

1.9 11G_Ant1_2412



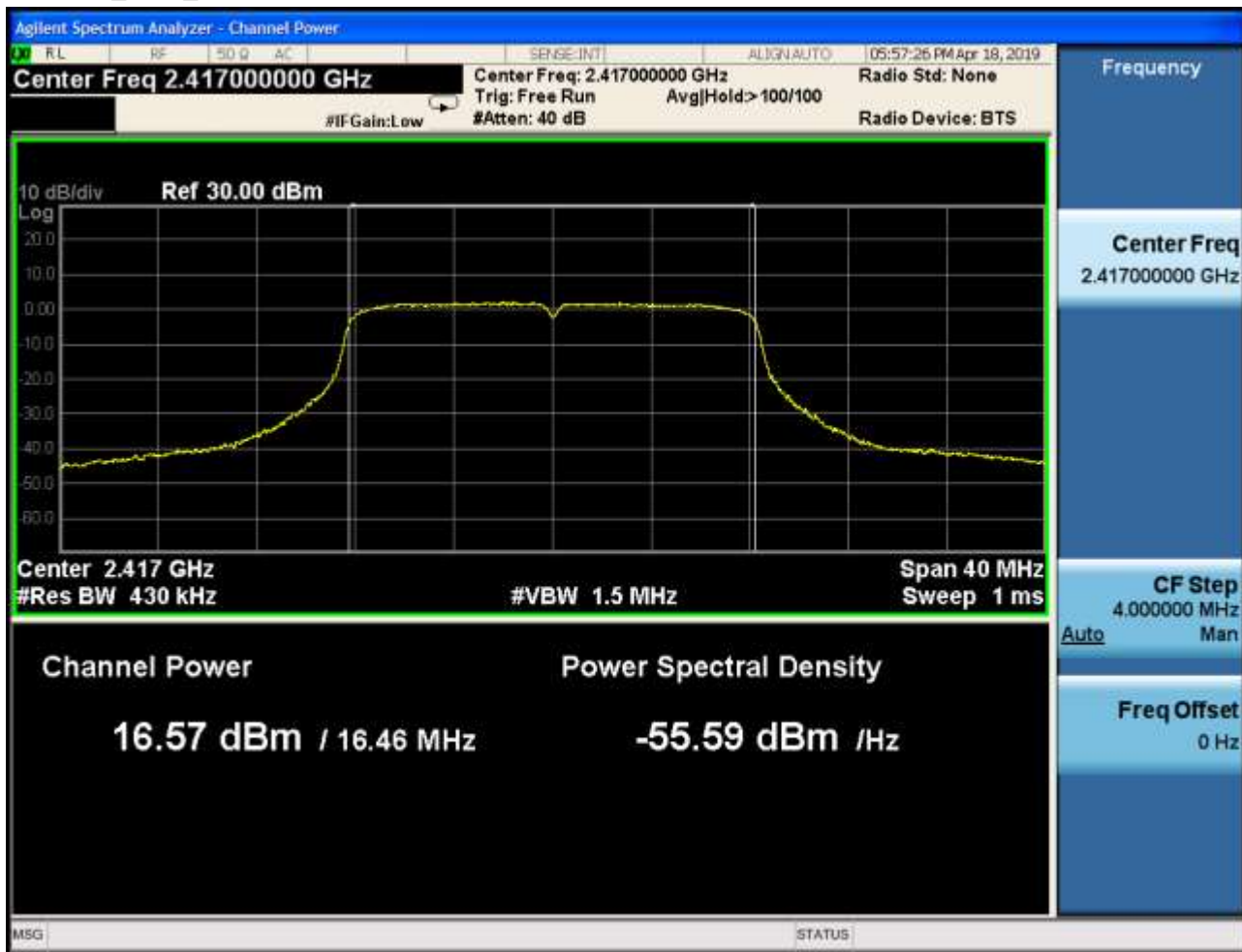


1.10 11G_Ant2_2412





1.11 11G_Ant1_2417

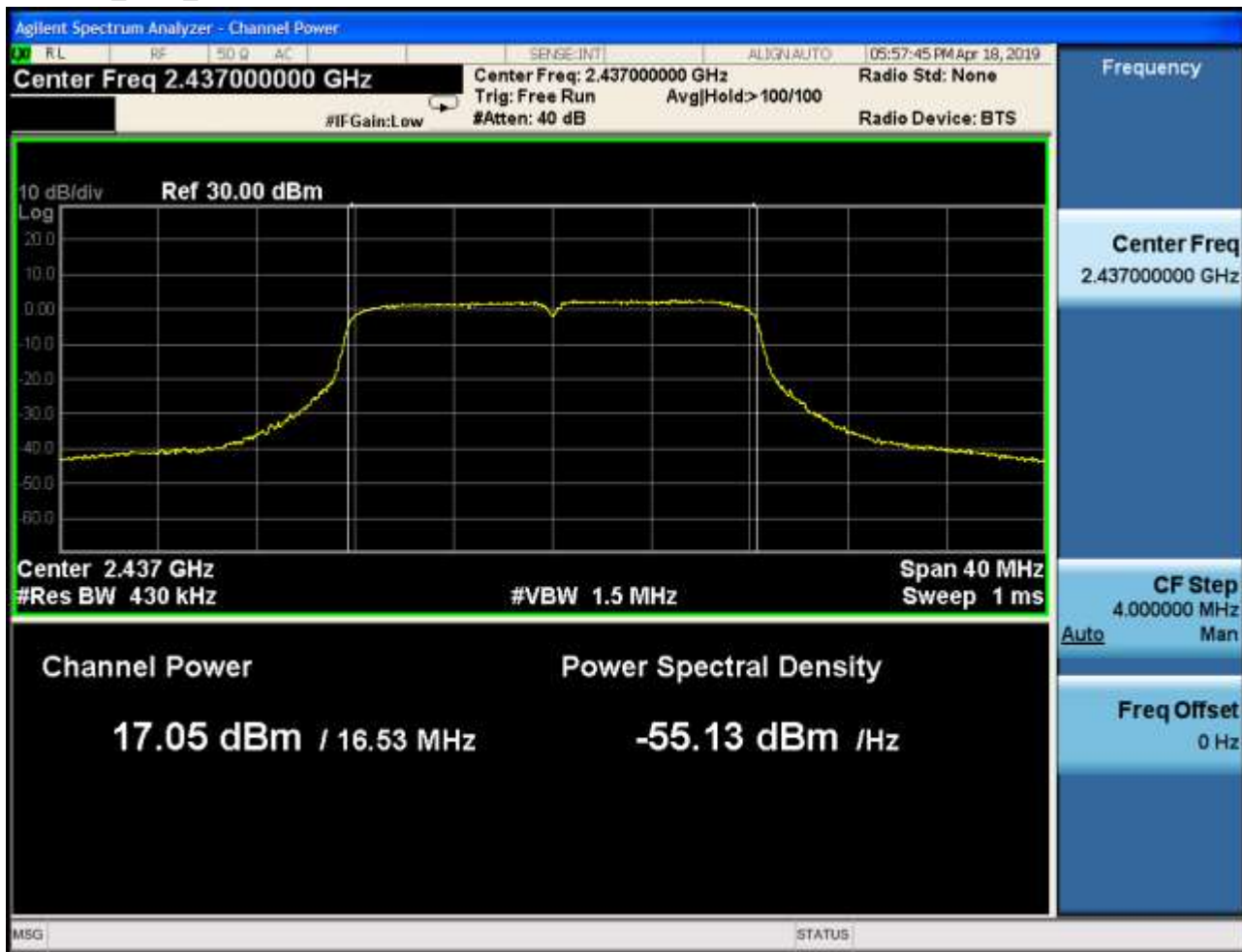




1.12 11G_Ant2_2417



1.13 11G_Ant1_2437

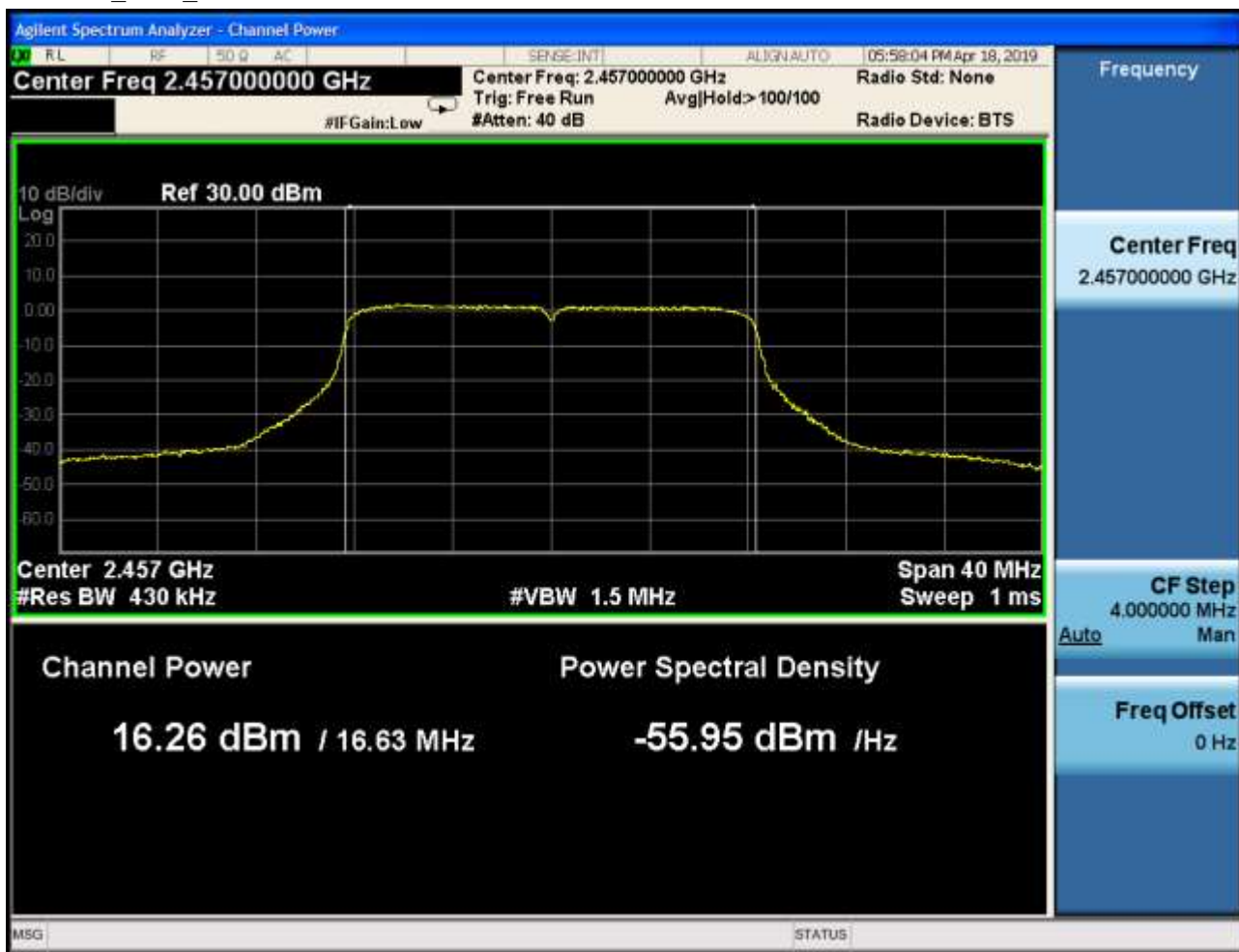




1.14 11G_Ant2_2437



1.15 11G_Ant1_2457

