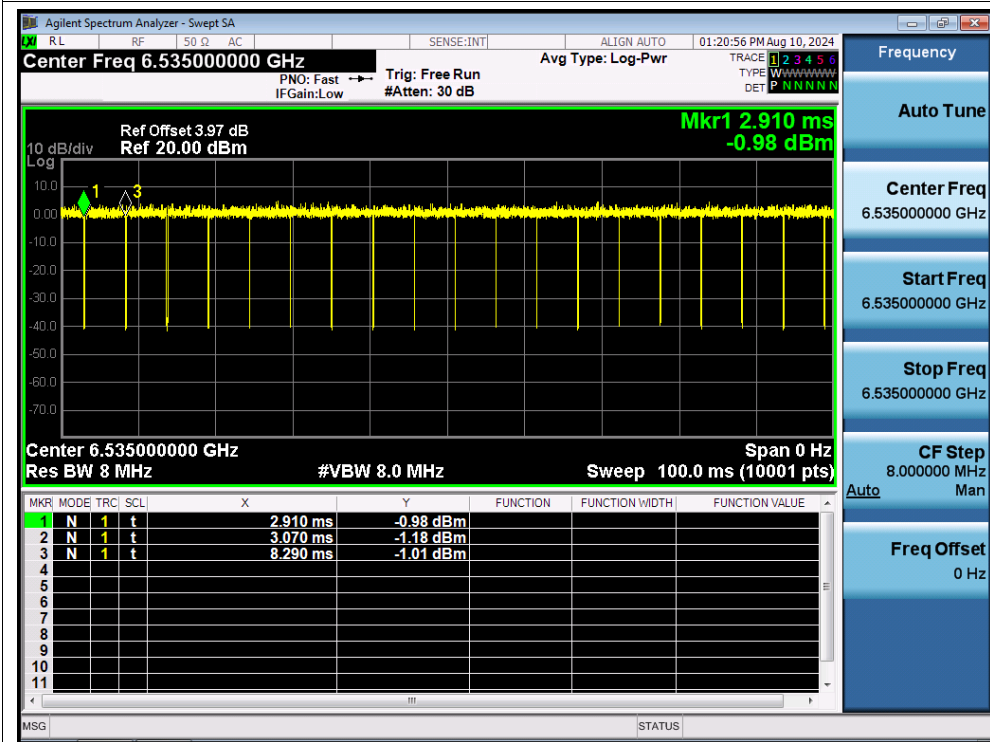
Duty Cycle NVNT ax20 6475MHz Ant2



Duty Cycle NVNT ax20 6515MHz Ant2



Duty Cycle NVNT ax20 6535MHz Ant2



Duty Cycle NVNT ax20 6695MHz Ant2

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:24:13 PM Aug 10, 2024

Center Freq 6.695000000 GHz Avg Type: Log-Pwr

PNO: Fast → Trig: Free Run
IF Gain: Low #Atten: 30 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W W
DET P N N N N N

Ref Offset 4.11 dB
Ref 20.00 dBm

Mkr1 4.430 ms
2.23 dBm

10 dB/div
Log

Center 6.695000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	4.430 ms	2.23 dBm			
2	N	1	t	4.610 ms	1.89 dBm			
3	N	1	t	9.830 ms	2.25 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

Frequency

Auto Tune

Center Freq
6.695000000 GHz

Start Freq
6.695000000 GHz

Stop Freq
6.695000000 GHz

CF Step
8.000000 MHz
Man

Freq Offset
0 Hz

MSG STATUS

Duty Cycle NVNT ax20 6855MHz Ant2

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:17:49 PM Aug 10, 2024

Center Freq 6.855000000 GHz Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE W W W W W W W W
DET P N N N N N

Ref Offset 4.16 dB
Ref 20.00 dBm

10 dB/div
Log

10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0

Center 6.855000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr1 2.020 ms
-1.38 dBm

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	2.020 ms	-1.38 dBm			
2	N	1	t	2.150 ms	-3.13 dBm			
3	N	1	t	7.370 ms	-2.97 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq
6.855000000 GHz

Start Freq
6.855000000 GHz

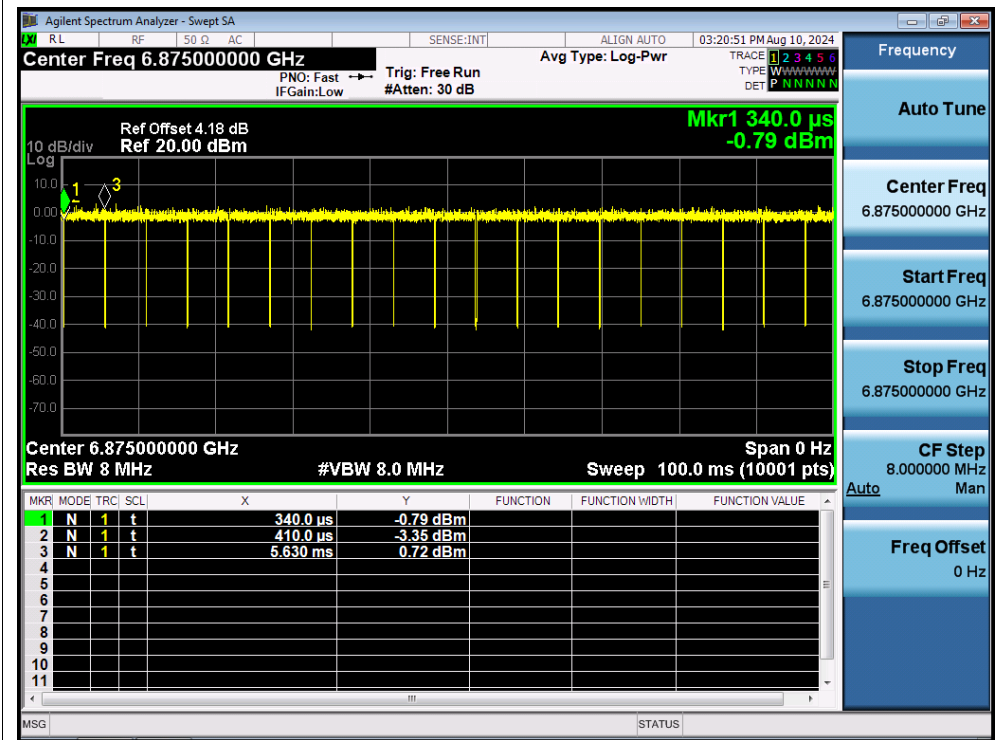
Stop Freq
6.855000000 GHz

CF Step
8.000000 MHz
Man

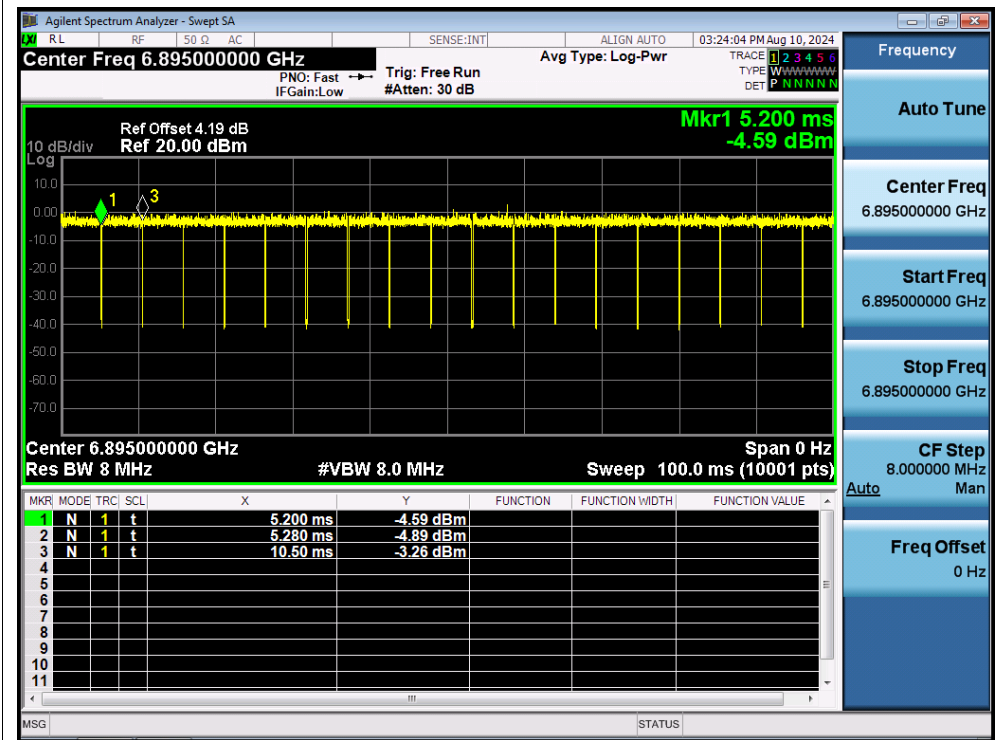
Auto

Freq Offset
0 Hz

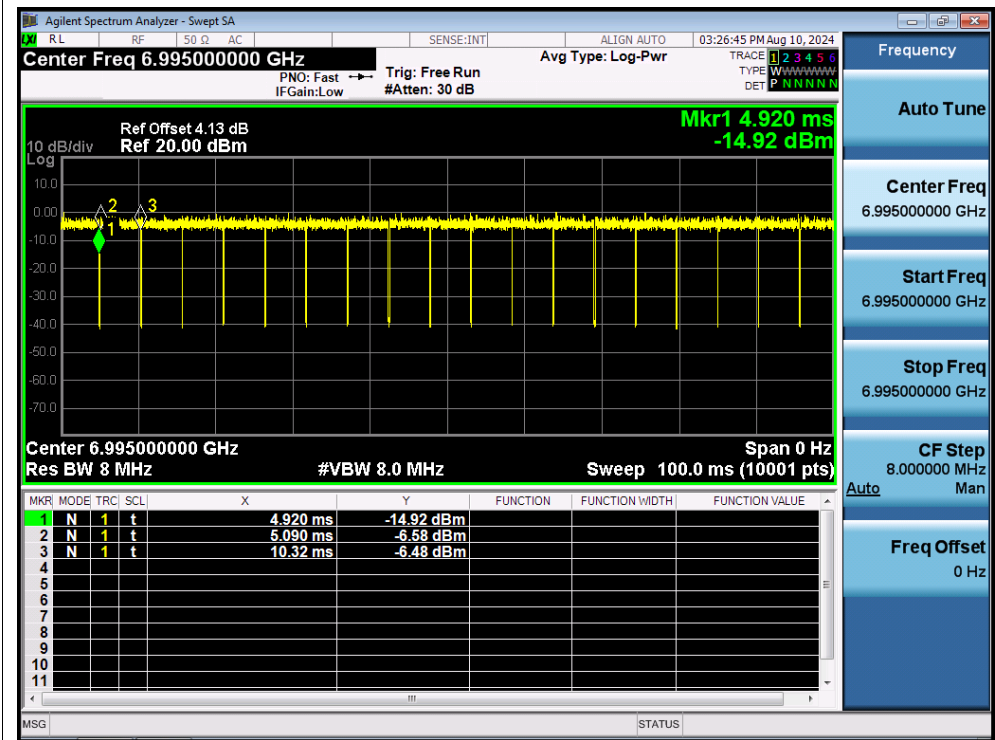
Duty Cycle NVNT ax20 6875MHz Ant2



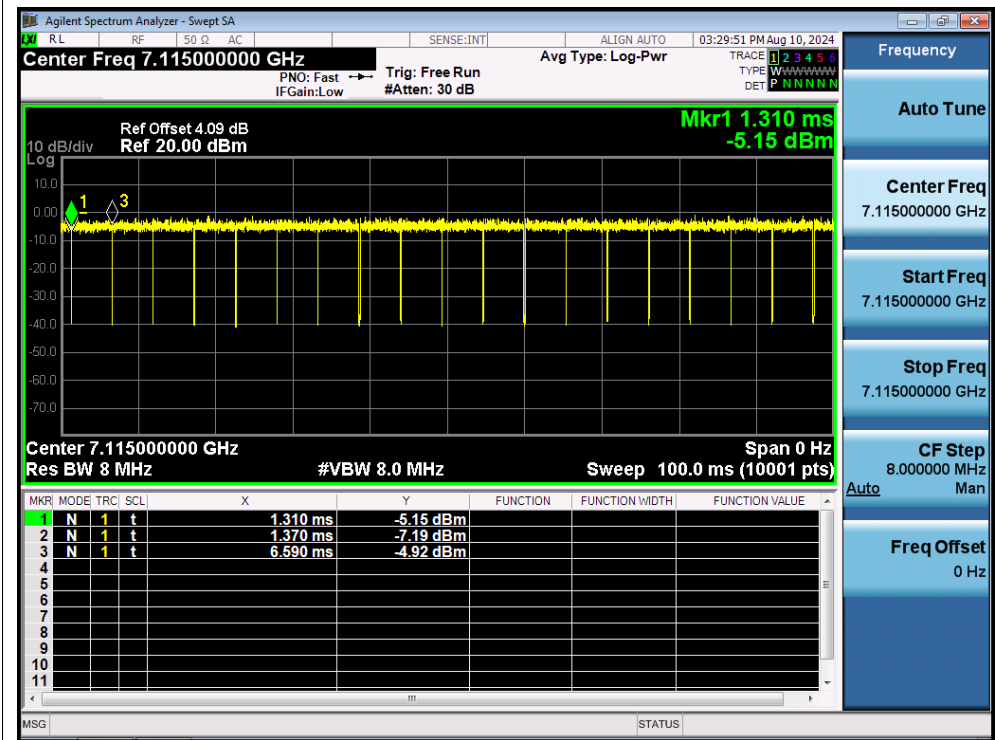
Duty Cycle NVNT ax20 6895MHz Ant2



Duty Cycle NVNT ax20 6995MHz Ant2



Duty Cycle NVNT ax20 7115MHz Ant2



Duty Cycle NVent ax20 5955MHz Ant3

The screenshot displays the Agilent Spectrum Analyzer interface. The main plot shows a spectrum with a yellow trace. A green marker is placed at 2.740 ms, with a value of -0.28 dBm. The plot is titled 'Center Freq 5.95500000 GHz' and 'Span 0 Hz'. The resolution bandwidth is 8 MHz, and the sweep time is 100.0 ms. The plot also shows 'Ref Offset 3.88 dB' and 'Ref 20.00 dBm'.

The table below shows the measurement data for the spectrum plot:

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	2.740 ms	-0.28 dBm			
2	N	1	t	2.800 ms	-1.65 dBm			
3	N	1	t	8.030 ms	-3.24 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

The right side of the interface shows the 'Frequency' panel with the following settings:

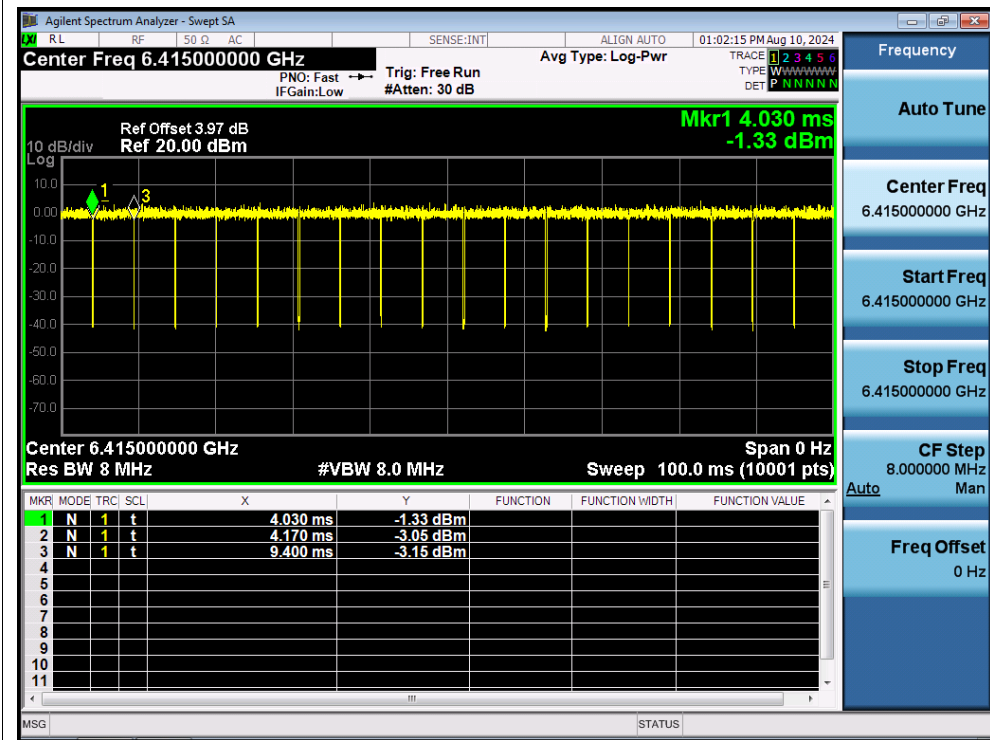
- Auto Tune
- Center Freq: 5.95500000 GHz
- Start Freq: 5.95500000 GHz
- Stop Freq: 5.95500000 GHz
- CF Step: 8.000000 MHz
- Man
- Auto
- Freq Offset: 0 Hz

The bottom of the interface shows the 'MSG' and 'STATUS' panels.

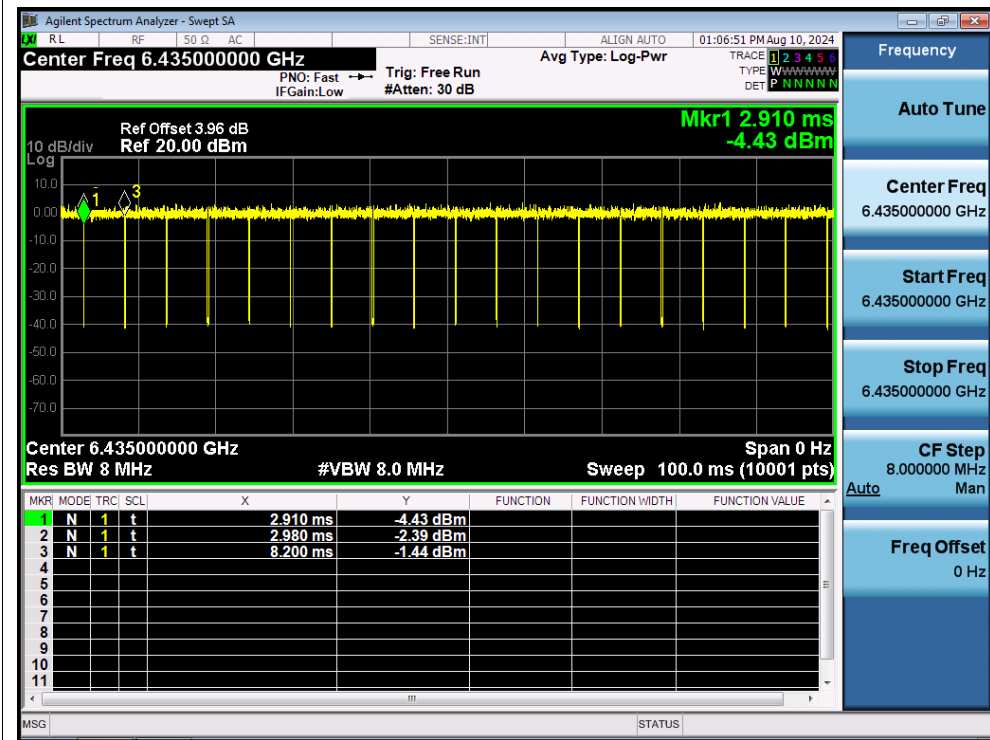
The screenshot shows the Agilent Spectrum Analyzer interface. The main display area shows a spectrum plot with a yellow trace. Key measurements are displayed in green text: Mkr1 1.480 ms and 2.04 dBm. The center frequency is 6.17500000 GHz. Other settings include Ref Offset 3.83 dB, Ref 20.00 dBm, PNO: Fast, IF Gain: Low, Trig: Free Run, #Atten: 30 dB, Avg Type: Log-Pwr, and Span 0 Hz. A table at the bottom lists measurement results for three markers.

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.480 ms	2.04 dBm			
2	N	1	t	1.550 ms	2.24 dBm			
3	N	1	t	6.770 ms	1.88 dBm			