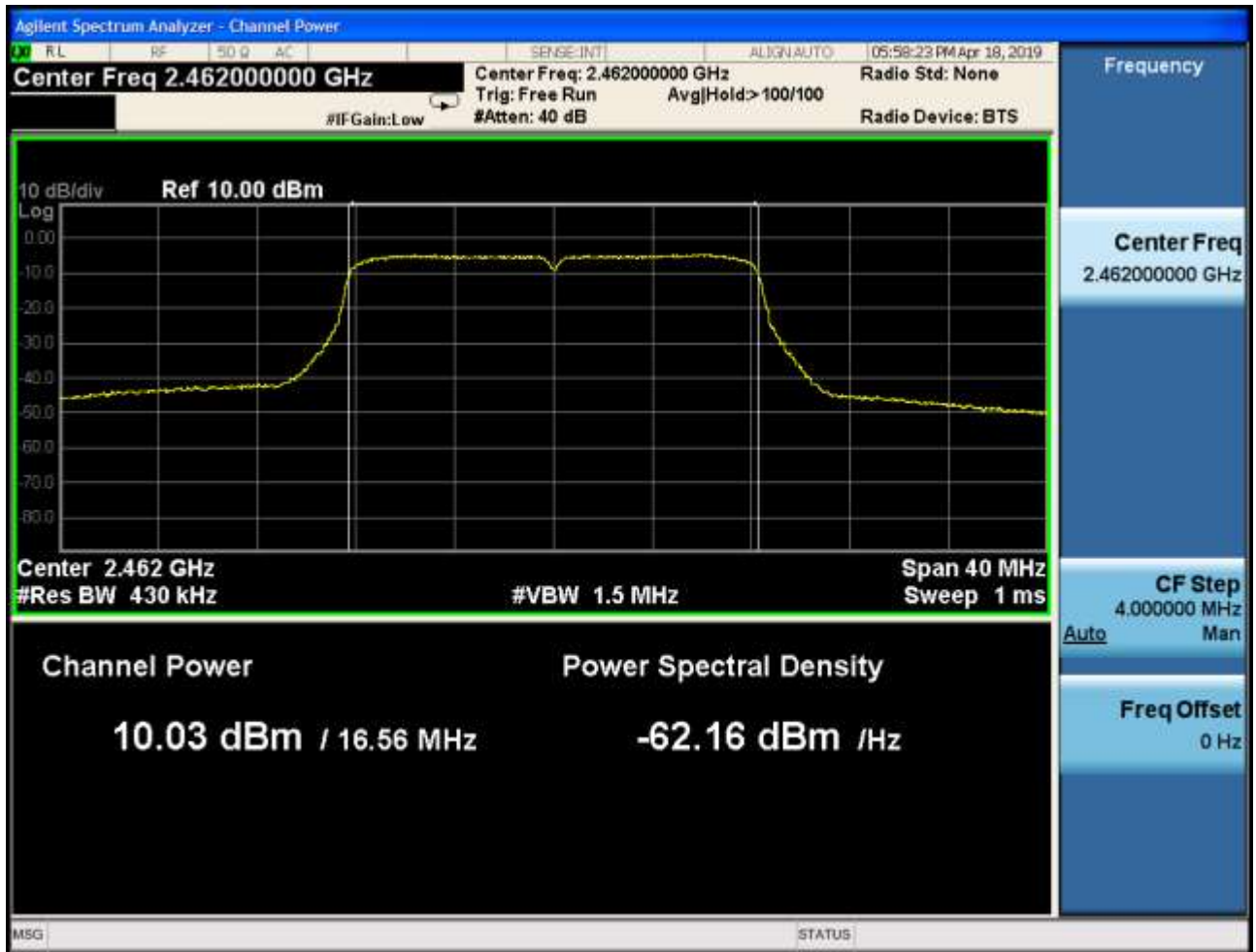




1.16 11G_Ant2_2457



1.17 11G_Ant1_2462





1.18 11G_Ant2_2462

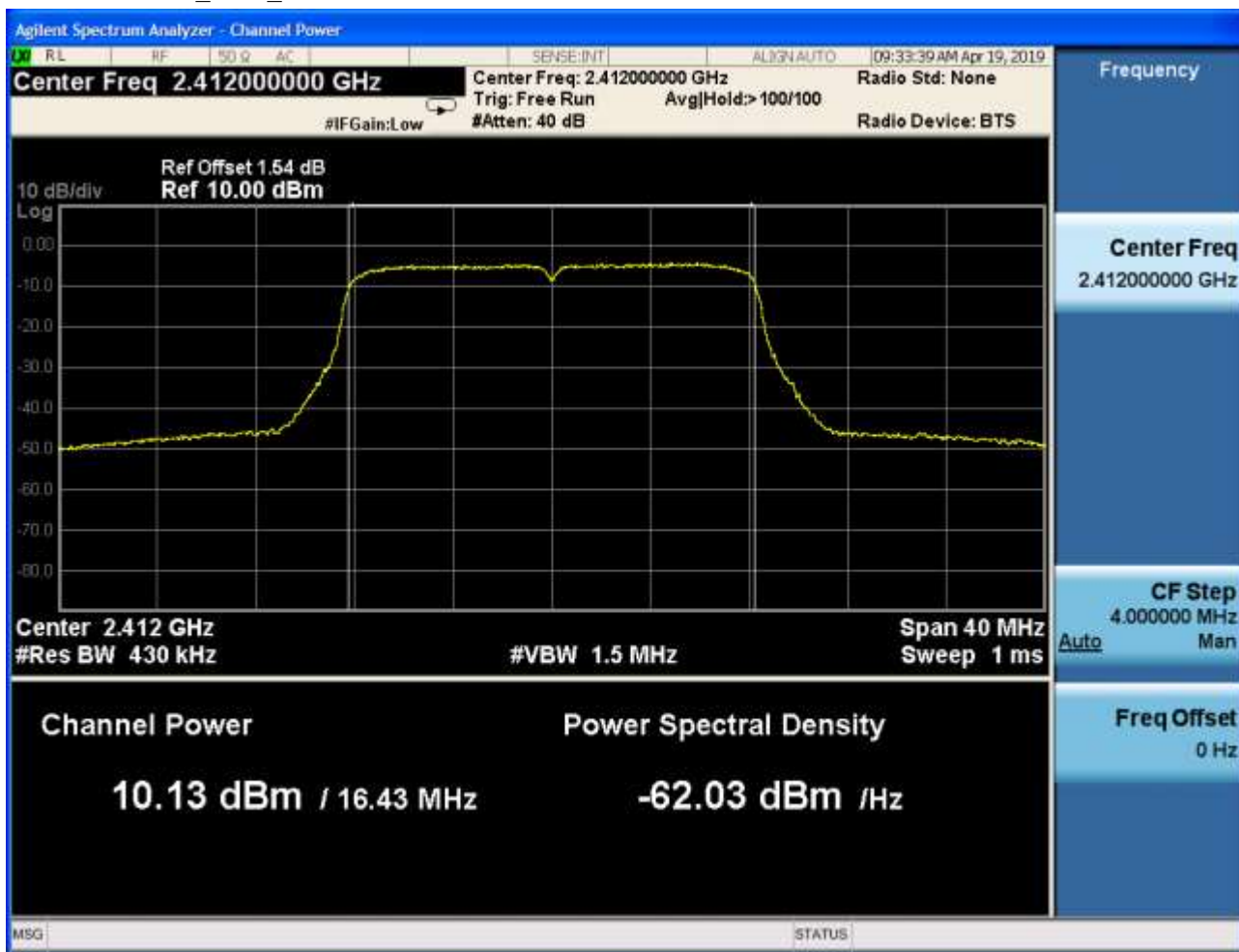


1.19 11G20CDD_Ant1_2412



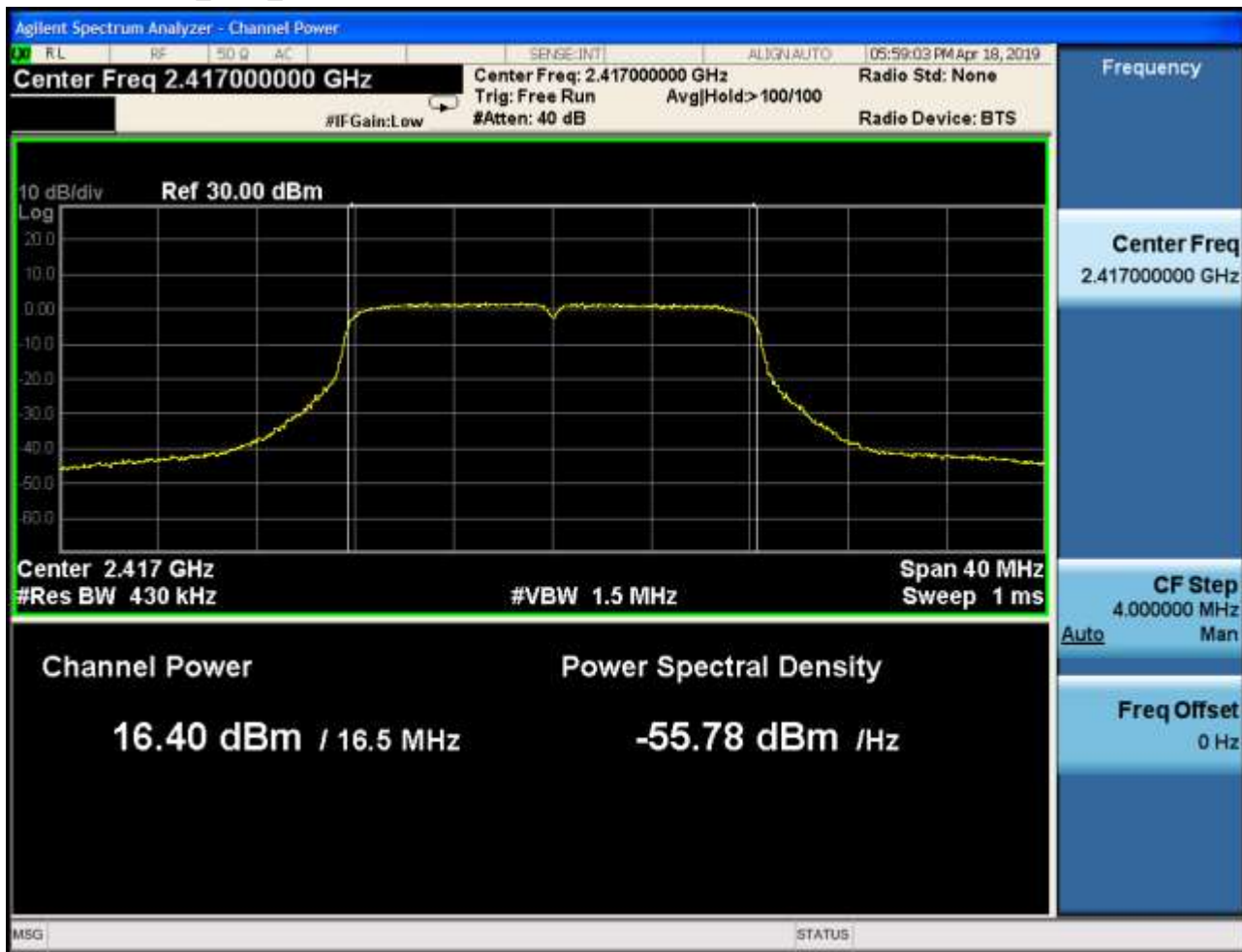


1.20 11G20CDD_Ant2_2412





1.21 11G20CDD_Ant1_2417





1.22 11G20CDD_Ant2_2417