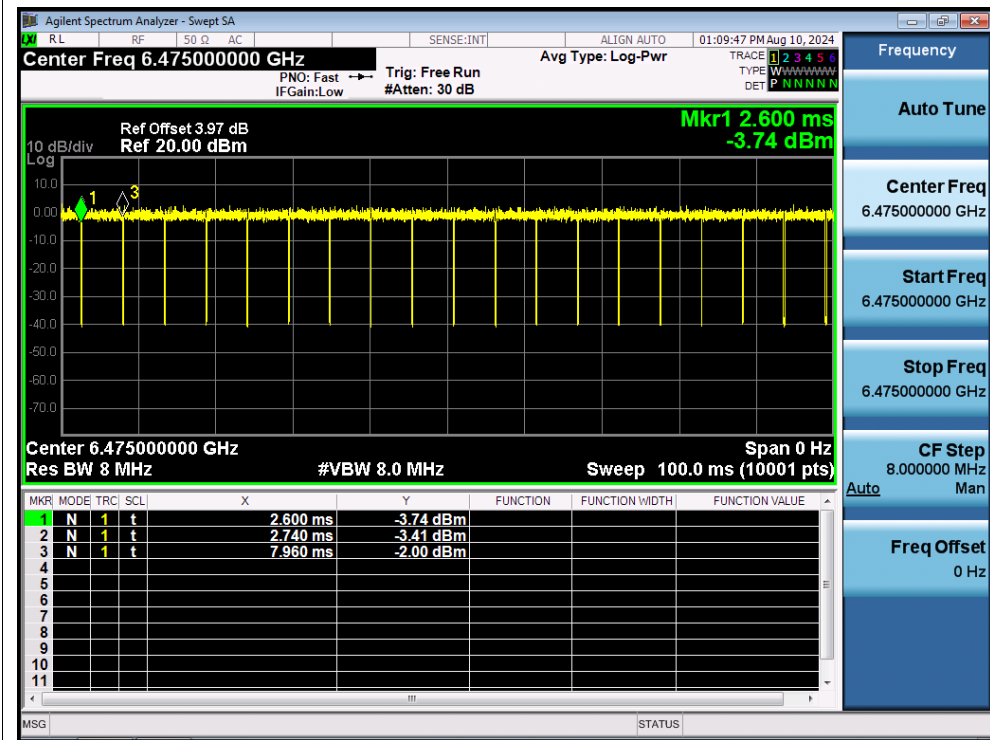
Duty Cycle NVNT ax20 6415MHz Ant3



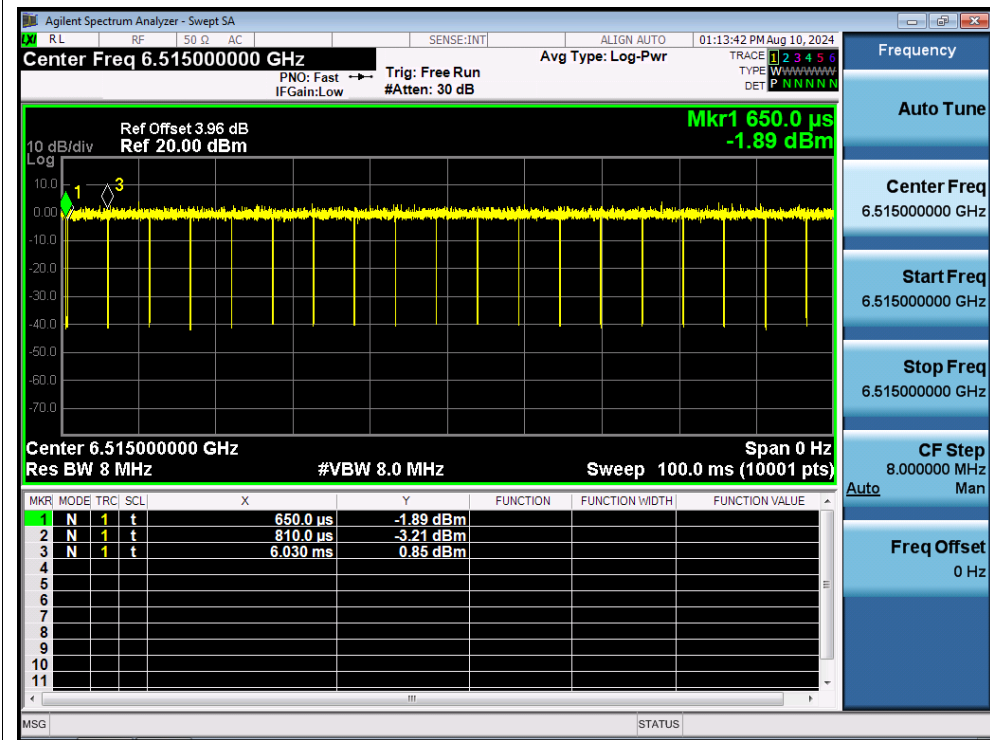
Duty Cycle NVNT ax20 6435MHz Ant3



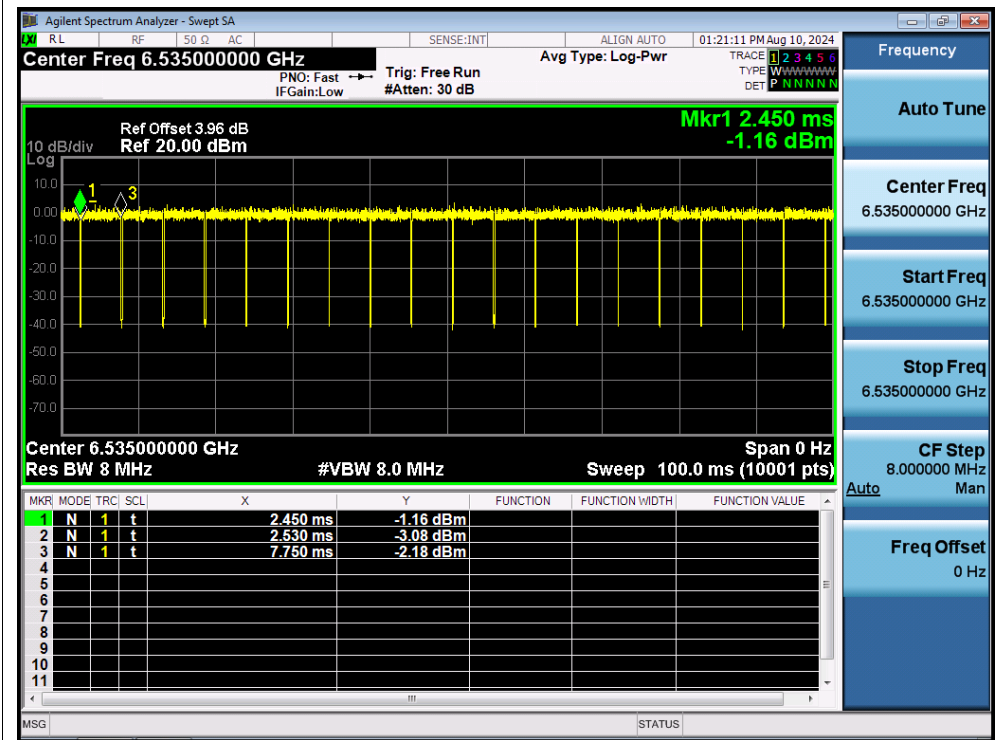
Duty Cycle NVNT ax20 6475MHz Ant3



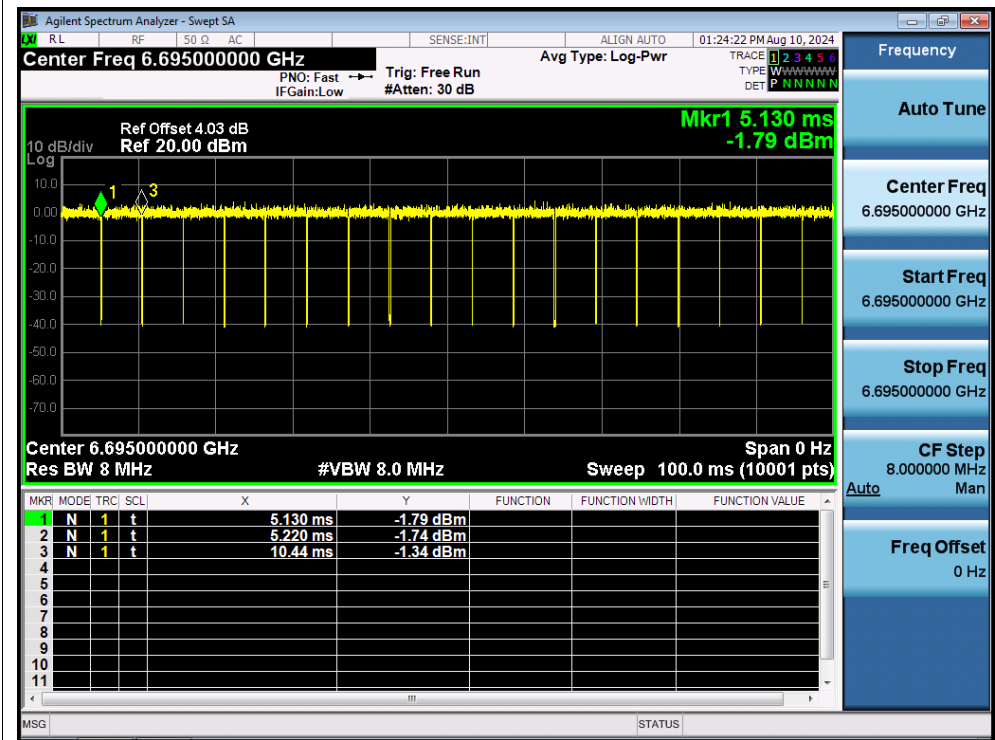
Duty Cycle NVNT ax20 6515MHz Ant3



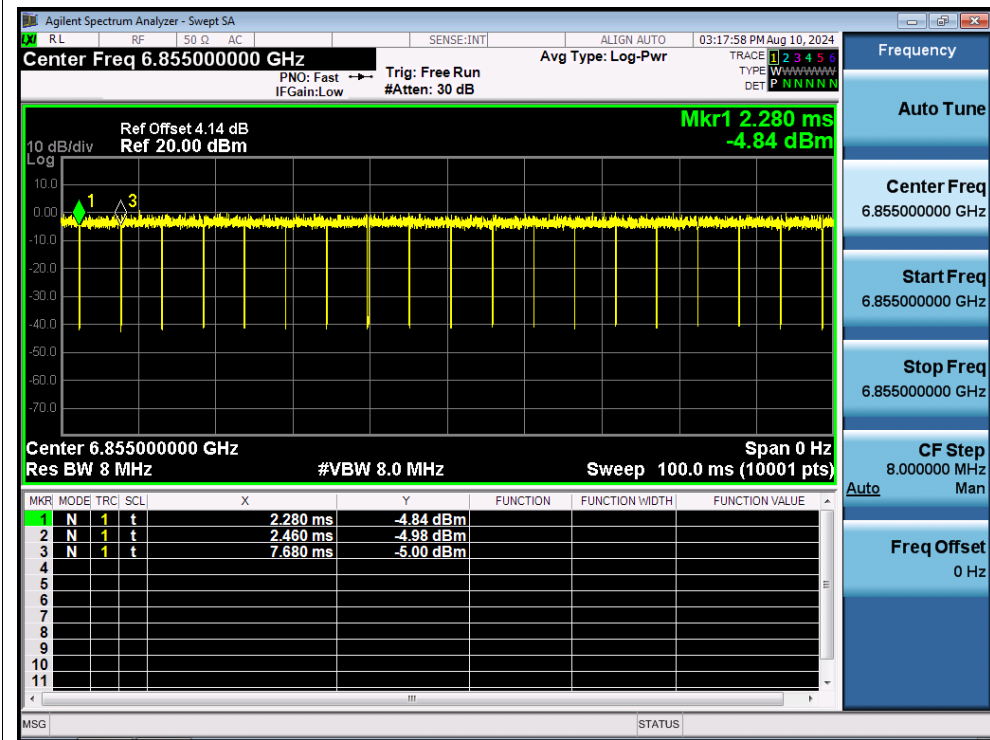
Duty Cycle NVNT ax20 6535MHz Ant3



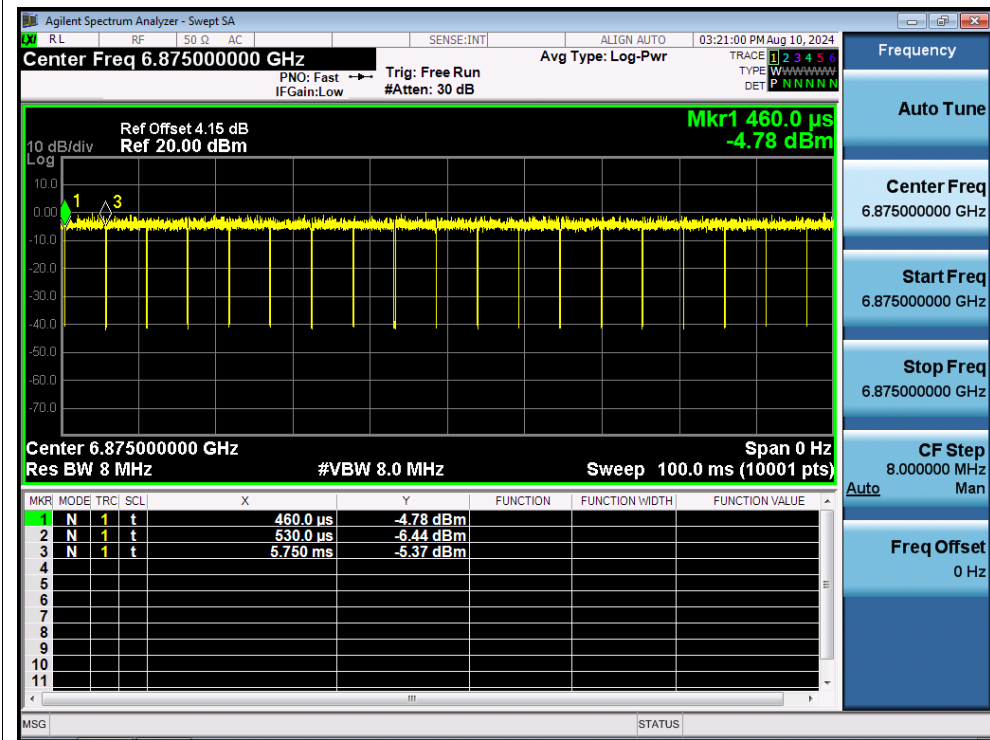
Duty Cycle NVNT ax20 6695MHz Ant3



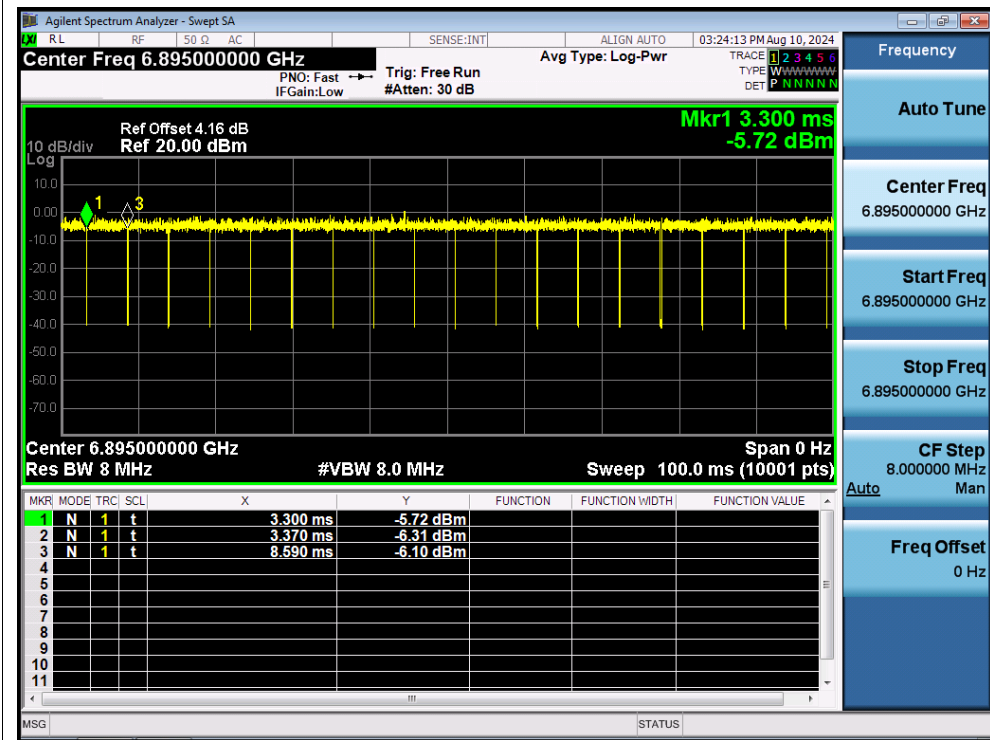
Duty Cycle NVNT ax20 6855MHz Ant3



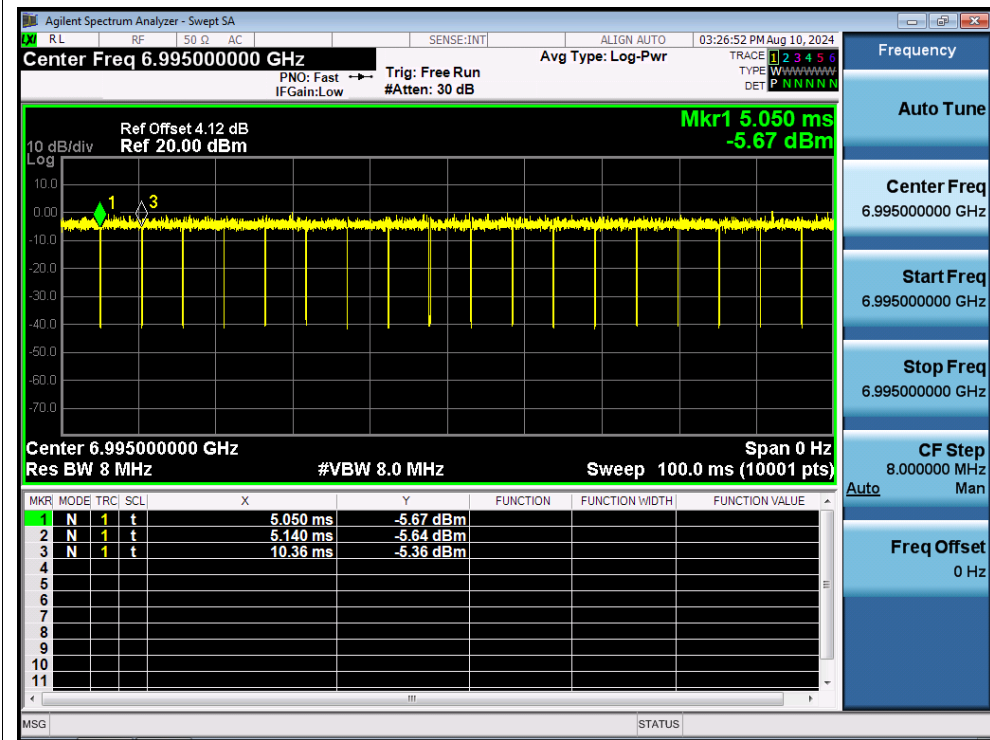
Duty Cycle NVNT ax20 6875MHz Ant3