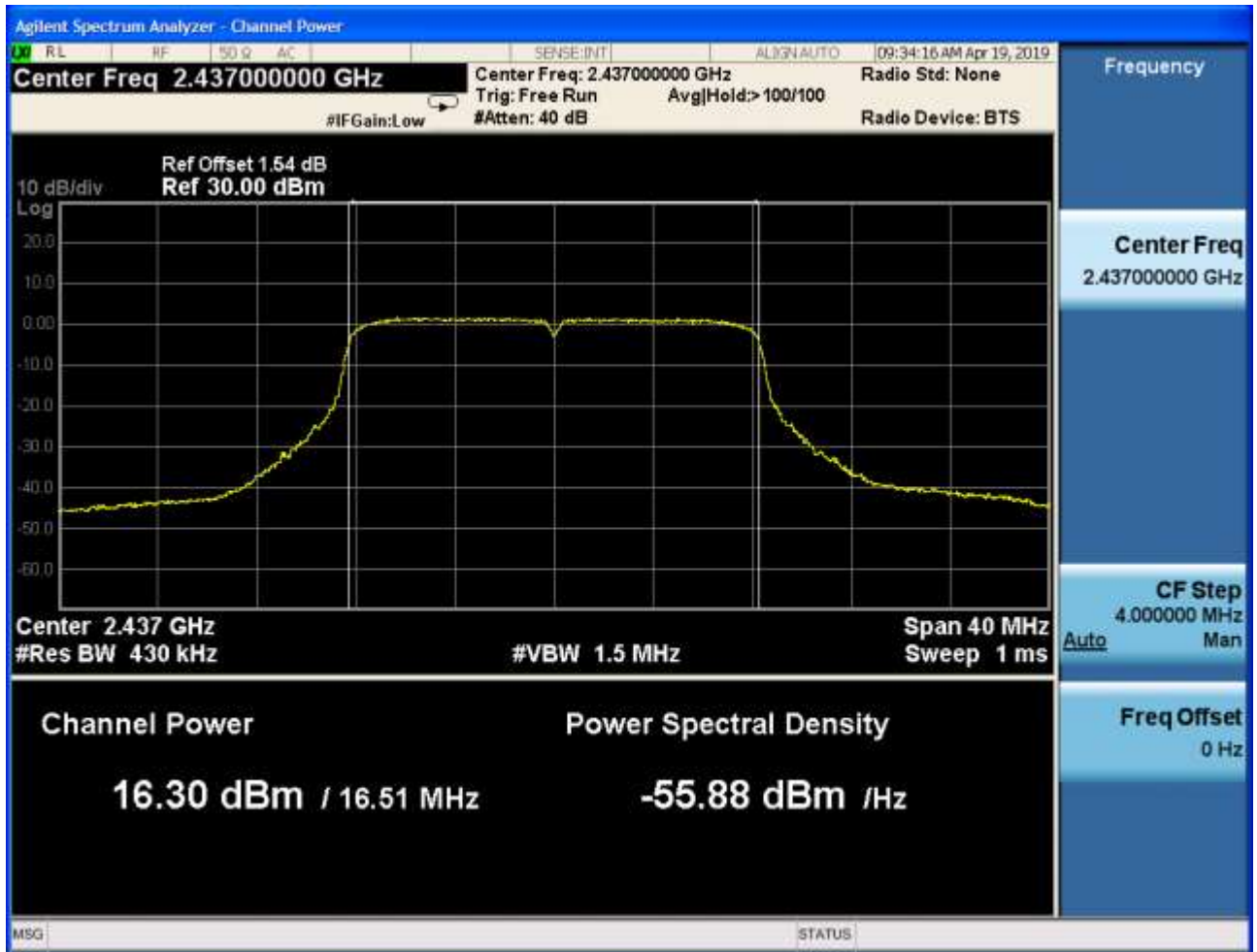




1.23 11G20CDD_Ant1_2437



1.24 11G20CDD_Ant2_2437



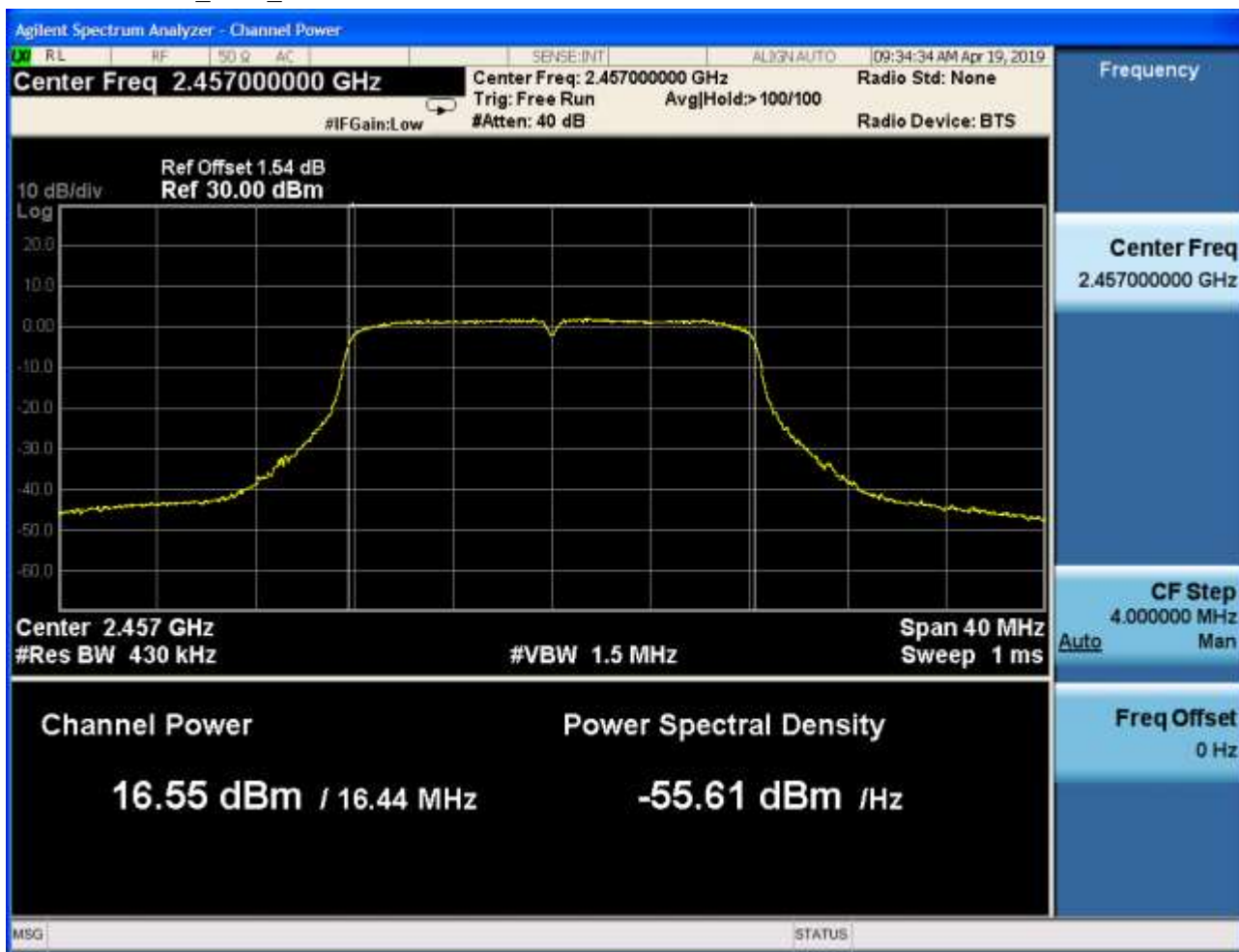


1.25 11G20CDD_Ant1_2457

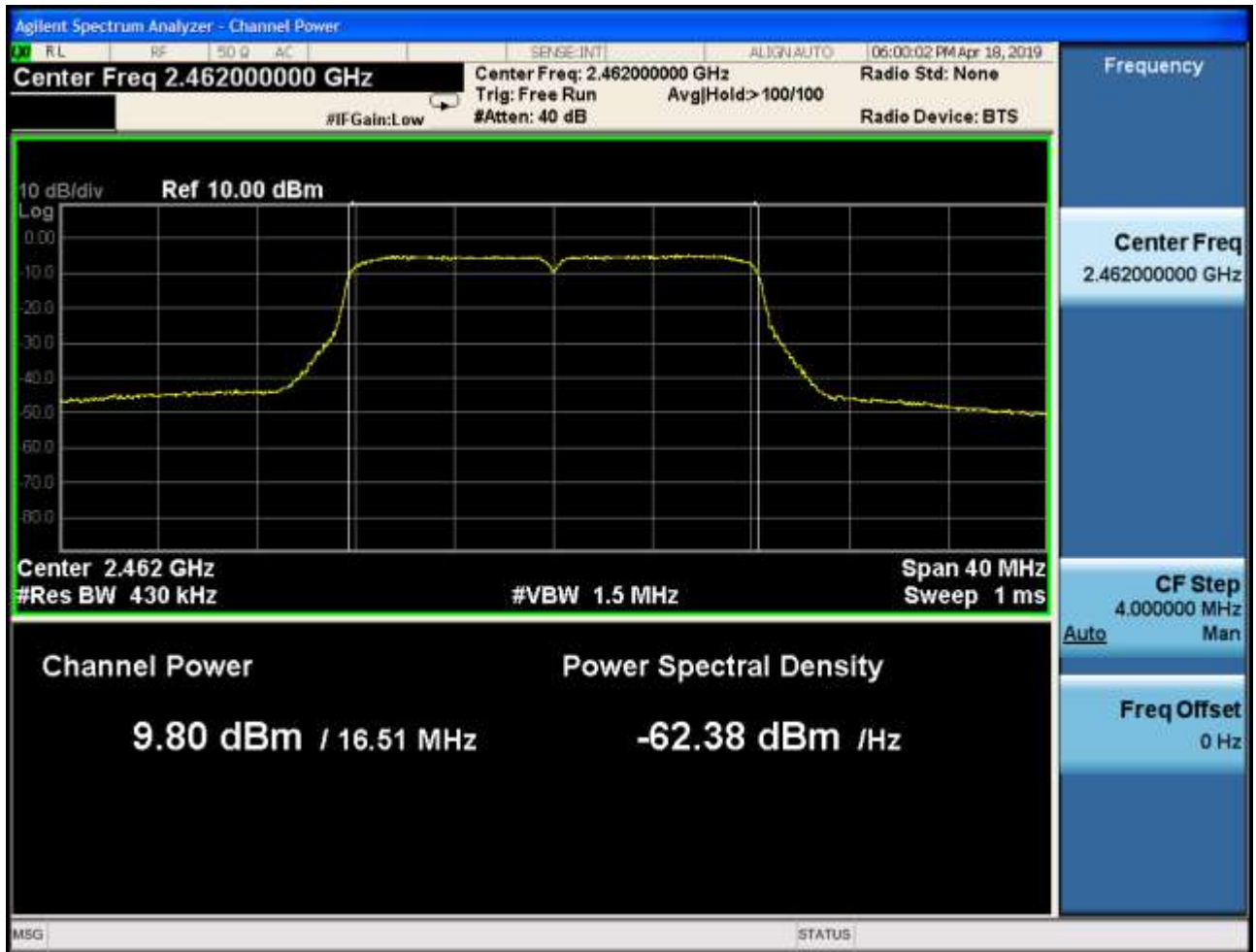




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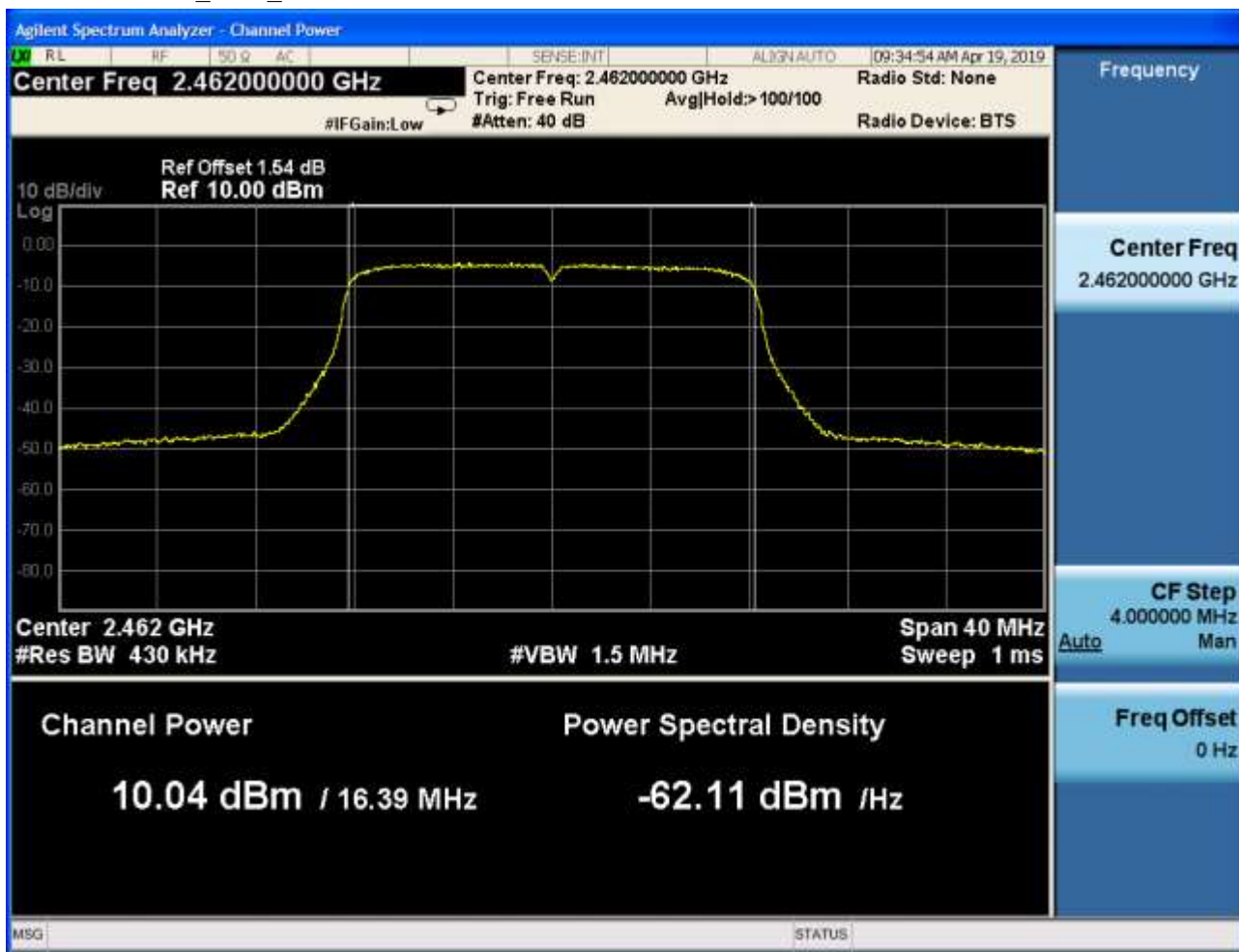


1.27 11G20CDD_Ant1_2462



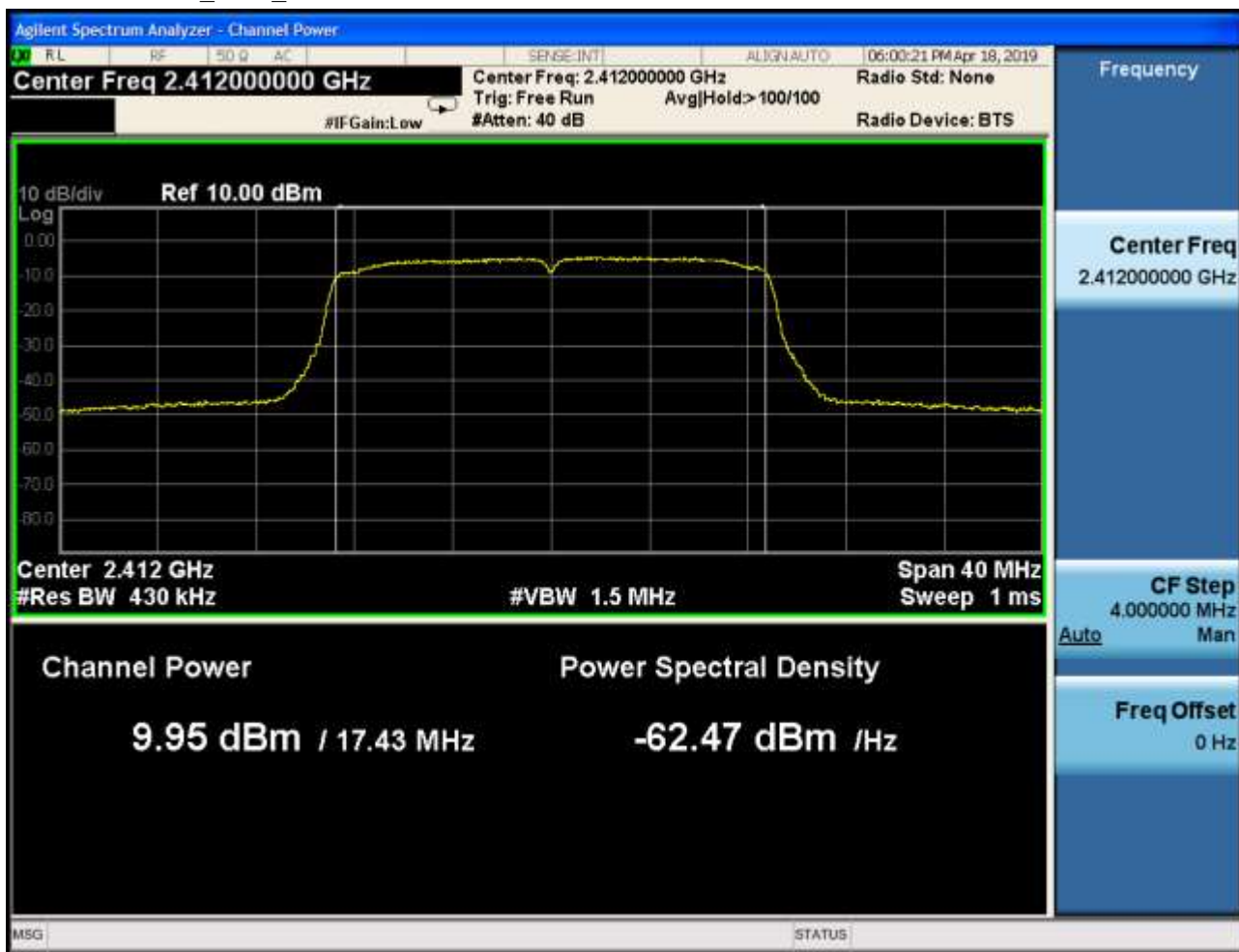


1.28 11G20CDD_Ant2_2462





1.29 11N20SISO_Ant1_2412

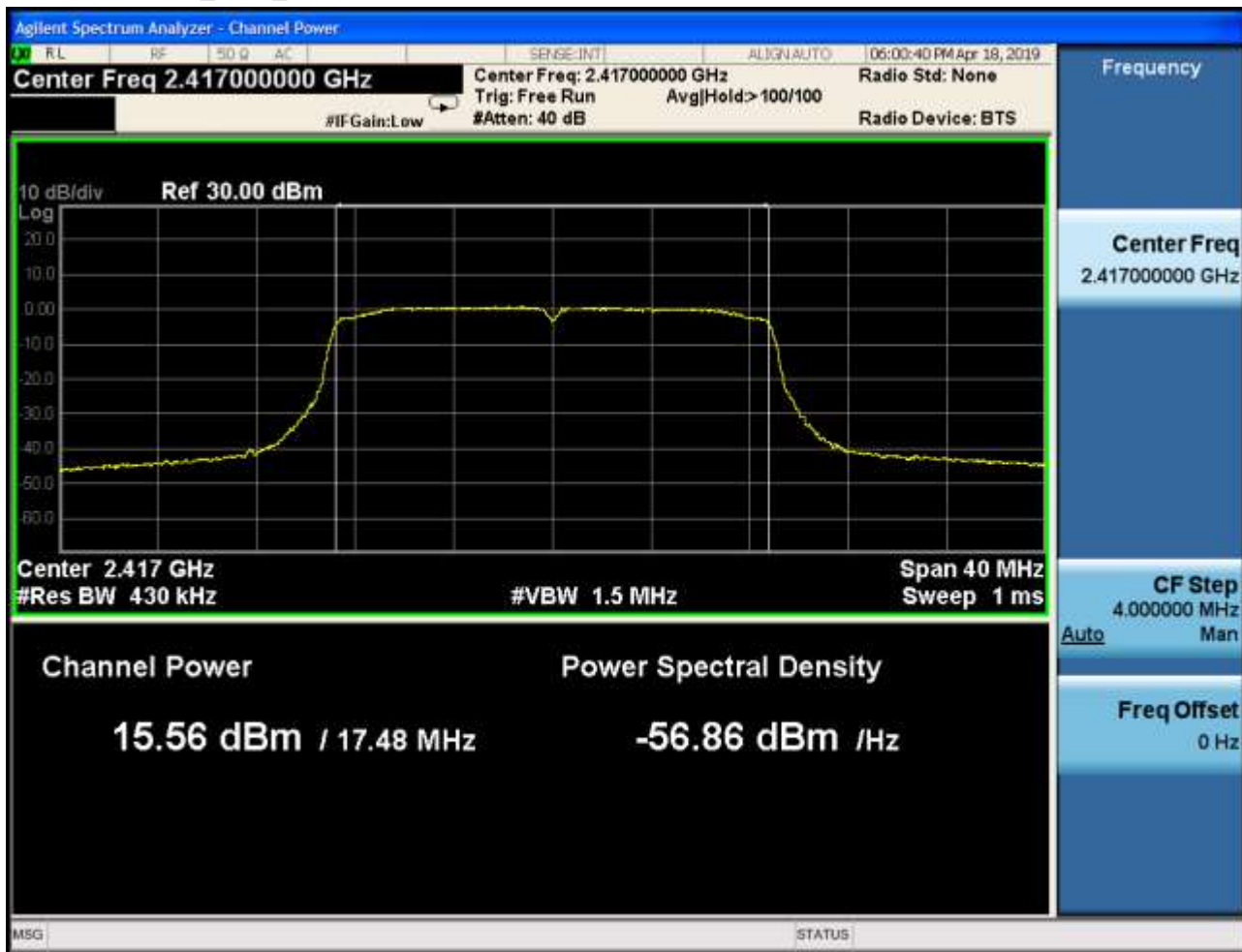




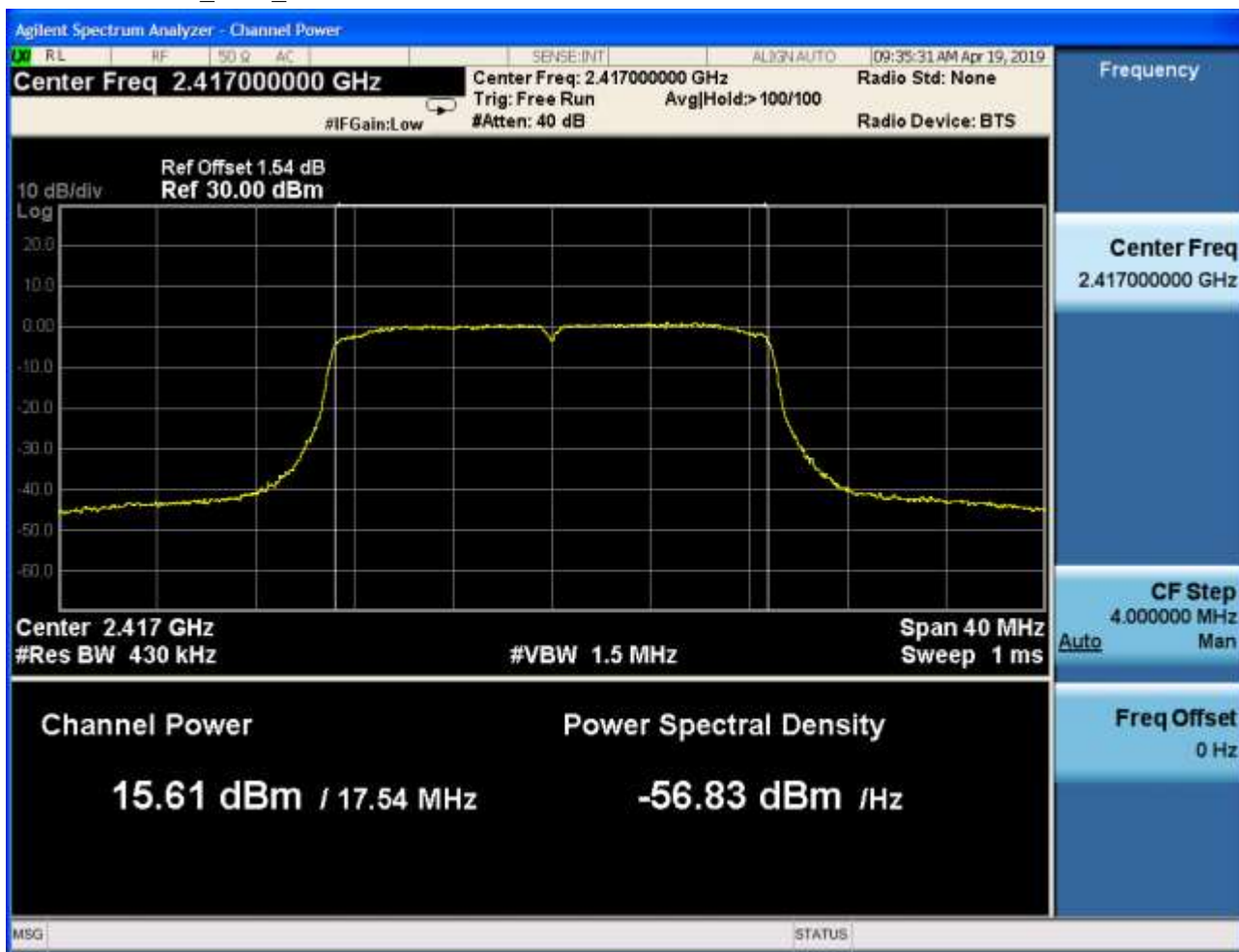
1.30 11N20SISO_Ant2_2412



1.31 11N20SISO_Ant1_2417



1.32 11N20SISO_Ant2_2417



1.33 11N20SISO_Ant1_2437





1.34 11N20SISO_Ant2_2437



1.35 11N20SISO_Ant1_2457



1.36 11N20SISO_Ant2_2457



1.37 11N20SISO_Ant1_2462



1.38 11N20SISO_Ant2_2462





1.39 11N40SISO_Ant1_2422





1.40 11N40SISO_Ant2_2422



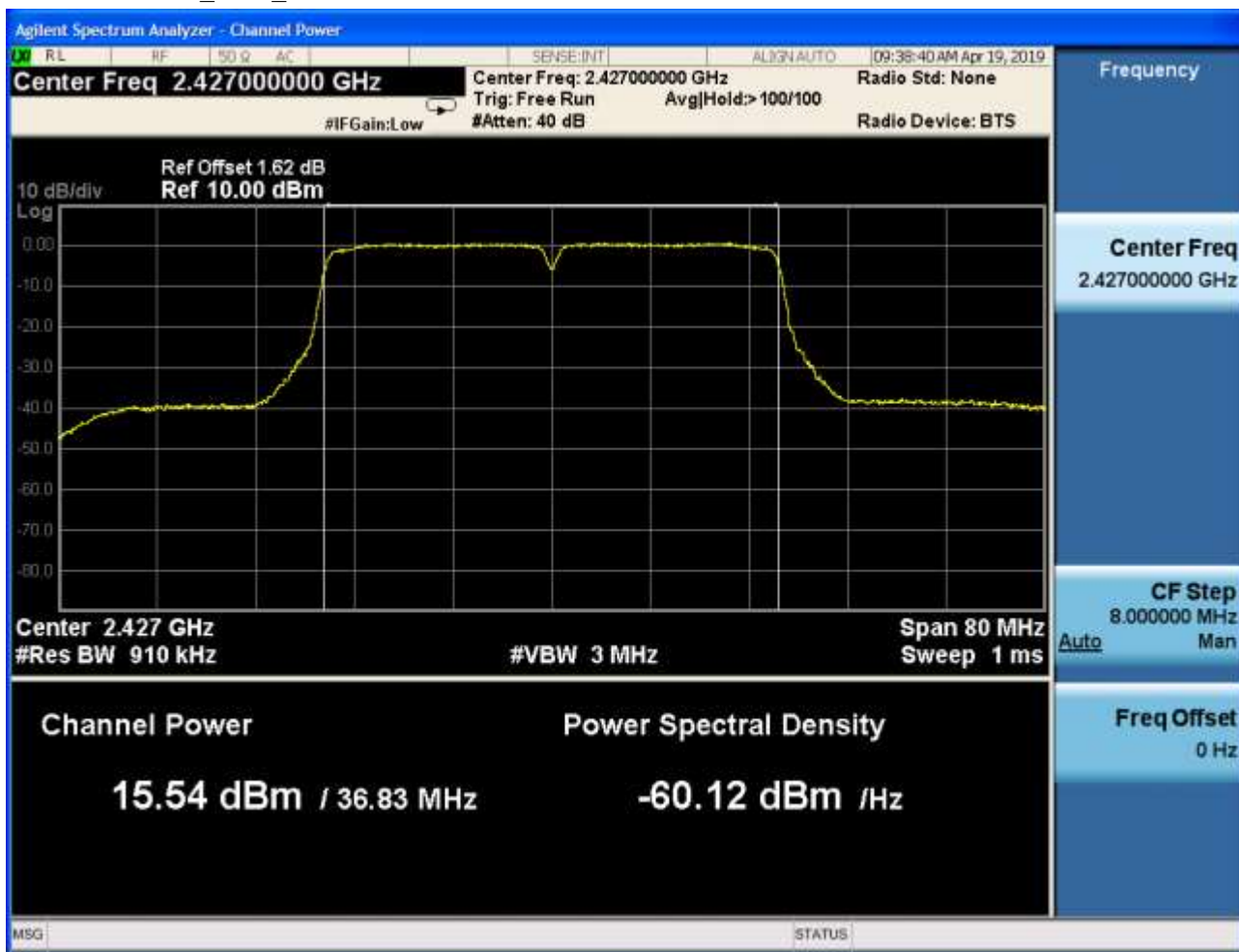


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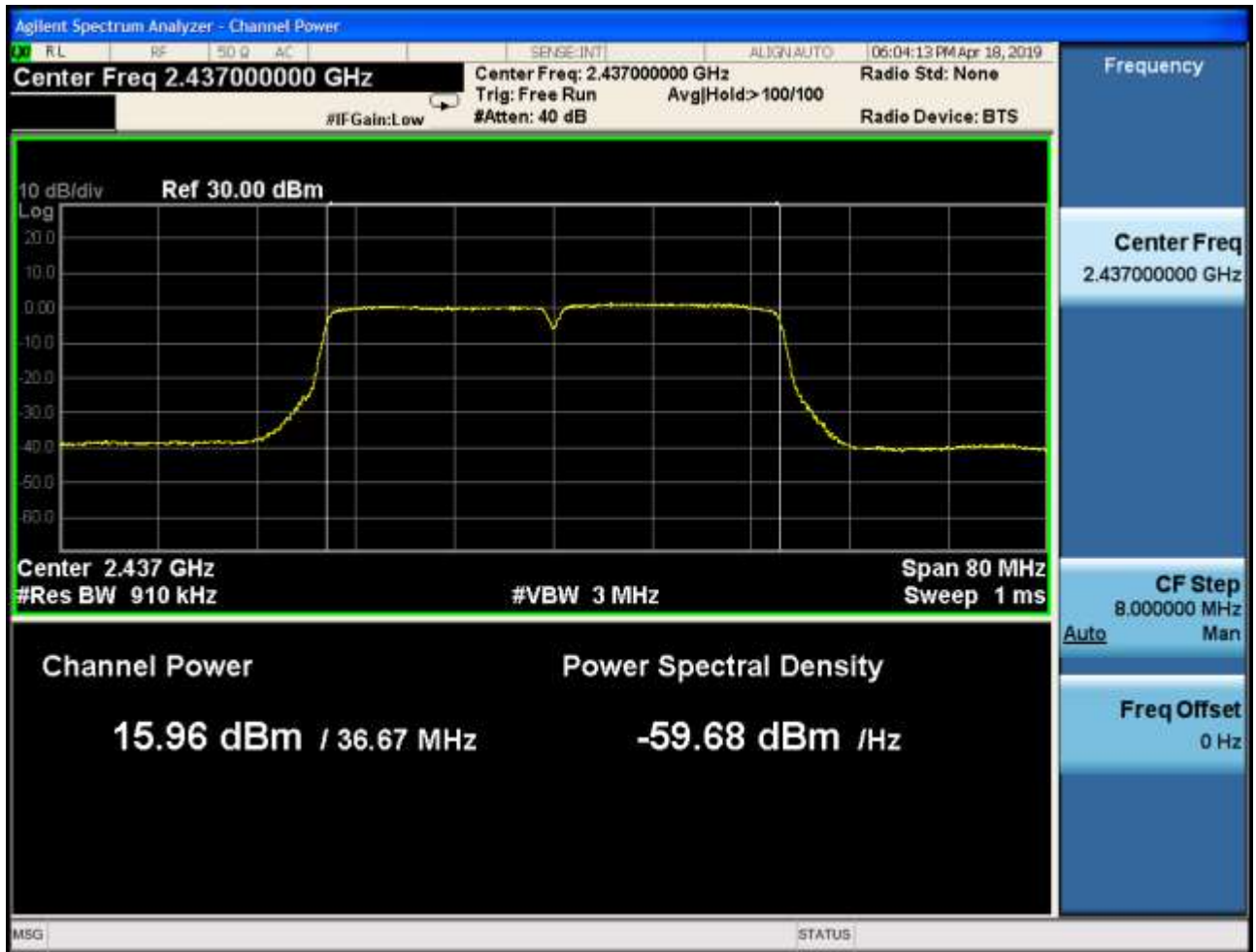