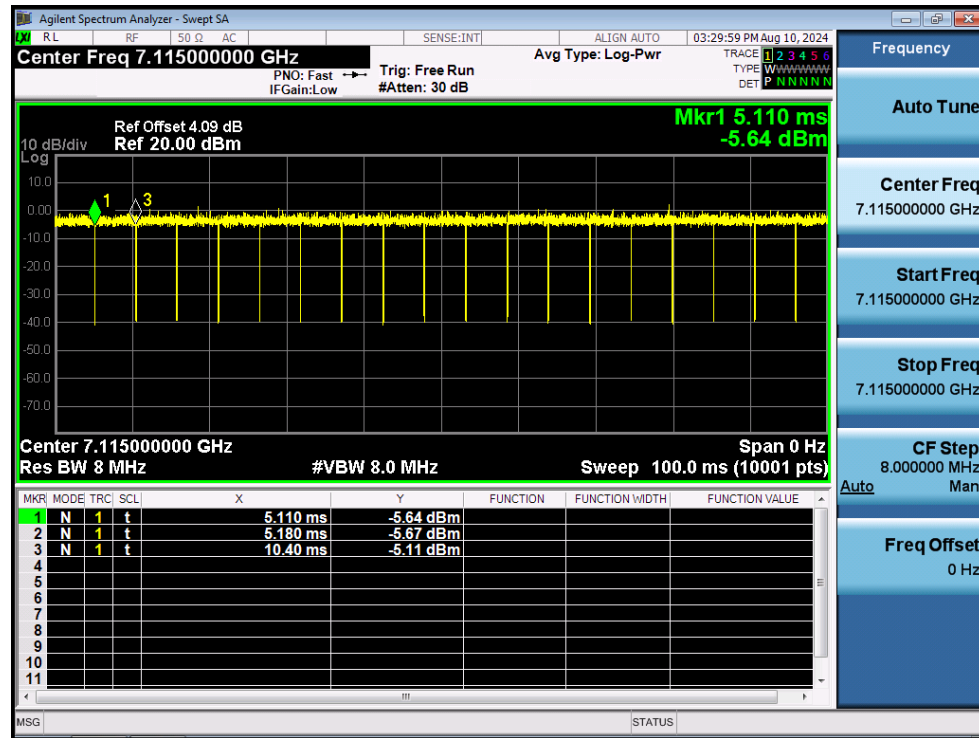
Duty Cycle NVNT ax20 6895MHz Ant3



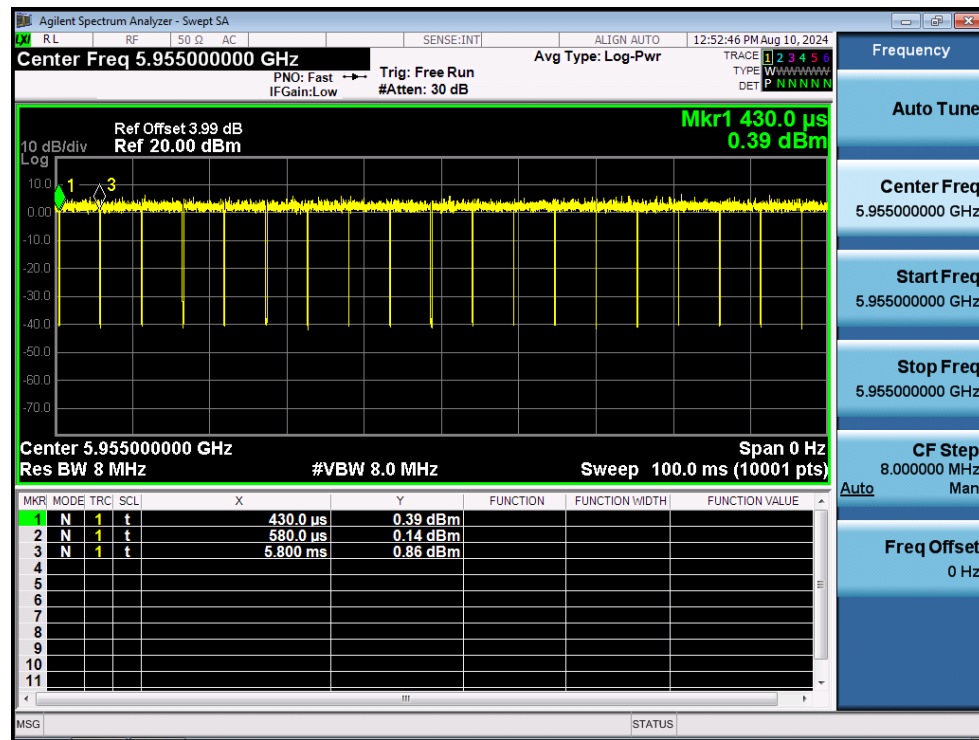
Duty Cycle NVNT ax20 6995MHz Ant3



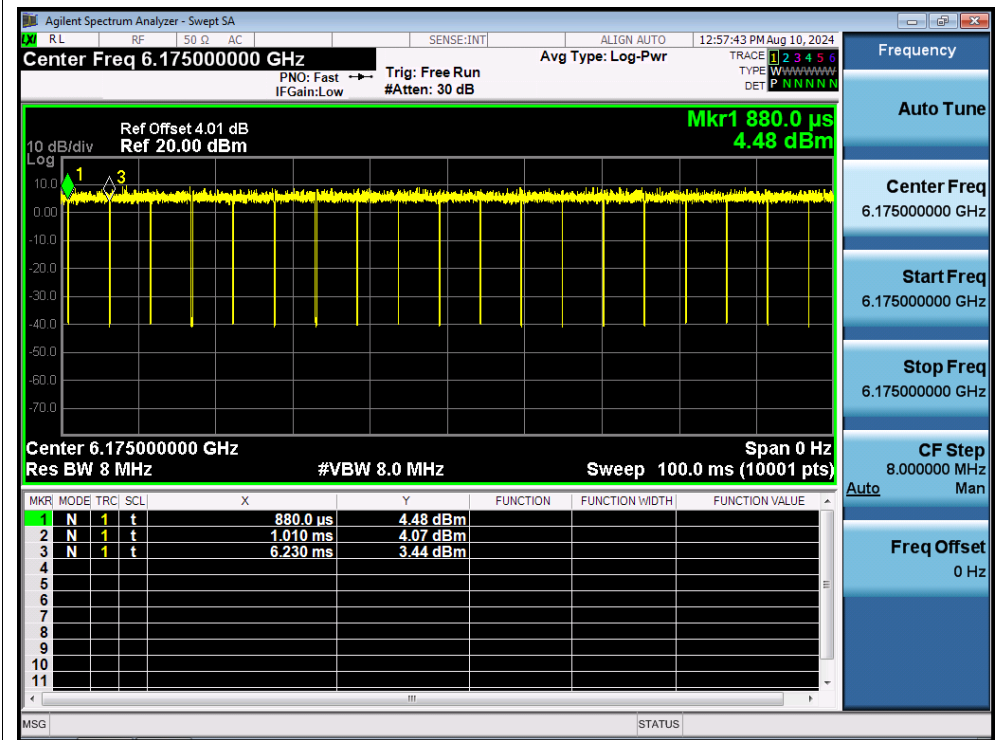
Duty Cycle NVNT ax20 7115MHz Ant3



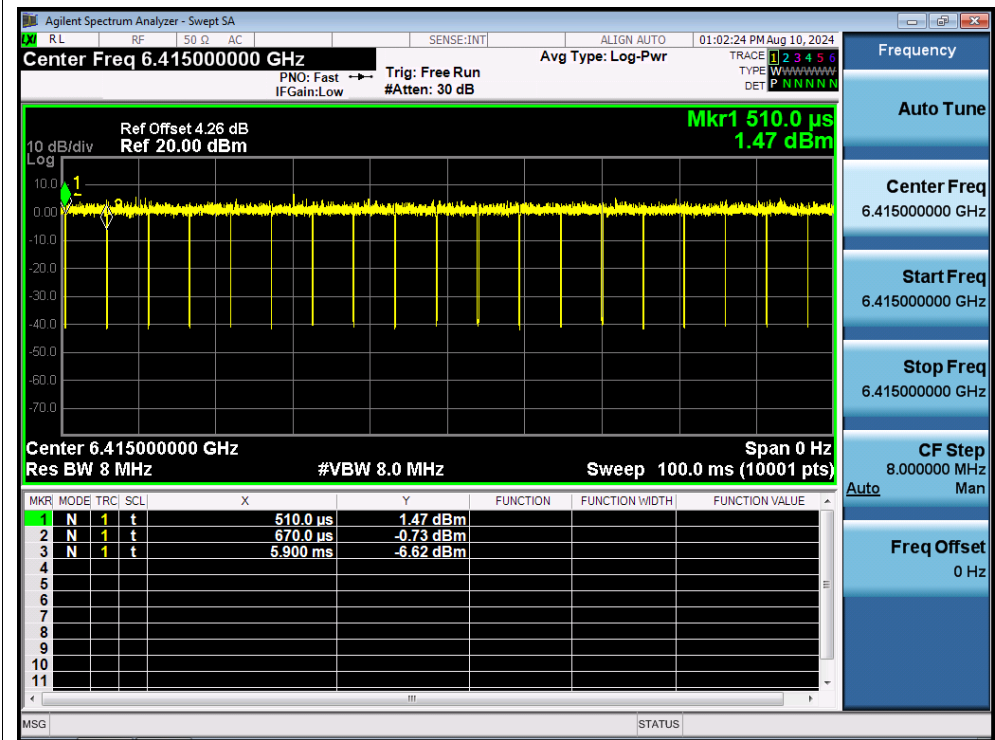
Duty Cycle NVNT ax20 5955MHz Ant4



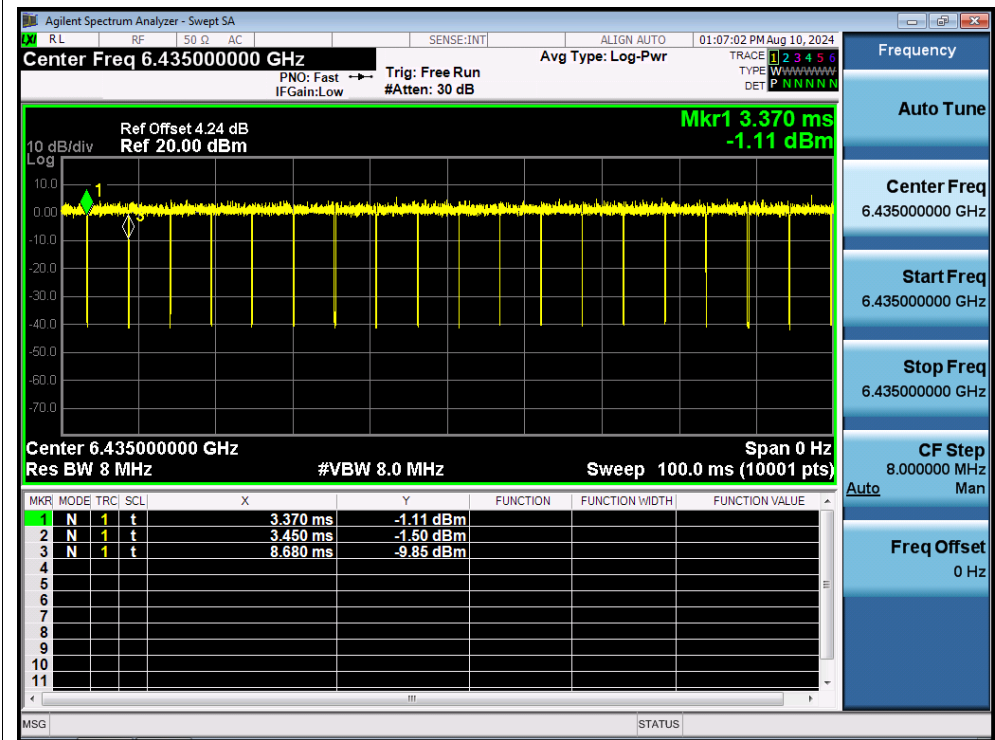
Duty Cycle NVNT ax20 6175MHz Ant4



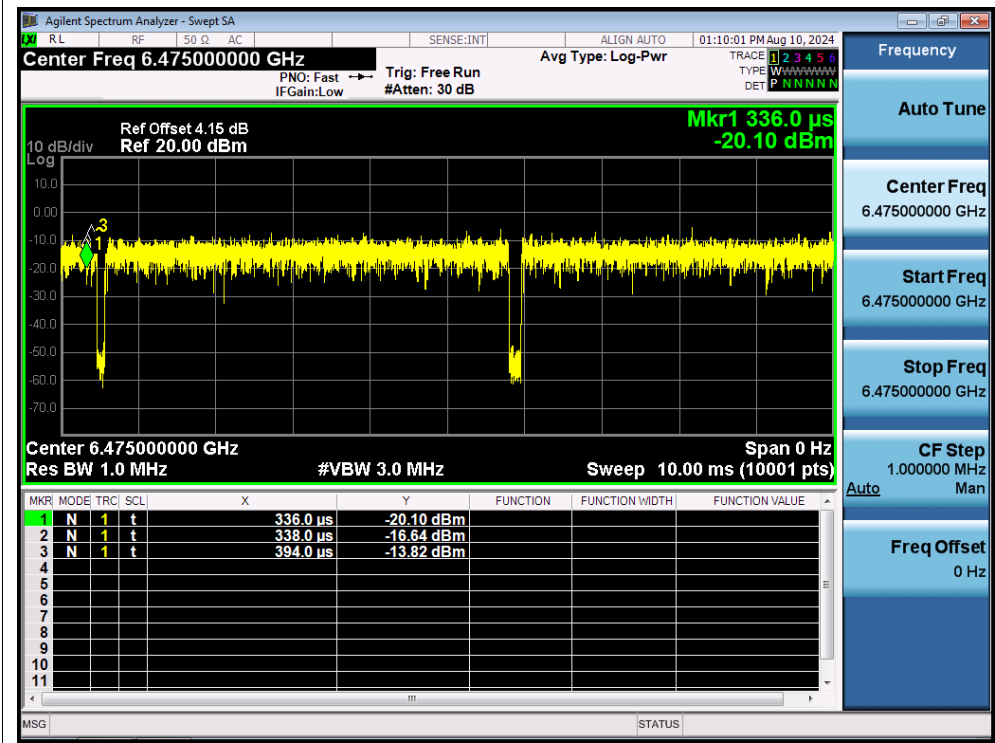
Duty Cycle NVNT ax20 6415MHz Ant4



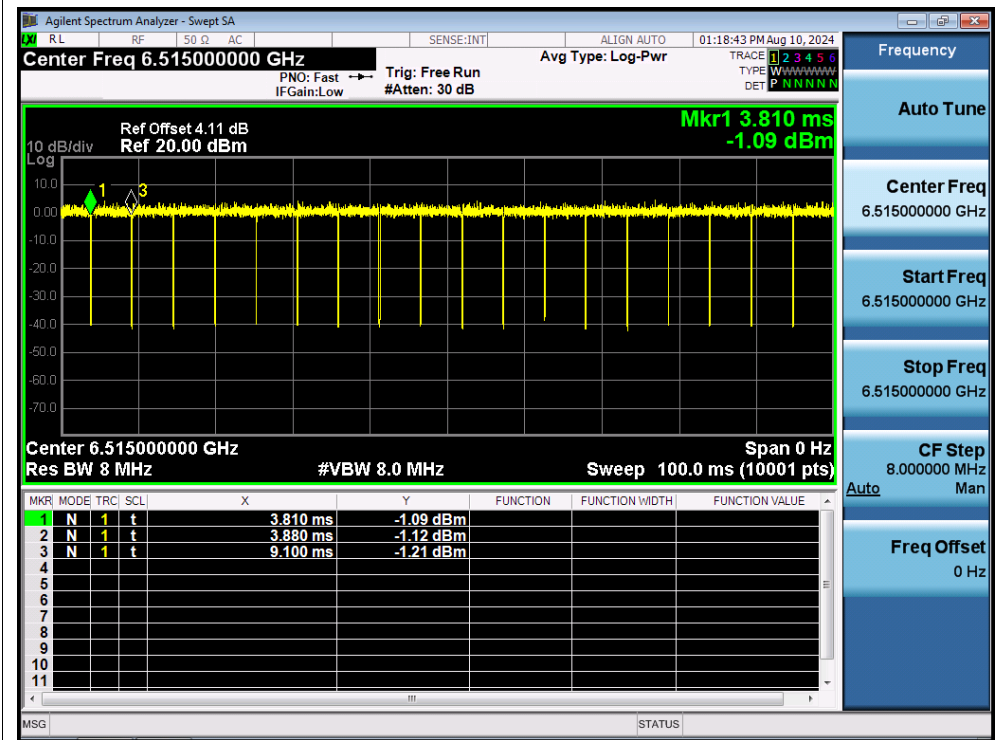
Duty Cycle NVNT ax20 6435MHz Ant4



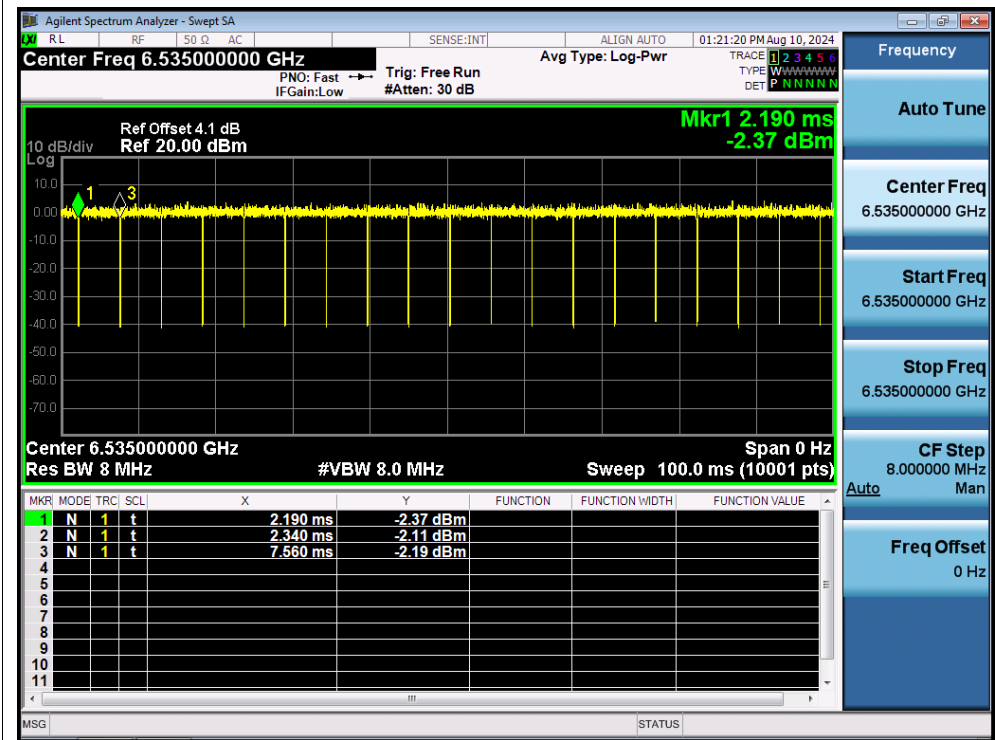
Duty Cycle NVNT ax20 6475MHz Ant4



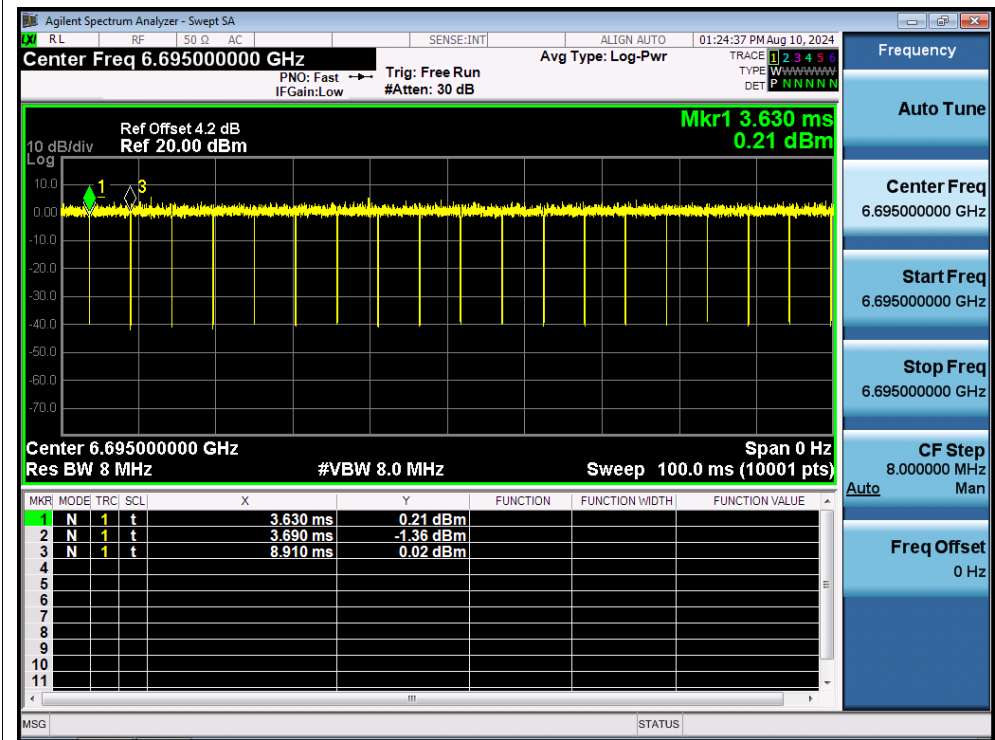
Duty Cycle NVNT ax20 6515MHz Ant4



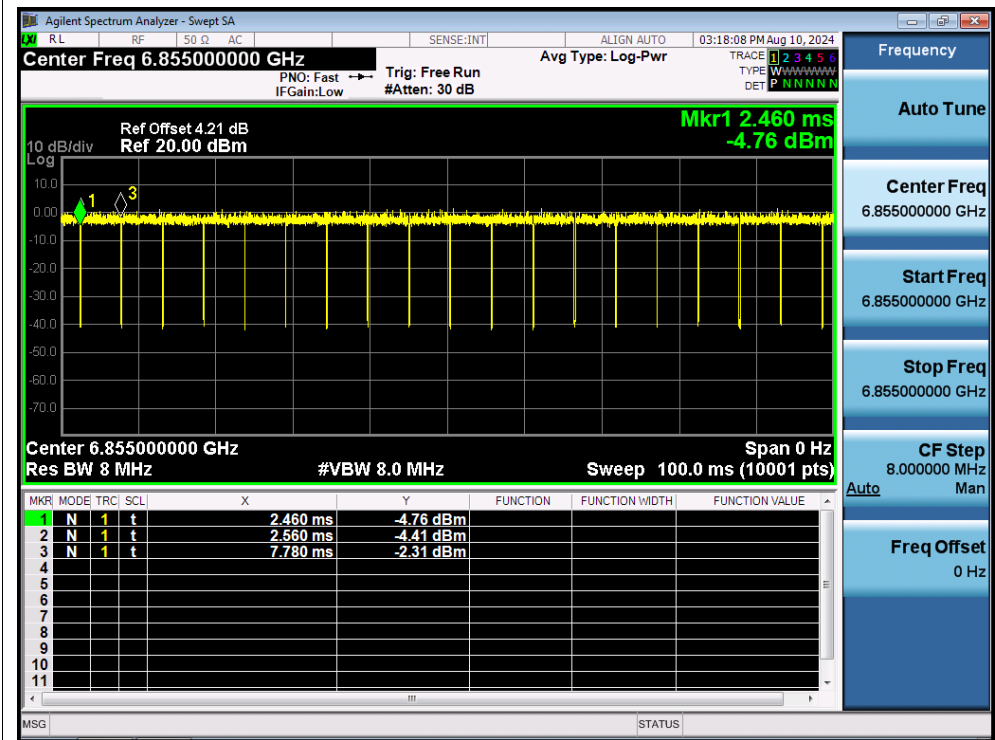
Duty Cycle NVNT ax20 6535MHz Ant4



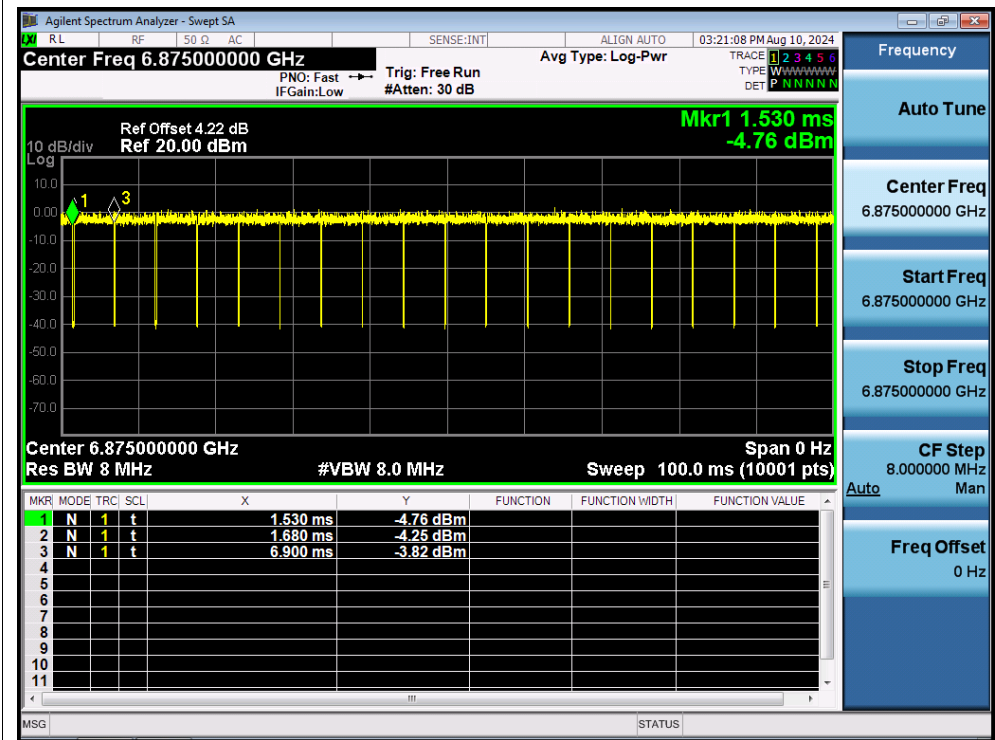
Duty Cycle NVNT ax20 6695MHz Ant4



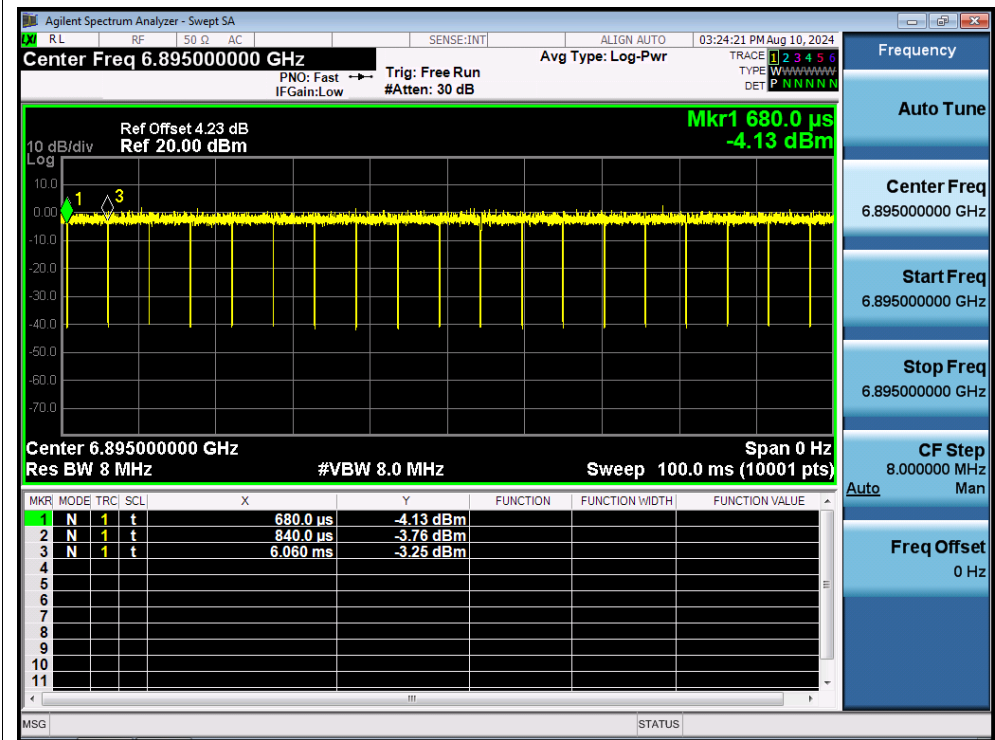
Duty Cycle NVNT ax20 6855MHz Ant4



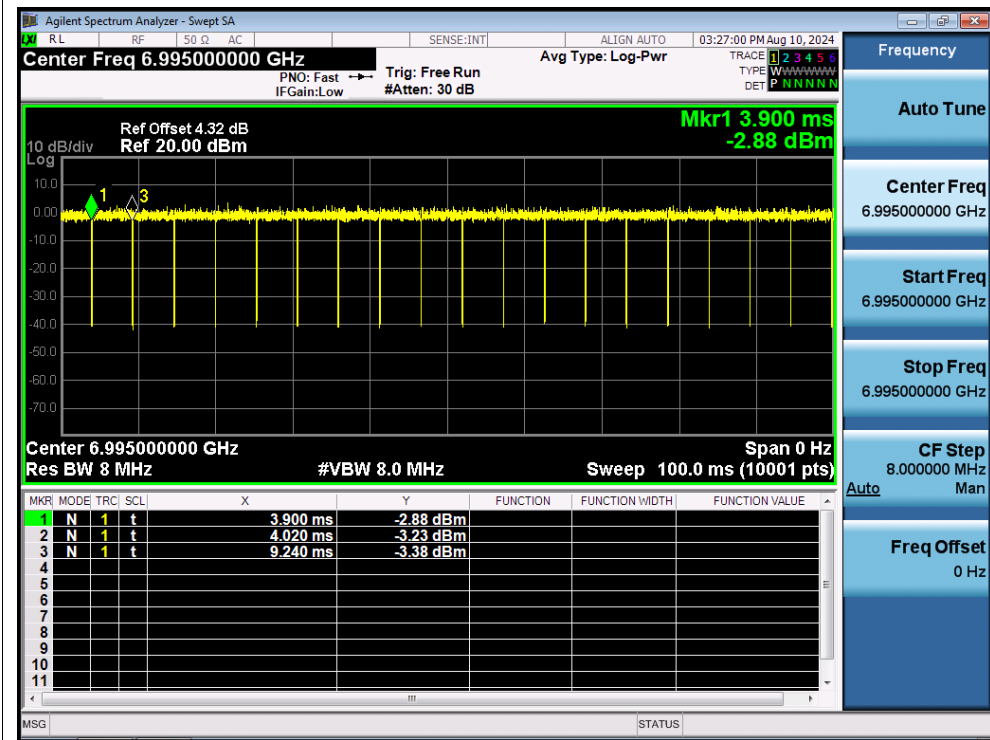
Duty Cycle NVNT ax20 6875MHz Ant4



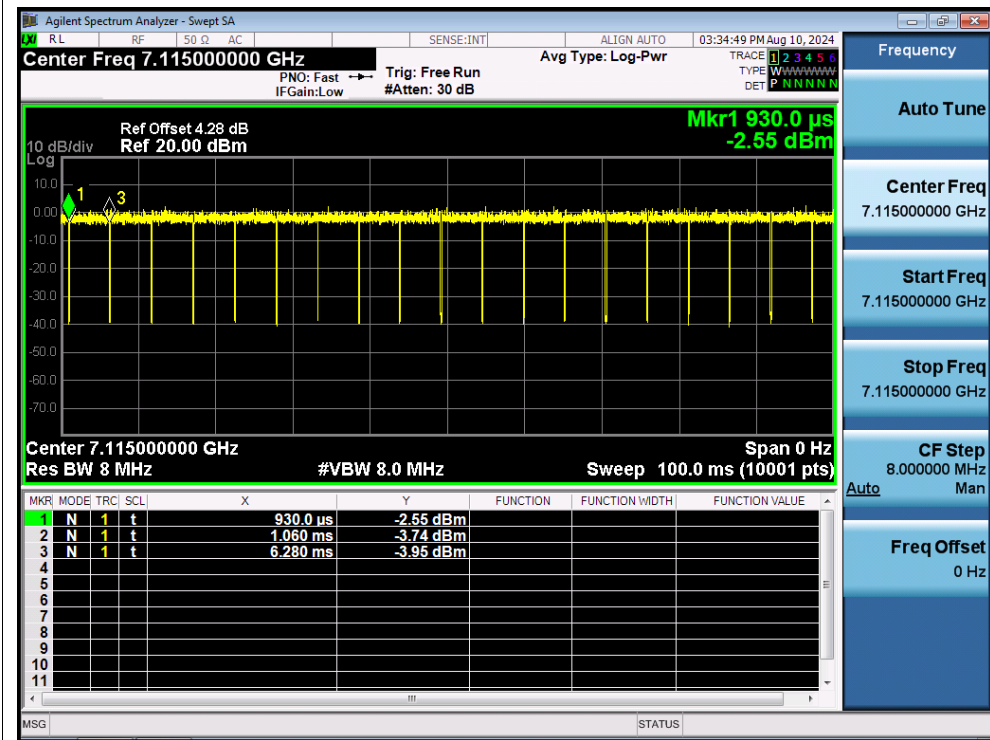
Duty Cycle NVNT ax20 6895MHz Ant4



Duty Cycle NVNT ax20 6995MHz Ant4



Duty Cycle NVNT ax20 7115MHz Ant4



Agilent Spectrum Analyzer - Sweep SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 12:53:20 PM Aug 10, 2024