1.42 11N40SISO_Ant2_2427



1.43 11N40SISO_Ant1_2437



1.44 11N40SISO_Ant2_2437





1.45 11N40SISO_Ant1_2452

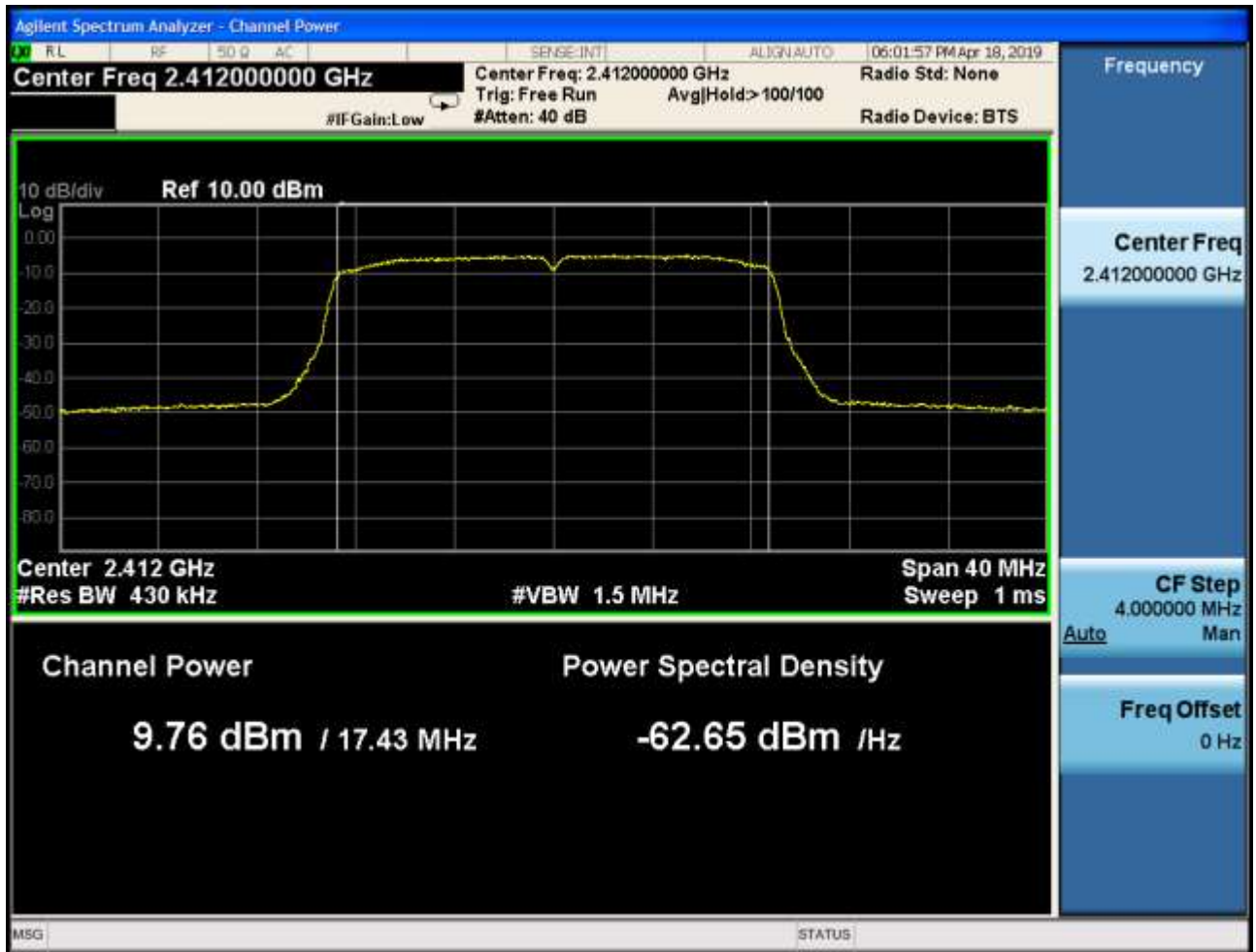




1.46 11N40SISO_Ant2_2452



1.47 11N20MIMO_Ant1_2412

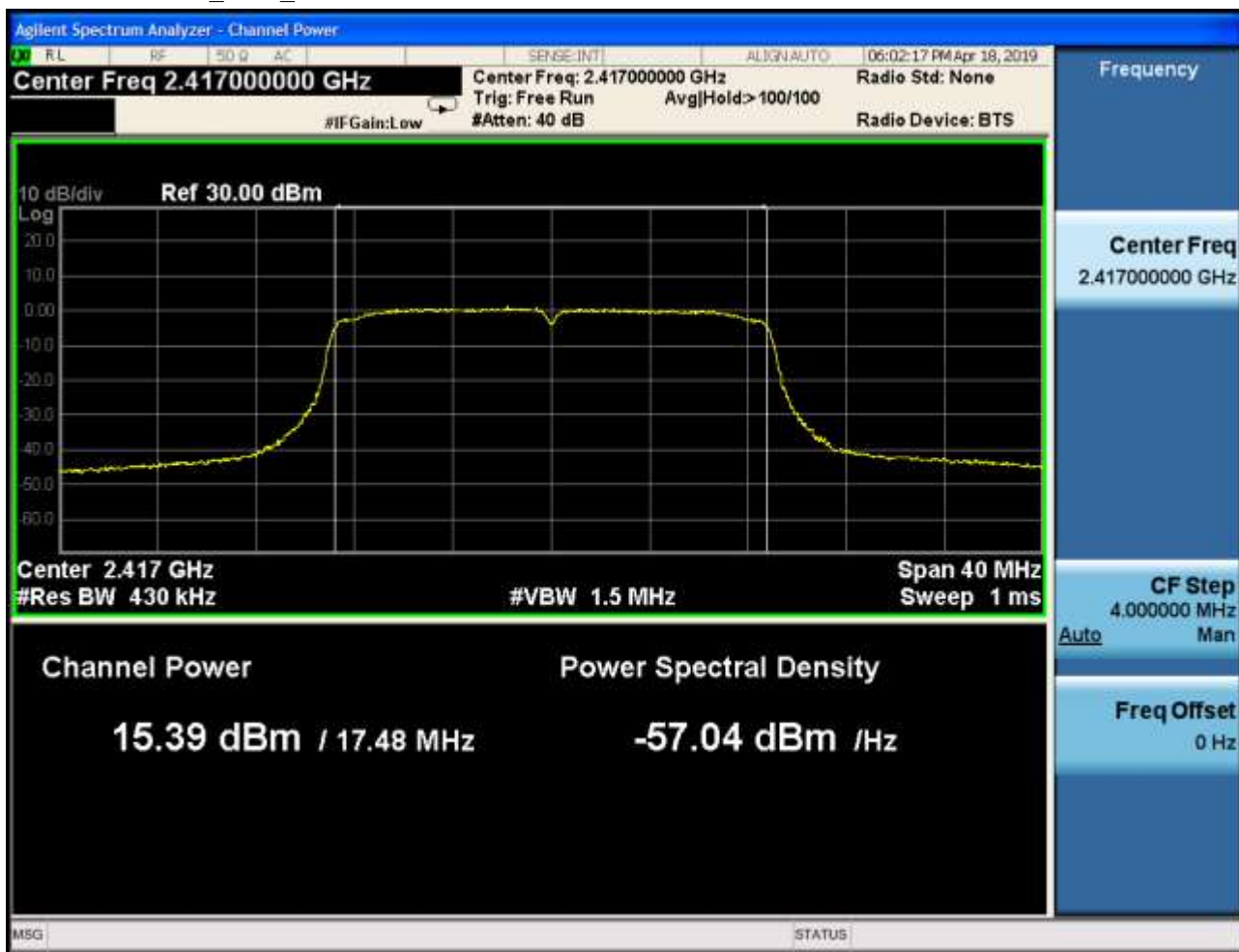




1.48 11N20MIMO_Ant2_2412

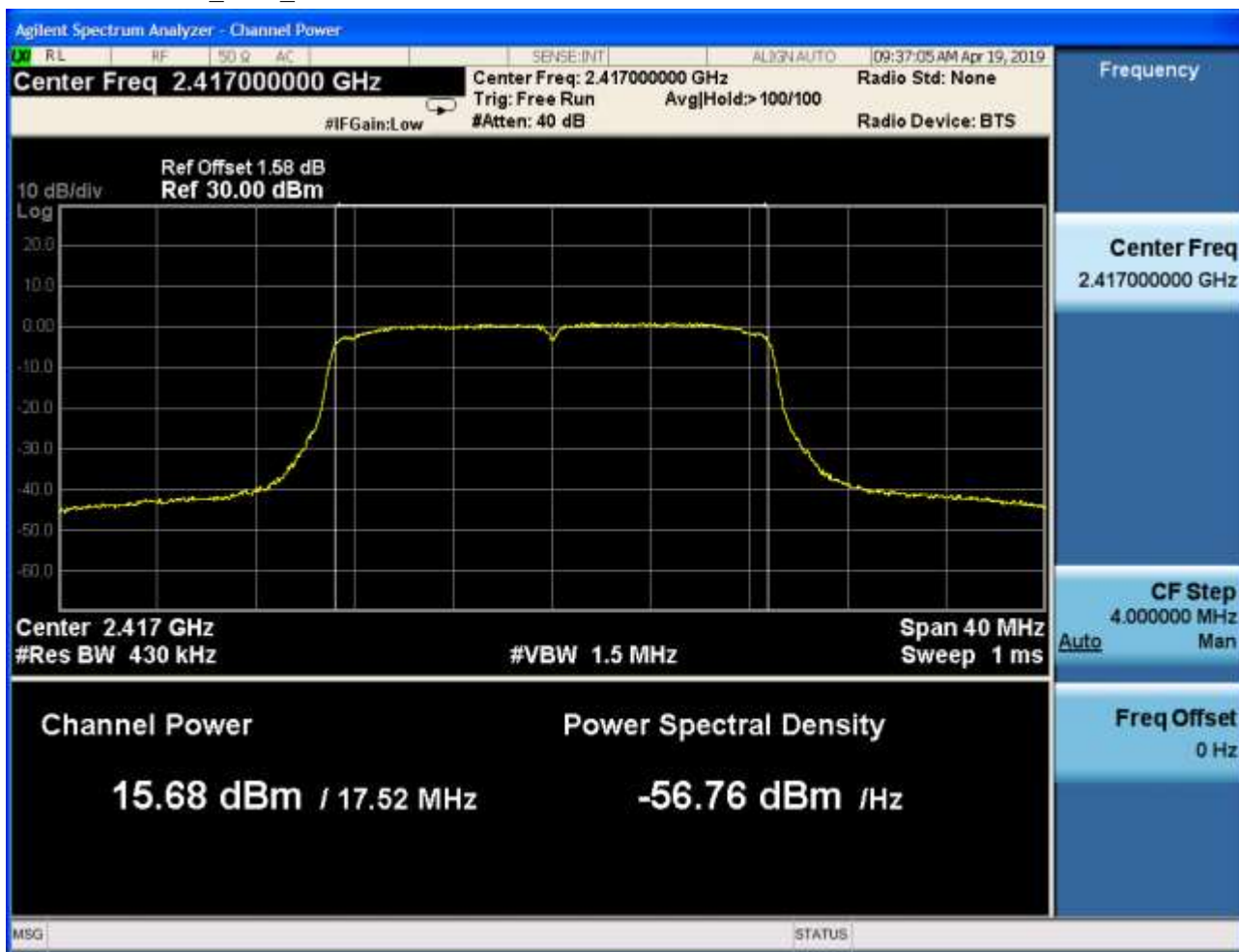


1.49 11N20MIMO_Ant1_2417





1.50 11N20MIMO_Ant2_2417



1.51 11N20MIMO_Ant1_2437





1.52 11N20MIMO_Ant2_2437



1.53 11N20MIMO_Ant1_2457





1.54 11N20MIMO_Ant2_2457



1.55 11N20MIMO_Ant1_2462

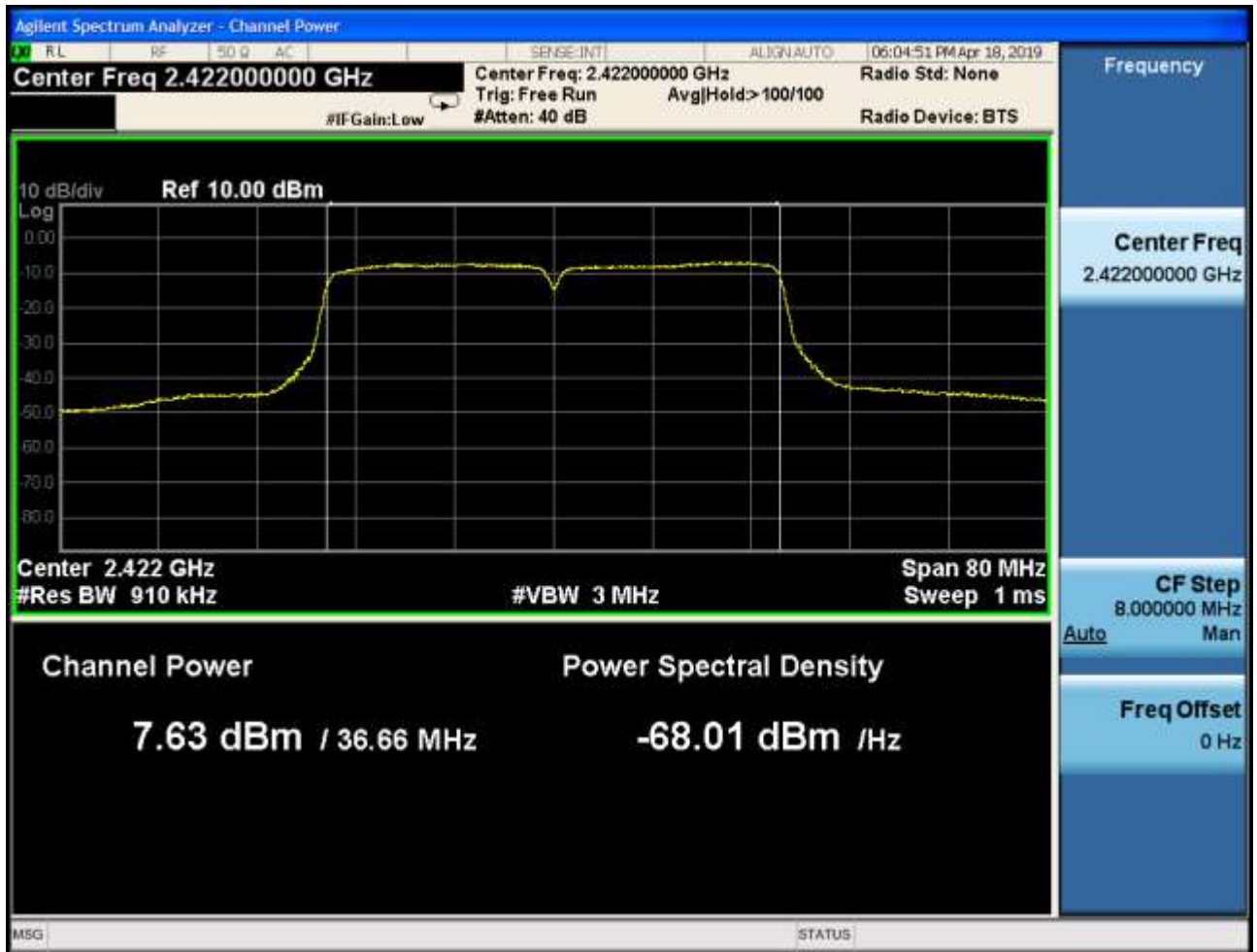




1.56 11N20MIMO_Ant2_2462



1.57 11N40MIMO_Ant1_2422





1.58 11N40MIMO_Ant2_2422





1.59 11N40MIMO_Ant1_2427



1.60 11N40MIMO_Ant2_2427



1.61 11N40MIMO_Ant1_2437



1.62 11N40MIMO_Ant2_2437





1.63 11N40MIMO_Ant1_2452





1.64 11N40MIMO_Ant2_2452



Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

Test Mode	Antenna	Channel	Result[dBm/10kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-9.13	8	PASS
11B	Ant2	2412	-9.24	8	PASS
11B	Ant1	2417	-8.32	8	PASS
11B	Ant2	2417	-8.15	8	PASS
11B	Ant1	2437	-7.84	8	PASS
11B	Ant2	2437	-8.75	8	PASS
11B	Ant1	2462	-8.24	8	PASS
11B	Ant2	2462	-8.42	8	PASS
11G	Ant1	2412	-18.37	8	PASS
11G	Ant2	2412	-18.35	8	PASS
11G	Ant1	2417	-12.56	8	PASS
11G	Ant2	2417	-11.91	8	PASS
11G	Ant1	2437	-11.82	8	PASS
11G	Ant2	2437	-11.86	8	PASS
11G	Ant1	2457	-12.49	8	PASS
11G	Ant2	2457	-12.33	8	PASS
11G	Ant1	2462	-18.96	8	PASS
11G	Ant2	2462	-18.24	8	PASS
11G20CDD	Ant1	2412	-18.83	8	PASS
11G20CDD	Ant2	2412	-18.77	8	PASS
11G20CDD	SUM	2412	-15.79	8	PASS
11G20CDD	Ant1	2417	-12.22	8	PASS
11G20CDD	Ant2	2417	-12.31	8	PASS
11G20CDD	SUM	2417	-9.25	8	PASS
11G20CDD	Ant1	2437	-12.15	8	PASS
11G20CDD	Ant2	2437	-12.22	8	PASS
11G20CDD	SUM	2437	-9.17	8	PASS
11G20CDD	Ant1	2457	-12.88	8	PASS
11G20CDD	Ant2	2457	-12.12	8	PASS
11G20CDD	SUM	2457	-9.47	8	PASS
11G20CDD	Ant1	2462	-19.17	8	PASS
11G20CDD	Ant2	2462	-18.42	8	PASS
11G20CDD	SUM	2462	-15.77	8	PASS
11N20SISO	Ant1	2412	-19.03	8	PASS
11N20SISO	Ant2	2412	-18.59	8	PASS
11N20SISO	Ant1	2417	-13.56	8	PASS
11N20SISO	Ant2	2417	-13.22	8	PASS
11N20SISO	Ant1	2437	-12.85	8	PASS
11N20SISO	Ant2	2437	-13.72	8	PASS
11N20SISO	Ant1	2457	-13.6	8	PASS
11N20SISO	Ant2	2457	-13.41	8	PASS
11N20SISO	Ant1	2462	-19.14	8	PASS
11N20SISO	Ant2	2462	-17.93	8	PASS
11N20MIMO	Ant1	2412	-18.91	8	PASS
11N20MIMO	Ant2	2412	-18.57	8	PASS
11N20MIMO	SUM	2412	-15.73	8	PASS
11N20MIMO	Ant1	2417	-13.47	8	PASS

11N20MIMO	Ant2	2417	-12.71	8	PASS
11N20MIMO	SUM	2417	-10.06	8	PASS
11N20MIMO	Ant1	2437	-12.71	8	PASS
11N20MIMO	Ant2	2437	-13.27	8	PASS
11N20MIMO	SUM	2437	-9.97	8	PASS
11N20MIMO	Ant1	2457	-13.49	8	PASS
11N20MIMO	Ant2	2457	-13.08	8	PASS
11N20MIMO	SUM	2457	-10.27	8	PASS
11N20MIMO	Ant1	2462	-19.36	8	PASS
11N20MIMO	Ant2	2462	-18.7	8	PASS
11N20MIMO	SUM	2462	-16.01	8	PASS
11N40SISO	Ant1	2422	-24.08	8	PASS
11N40SISO	Ant2	2422	-23.78	8	PASS
11N40SISO	Ant1	2427	-15.54	8	PASS
11N40SISO	Ant2	2427	-16.74	8	PASS
11N40SISO	Ant1	2437	-16.16	8	PASS
11N40SISO	Ant2	2437	-16.44	8	PASS
11N40SISO	Ant1	2452	-24.97	8	PASS
11N40SISO	Ant2	2452	-25.23	8	PASS
11N40MIMO	Ant1	2422	-23.51	8	PASS
11N40MIMO	Ant2	2422	-23.19	8	PASS
11N40MIMO	SUM	2422	-20.34	8	PASS
11N40MIMO	Ant1	2427	-15.47	8	PASS
11N40MIMO	Ant2	2427	-15.28	8	PASS
11N40MIMO	SUM	2427	-12.36	8	PASS
11N40MIMO	Ant1	2437	-15.48	8	PASS
11N40MIMO	Ant2	2437	-15.14	8	PASS
11N40MIMO	SUM	2437	-12.30	8	PASS
11N40MIMO	Ant1	2452	-24.42	8	PASS
11N40MIMO	Ant2	2452	-24.2	8	PASS
11N40MIMO	SUM	2452	-21.30	8	PASS

Note: The Duty Cycle Factor is compensated in the graph.