Center Freq 5.955000000 GHz PNO: Fast Trig: Free Run Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
IF Gain: Low #Atten: 30 dB TYPE W W W W W W W W
DET P N N N N N N N

Ref Offset 3.9 dB Mkr1 10.00 μs
Ref 20.00 dBm 5.65 dBm

10 dB/div Log

Center 5.955000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	10.00 μs	5.65 dBm			
2	N	1	t	160.0 μs	5.23 dBm			
3	N	1	t	5.390 ms	4.88 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq 5.955000000 GHz

Start Freq 5.955000000 GHz

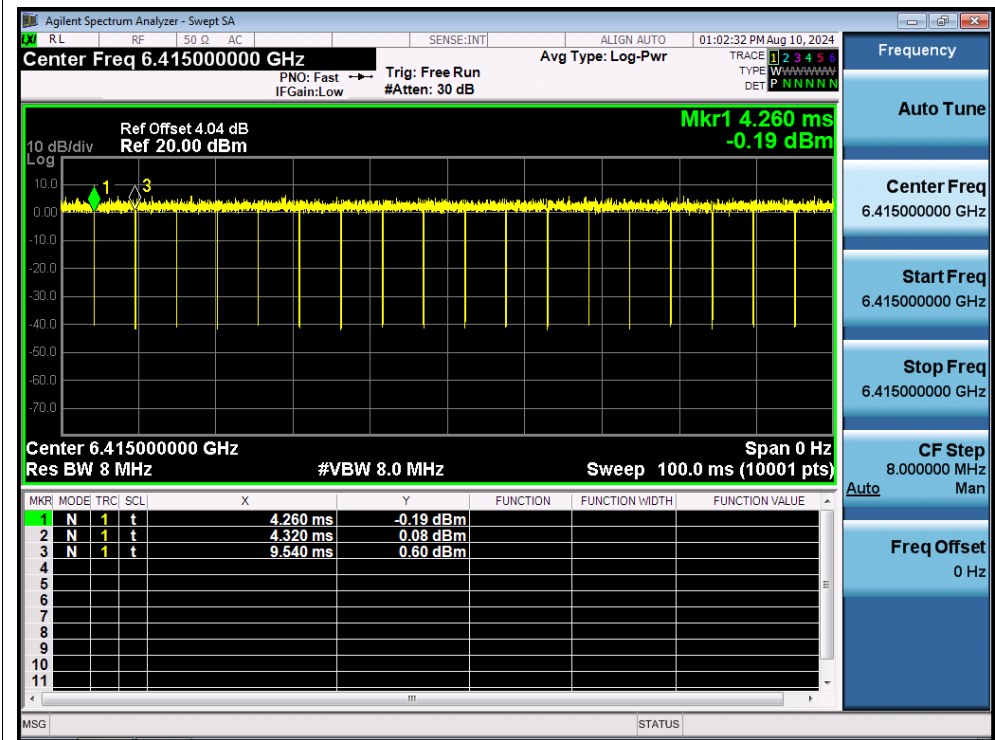
Stop Freq 5.955000000 GHz

CF Step 8.000000 MHz Man

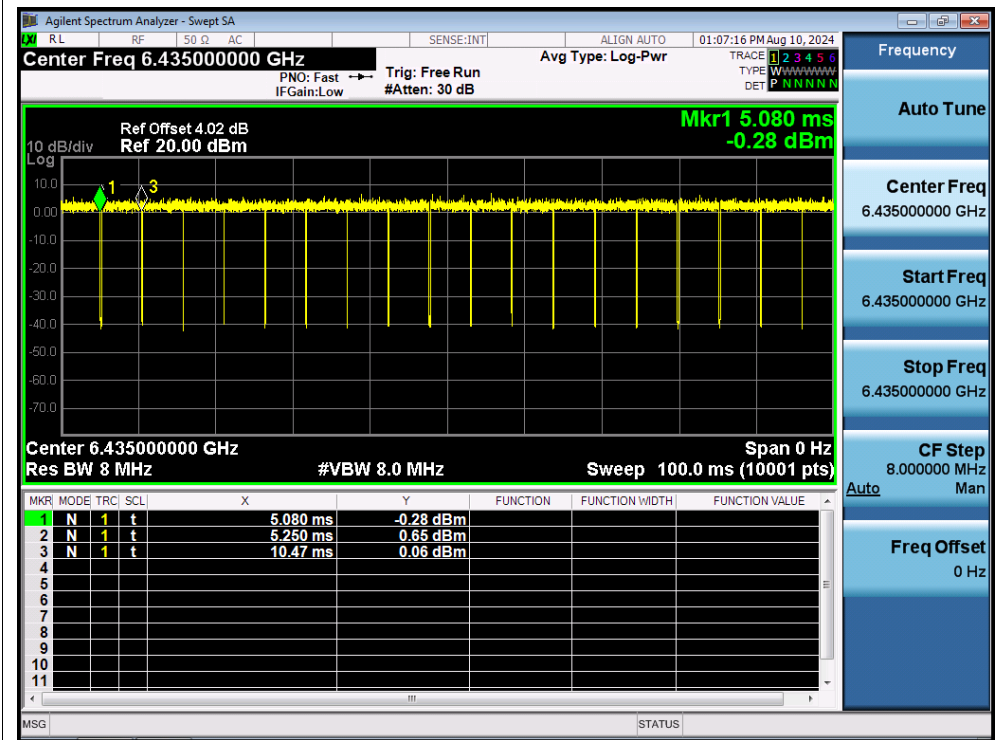
Freq Offset 0 Hz

[illegible]