Part II - Test Graphs

1.1 11B_Ant1_2412





1.2 11B_Ant2_2412





1.3 11B_Ant1_2417





1.4 11B_Ant2_2417





1.5 11B_Ant1_2437





1.6 11B_Ant2_2437





1.7 11B_Ant1_2462





1.8 11B_Ant2_2462



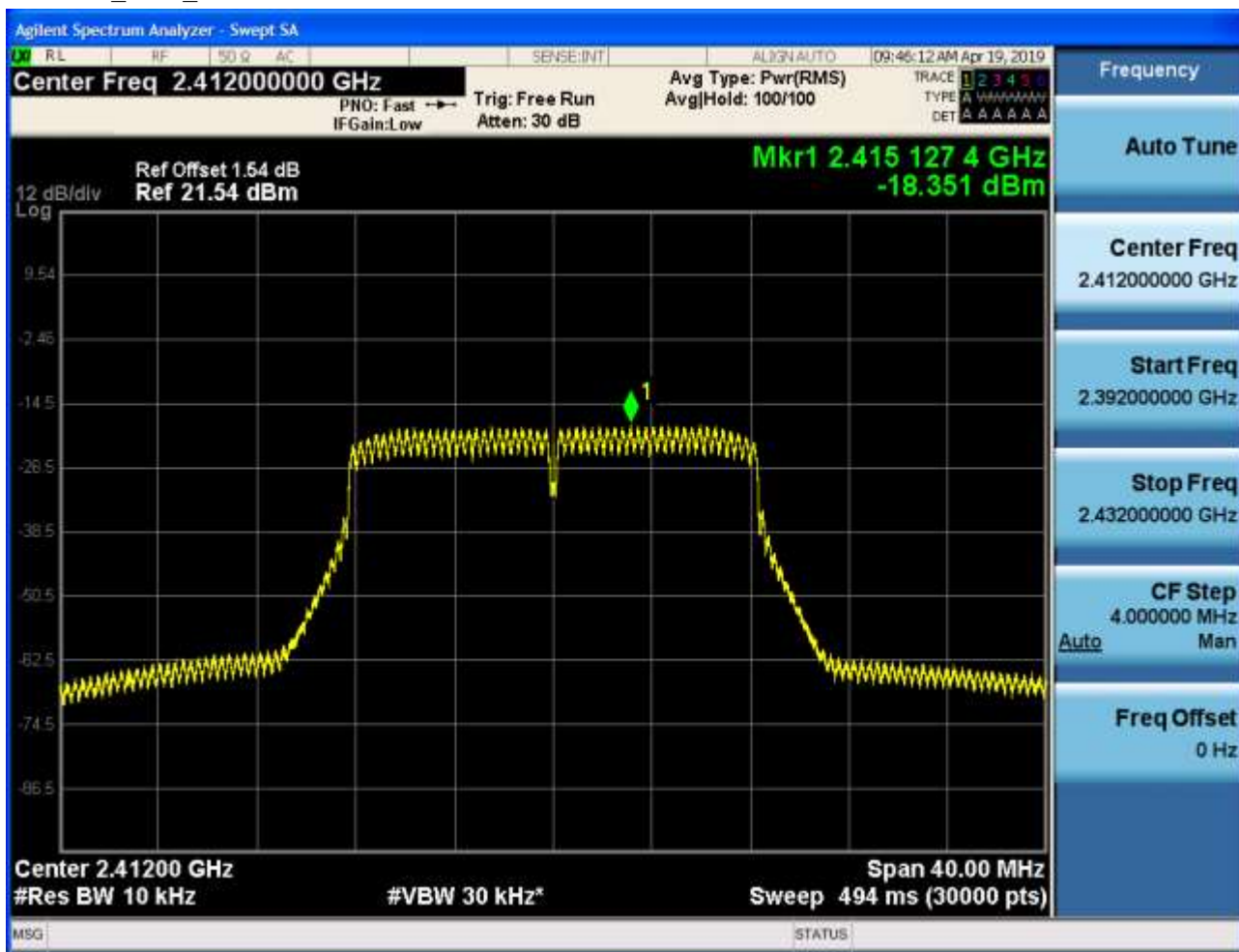


1.9 11G_Ant1_2412



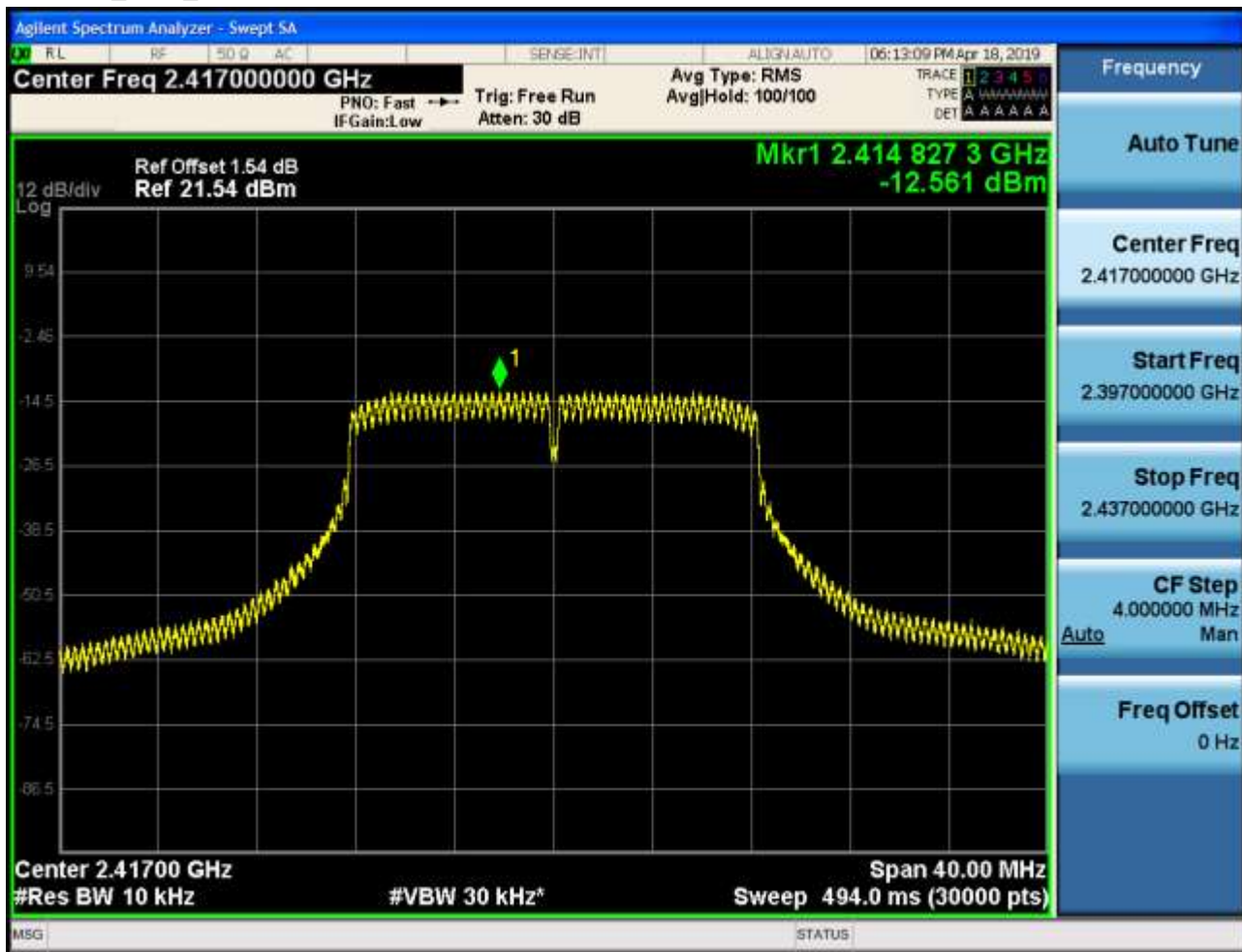


1.10 11G_Ant2_2412



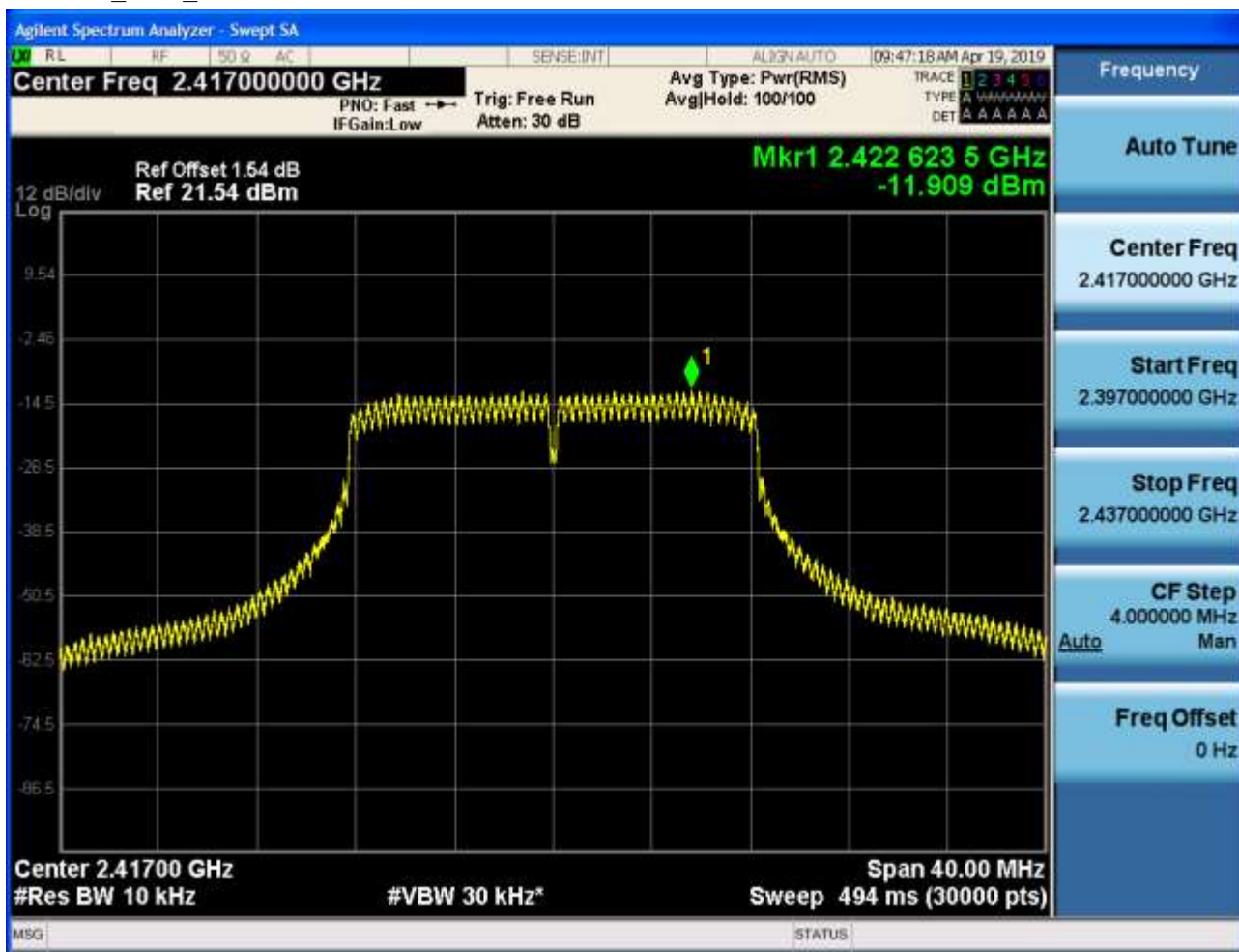


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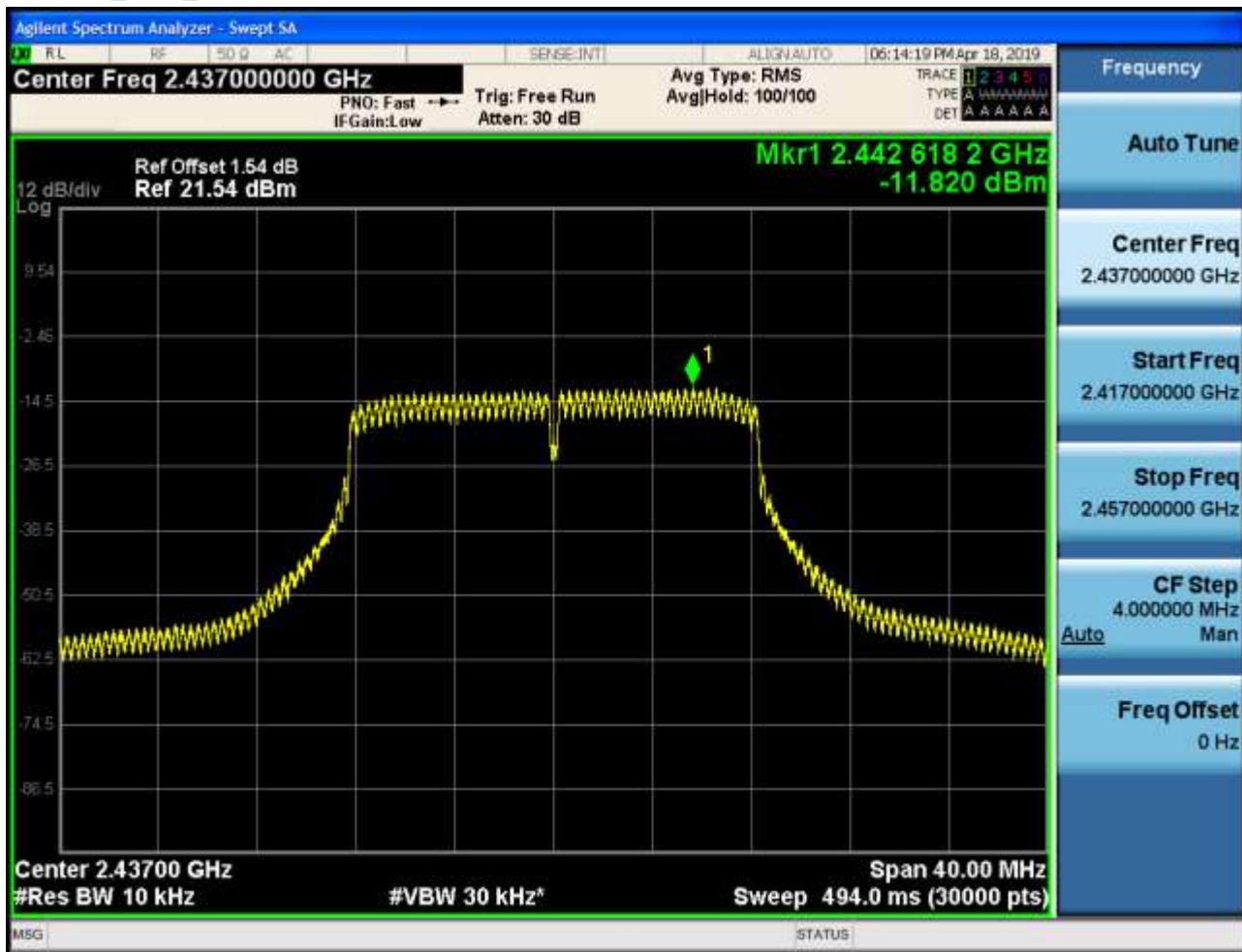


1.12 11G_Ant2_2417





1.13 11G_Ant1_2437





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 09:48:23 AM Apr 19, 2019

Center Freq 2.437000000 GHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5
PNO: Fast → Trig: Free Run Type A W W W W W W W
IF Gain: Low Atten: 30 dB DET A A A A A A

Ref Offset 1.54 dB Mkr1 2.431 999 GHz
Ref 21.54 dBm -11.863 dBm

12 dB/div Log

Center 2.43700 GHz Span 40.00 MHz
#Res BW 10 kHz #VBW 30 kHz* Sweep 494 ms (30000 pts)

Frequency
Auto Tune
Center Freq 2.437000000 GHz
Start Freq 2.417000000 GHz
Stop Freq 2.457000000 GHz
CF Step 4.000000 MHz
Auto Man
Freq Offset 0 Hz