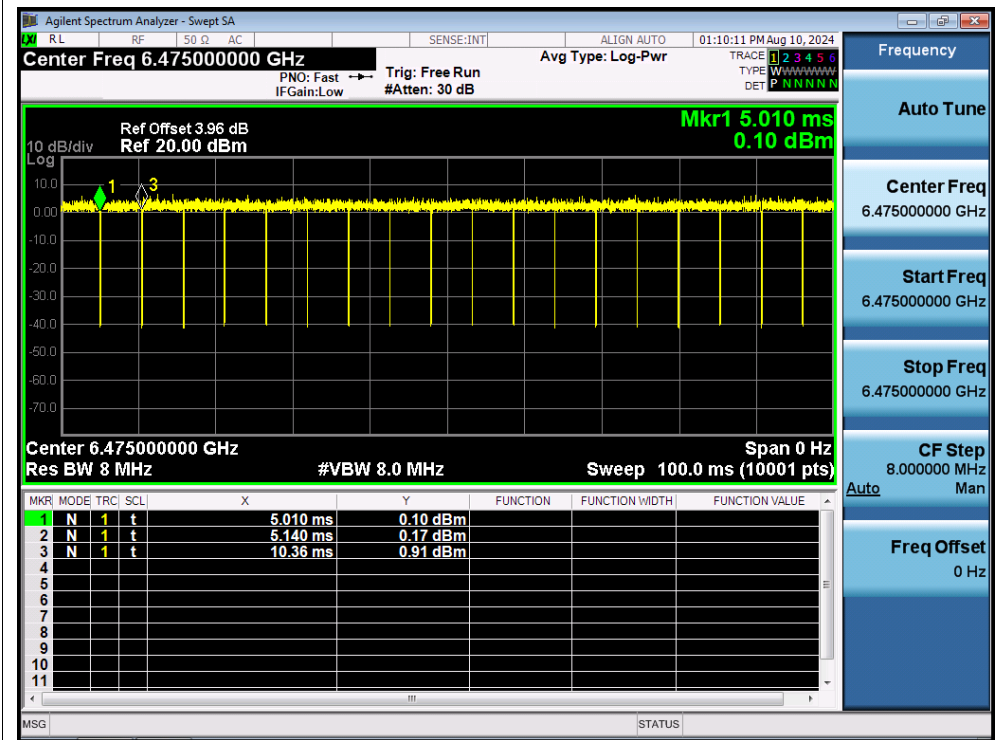
Duty Cycle NVNT ax20 6415MHz Sum



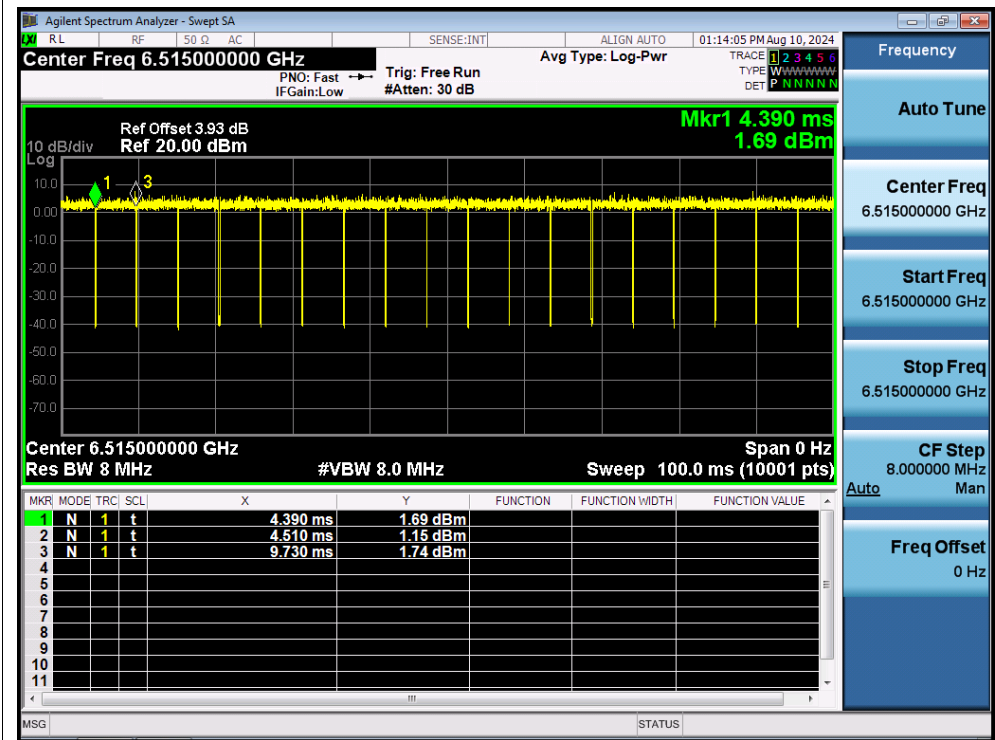
Duty Cycle NVNT ax20 6435MHz Sum



Duty Cycle NVNT ax20 6475MHz Sum



Duty Cycle NVNT ax20 6515MHz Sum



Duty Cycle NVNT ax20 6535MHz Sum

Agilent Spectrum Analyzer - Sweep SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 01:21:34 PM Aug 10, 2024

Center Freq 6.535000000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6 TYPE P NNNNNN DET P NNNNNN

Ref Offset 3.93 dB
Ref 20.00 dBm

10 dB/div
Log

Mkr1 710.0 μs
4.16 dBm

Center 6.535000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	710.0 μs	4.16 dBm			
2	N	1	t	770.0 μs	0.50 dBm			
3	N	1	t	6.000 ms	0.82 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq
6.535000000 GHz

Start Freq
6.535000000 GHz

Stop Freq
6.535000000 GHz

CF Step
8.000000 MHz
Man

Auto

Freq Offset
0 Hz

Duty Cycle NVNT ax20 6695MHz Sum

Agilent Spectrum Analyzer - Sweep SA

Center Freq 6.695000000 GHz

PNO: Fast → Trig: Free Run

IF Gain: Low #Atten: 30 dB

Ave Type: Log-Pwr

Ref Offset 4.09 dB

Ref 20.00 dBm

Mkr1 2.290 ms
-0.89 dBm

10 dB/div Log

Center 6.695000000 GHz

Res BW 8 MHz

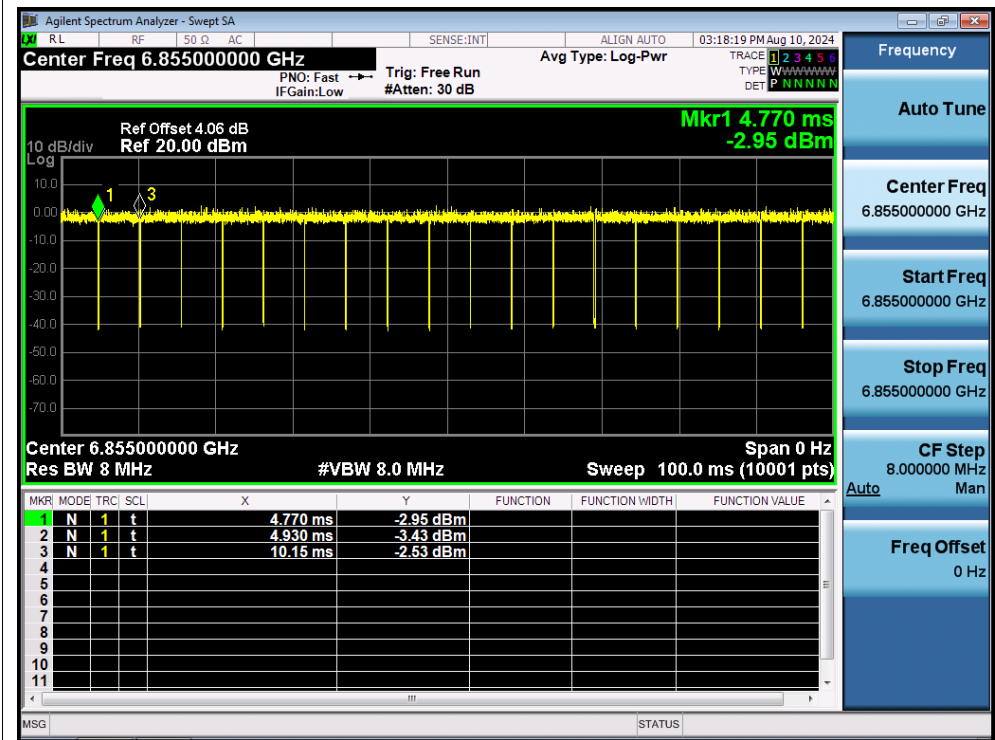
#VBW 8.0 MHz

Span 0 Hz

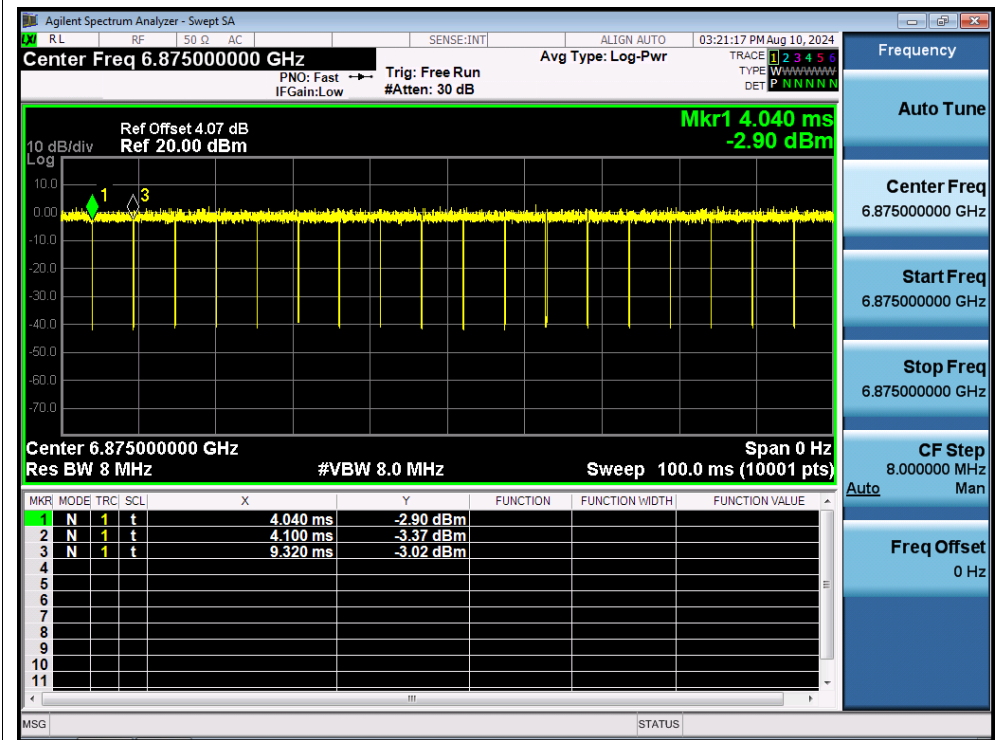
Sweep 100.0 ms (10001 pts)

Mkr	Mode	Trc	Scl	X	Y	Function	Function Width	Function Value
1	N	1	t	2.290 ms	-0.89 dBm			
2	N	1	t	2.390 ms	-1.25 dBm			
3	N	1	t	7.610 ms	-0.15 dBm			

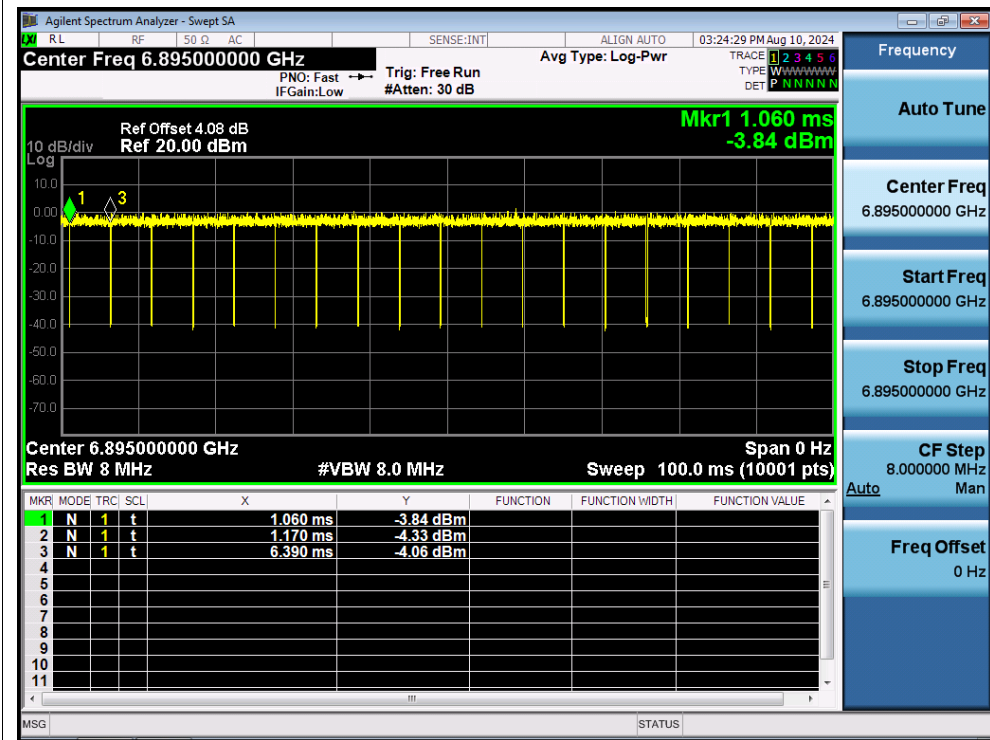
Duty Cycle NVNT ax20 6855MHz Sum



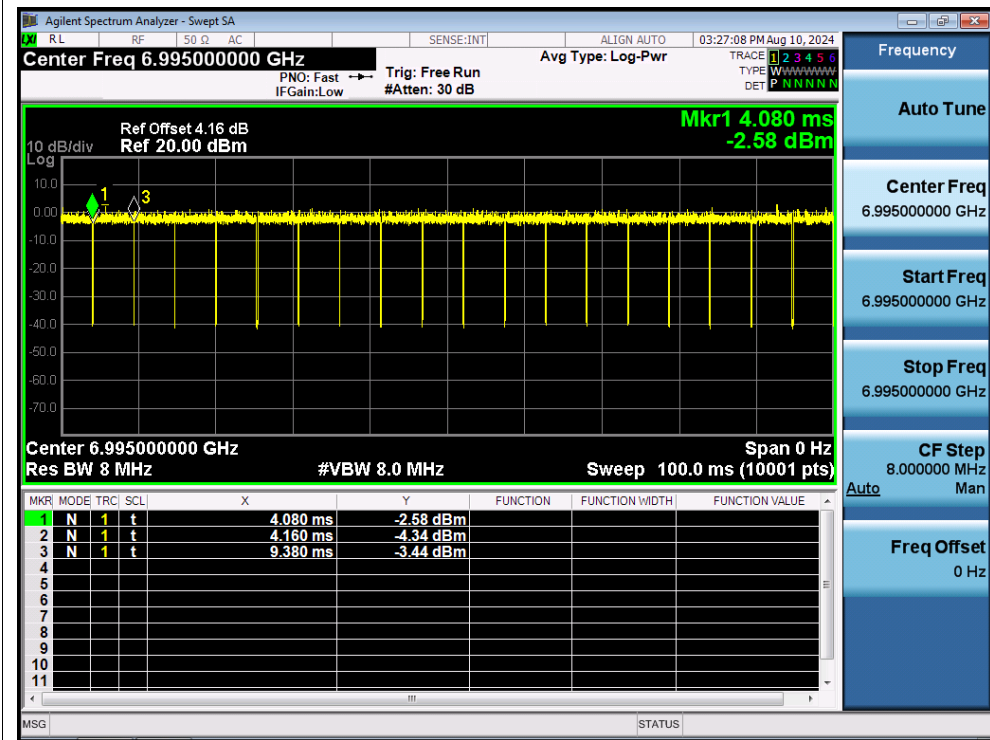
Duty Cycle NVNT ax20 6875MHz Sum



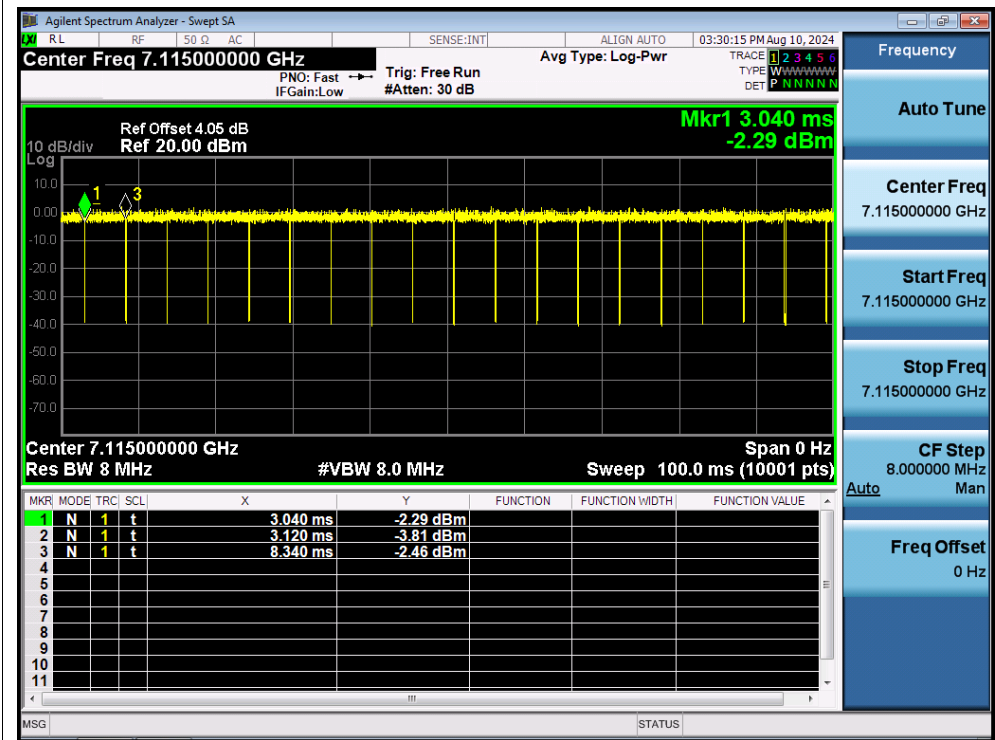
Duty Cycle NVNT ax20 6895MHz Sum



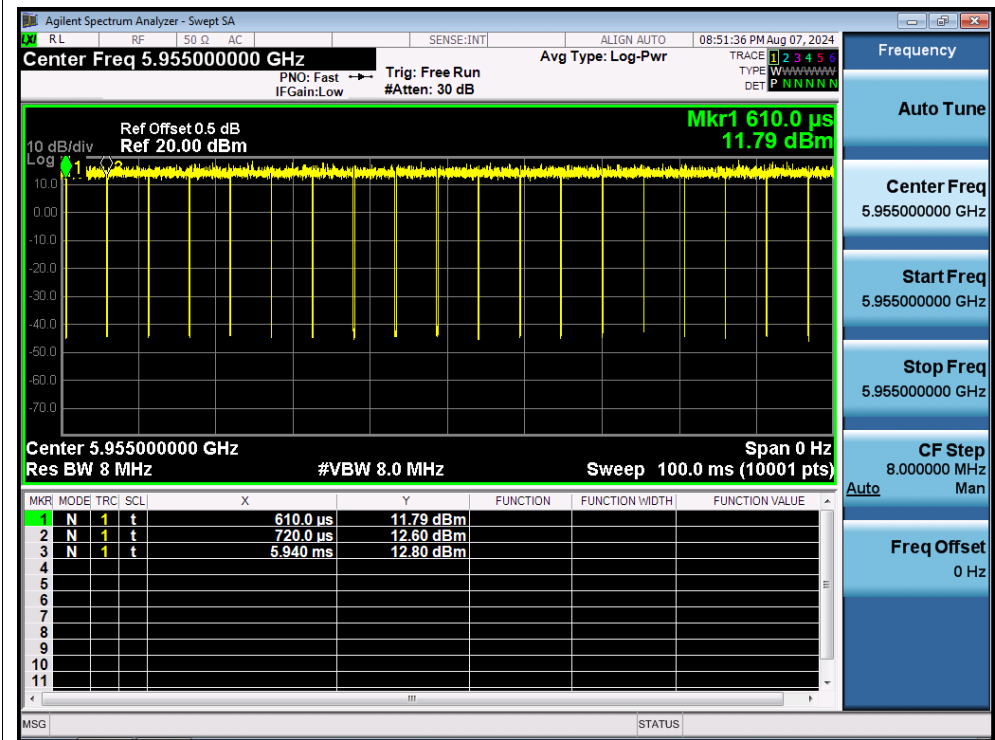
Duty Cycle NVNT ax20 6995MHz Sum



Duty Cycle NVNT ax20 7115MHz Sum



Duty Cycle NVNT ax20 5955MHz Ant1



Duty Cycle NVNT ax20 6175MHz Ant1

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 08:55:38 PM Aug 07, 2024

Center Freq 6.175000000 GHz Avg Type: Log-Pwr

PNO: Fast → Trig: Free Run
IF Gain: Low #Atten: 30 dB

Ref Offset 0.5 dB
Ref 20.00 dBm

Mkr1 4.750 ms
10.34 dBm

10 dB/div
Log

Center 6.175000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	4.750 ms	10.34 dBm			
2	N	1	t	4.840 ms	9.81 dBm			
3	N	1	t	10.06 ms	10.64 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

Frequency

Auto Tune

Center Freq
6.175000000 GHz

Start Freq
6.175000000 GHz

Stop Freq
6.175000000 GHz

CF Step
8.000000 MHz

Man

Freq Offset
0 Hz

Auto

MSG STATUS

Duty Cycle NVNT ax20 6415MHz Ant1

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 08:56:40 PM Aug 07, 2024

Center Freq 6.415000000 GHz Avg Type: Log-Pwr

TRACE 1 2 3 4 5 6
TYPE W W W W W W W W
DET P N N N N N N

PN0: Fast → Trig: Free Run
IFGain:Low #Atten: 30 dB

Ref Offset 0.5 dB
Ref 20.00 dBm

**Mkr1 2.380 ms
9.57 dBm**

10 dB/div
Log

Center 6.415000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	2.380 ms	9.57 dBm			
2	N	1	t	2.490 ms	9.72 dBm			
3	N	1	t	7.710 ms	10.44 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSG STATUS

Frequency

Auto Tune

Center Freq
6.415000000 GHz

Start Freq
6.415000000 GHz

Stop Freq
6.415000000 GHz

CF Step
8.000000 MHz
Man

Freq Offset
0 Hz

Duty Cycle NVent ax20 6435MHz Ant1

Agilent Spectrum Analyzer - Sweep SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 08:58:27 PM Aug 07, 2024

Center Freq 6.435000000 GHz Avg Type: Log-Pwr

PNO: Fast → Trig: Free Run
IF Gain: Low #Atten: 30 dB

TRACE 1 2 3 4 5 6
TYPE W W W W W W
DET P N N N N N

10 dB/div
Log

Ref Offset 0.5 dB
Ref 20.00 dBm

**Mkr1 140.0 μs
10.89 dBm**

Center 6.435000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	140.0 μs	10.89 dBm			
2	N	1	t	290.0 μs	10.31 dBm			
3	N	1	t	5.510 ms	10.81 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

MSQ STATUS

Frequency

Auto Tune

Center Freq
6.435000000 GHz

Start Freq
6.435000000 GHz

Stop Freq
6.435000000 GHz

CF Step
8.000000 MHz
Man

Auto

Freq Offset
0 Hz

Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 08:58:58 PM Aug 07, 2024

Center Freq 6.475000000 GHz Avg Type: Log-Pwr

PNO: Fast Trg: Free Run
IF Gain: Low #Atten: 30 dB

Ref Offset 0.5 dB
Ref 20.00 dBm

Mkr1 850.0 μs
-0.64 dBm

10 dB/div
Log

Center 6.475000000 GHz Span 0 Hz
Res BW 8 MHz #VBW 8.0 MHz Sweep 100.0 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	850.0 μs	-0.64 dBm			
2	N	1	t	910.0 μs	10.34 dBm			
3	N	1	t	6.130 ms	10.97 dBm			
4								
5								
6								
7								
8								
9								
10								
11								

Frequency

Auto Tune

Center Freq 6.475000000 GHz

Start Freq 6.475000000 GHz

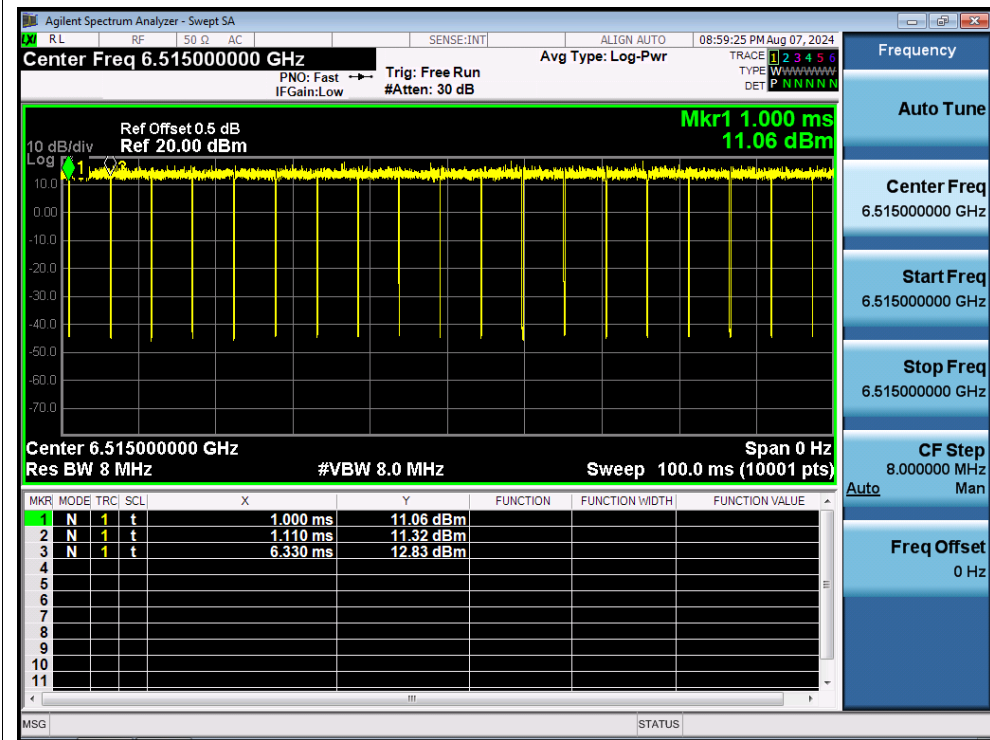
Stop Freq 6.475000000 GHz

CF Step 8.000000 MHz

Man

Freq Offset 0 Hz

Duty Cycle NVNT ax20 6515MHz Ant1



Duty Cycle NVNT ax20 6535MHz Ant1