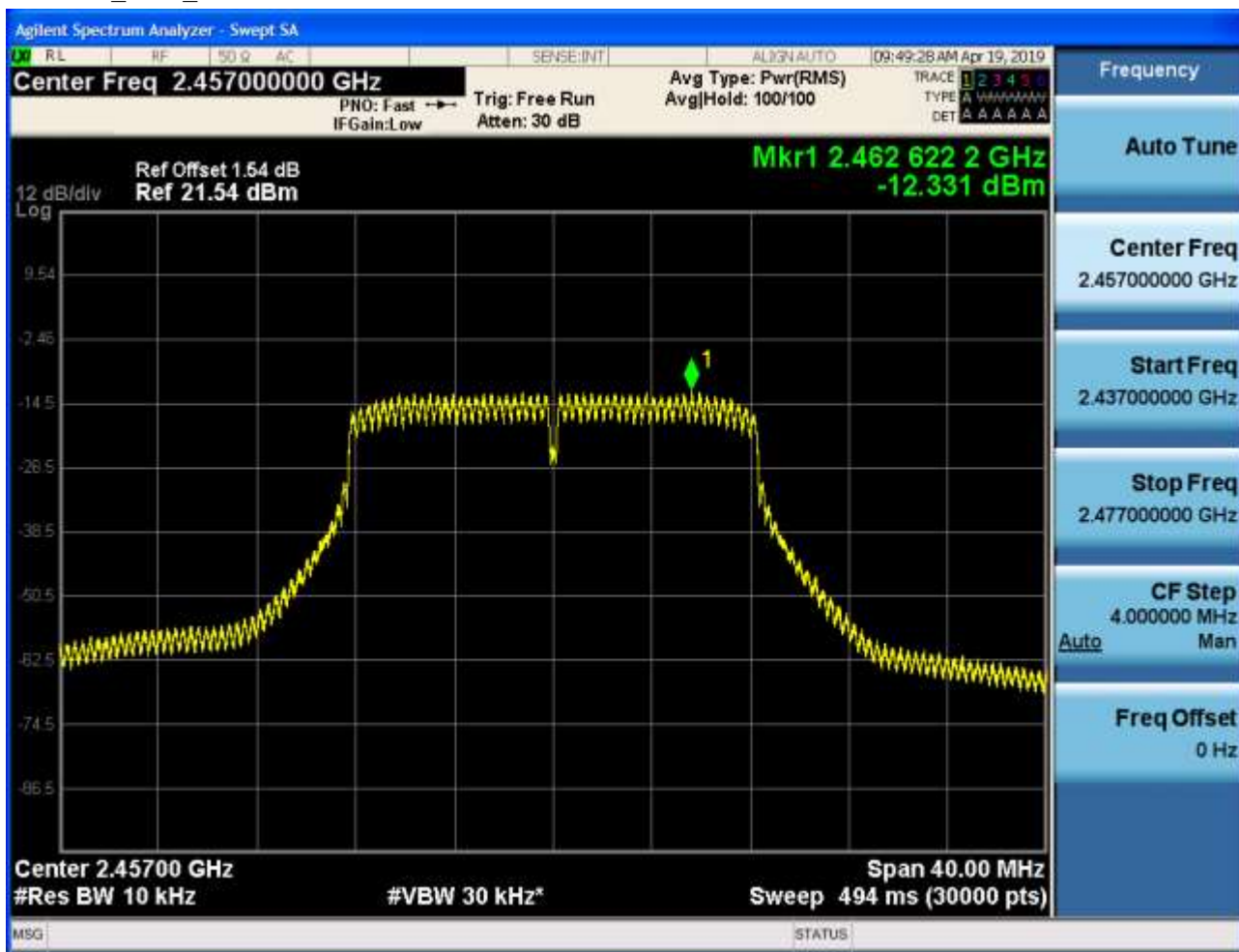


1.15 11G_Ant1_2457





1.16 11G_Ant2_2457



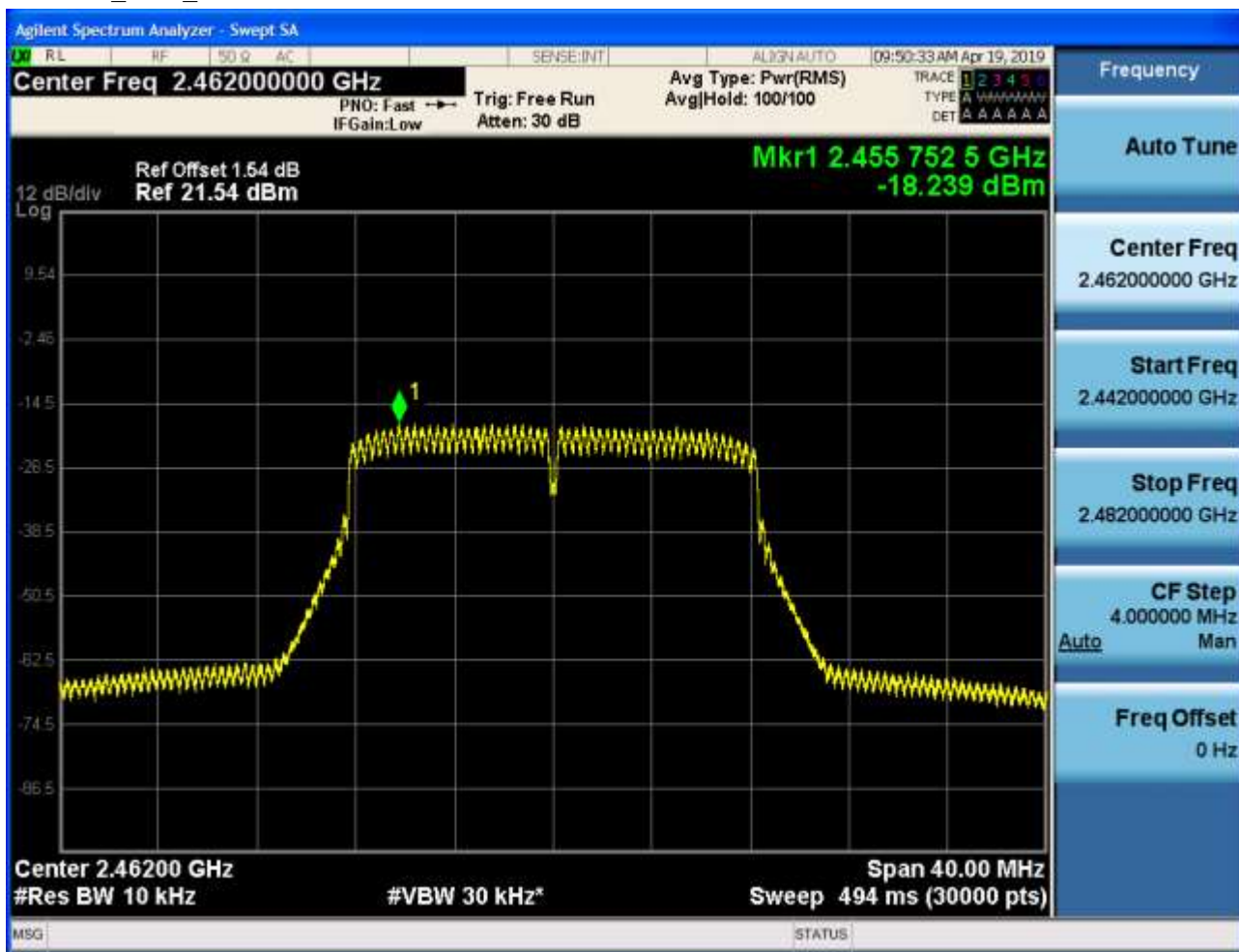


1.17 11G_Ant1_2462





1.18 11G_Ant2_2462





1.19 11G20CDD_Ant1_2412





1.20 11G20CDD_Ant2_2412



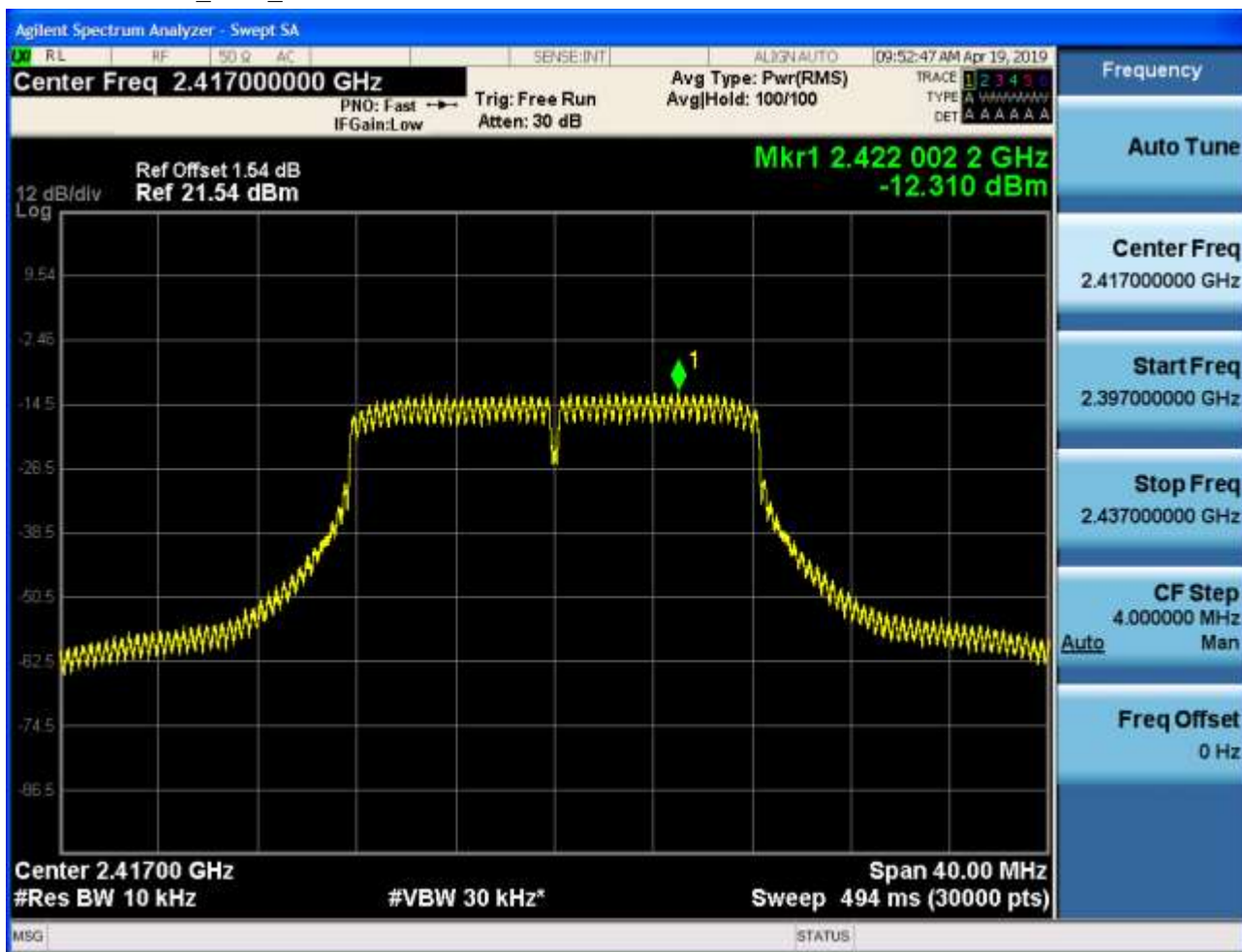


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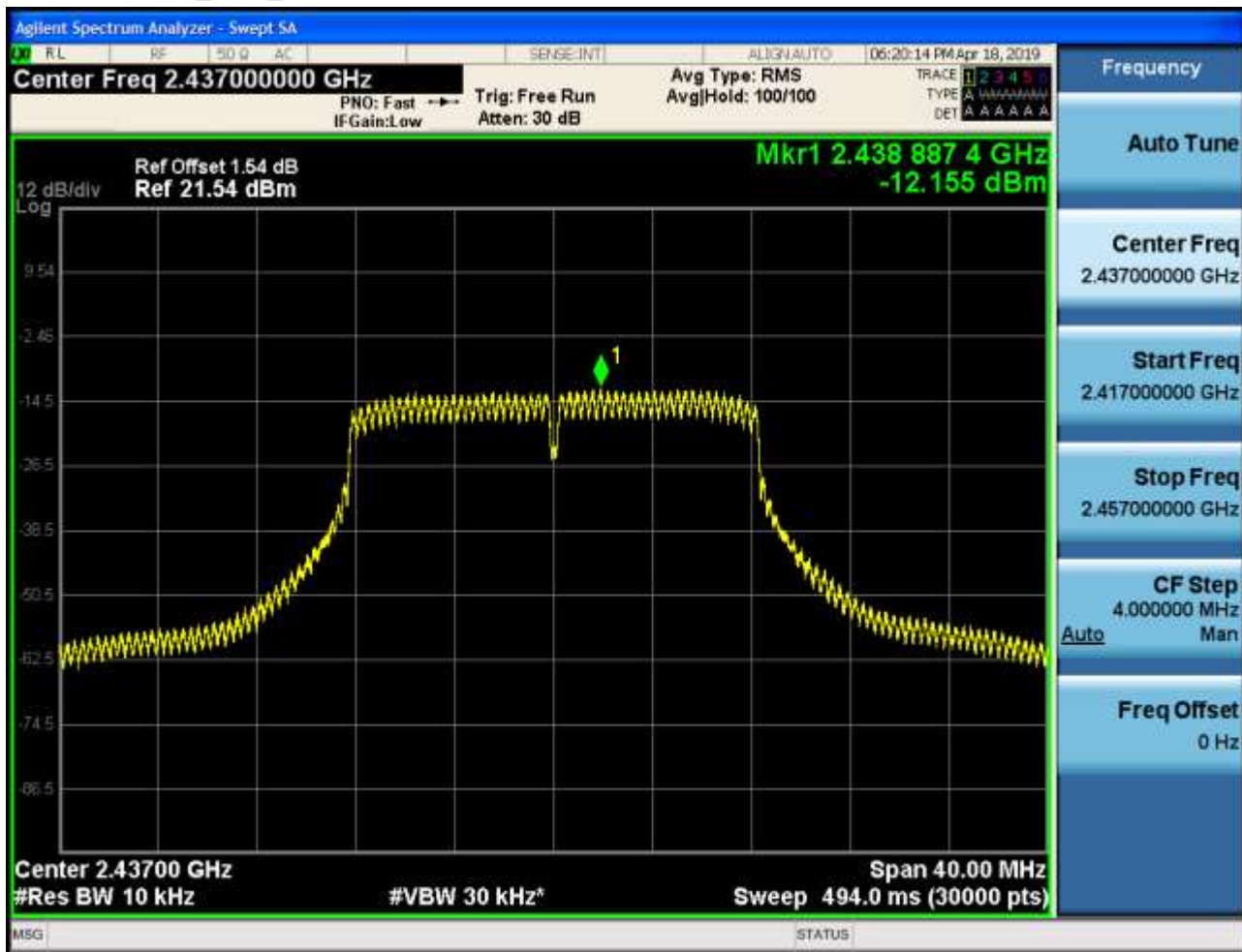


1.22 11G20CDD_Ant2_2417



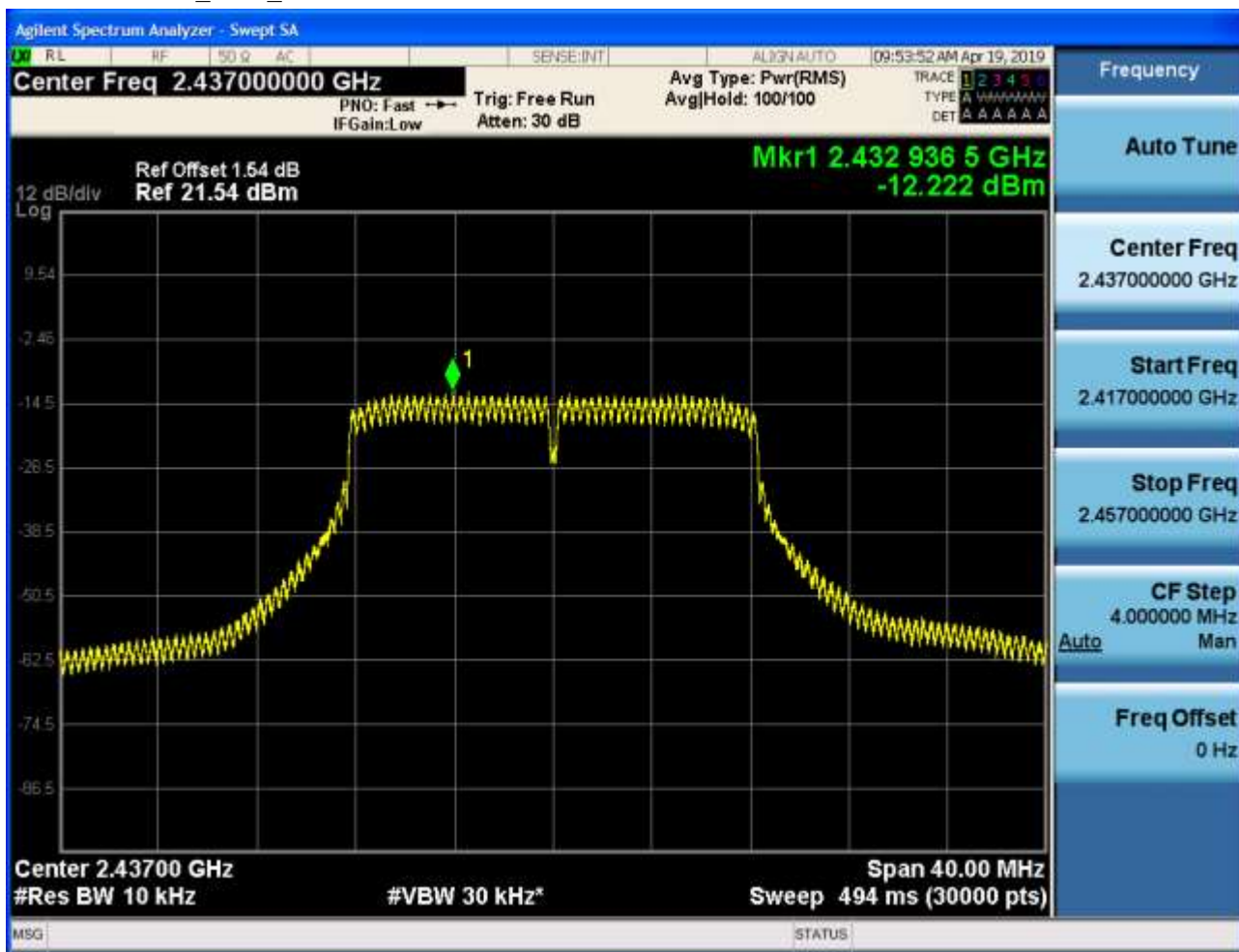


1.23 11G20CDD_Ant1_2437



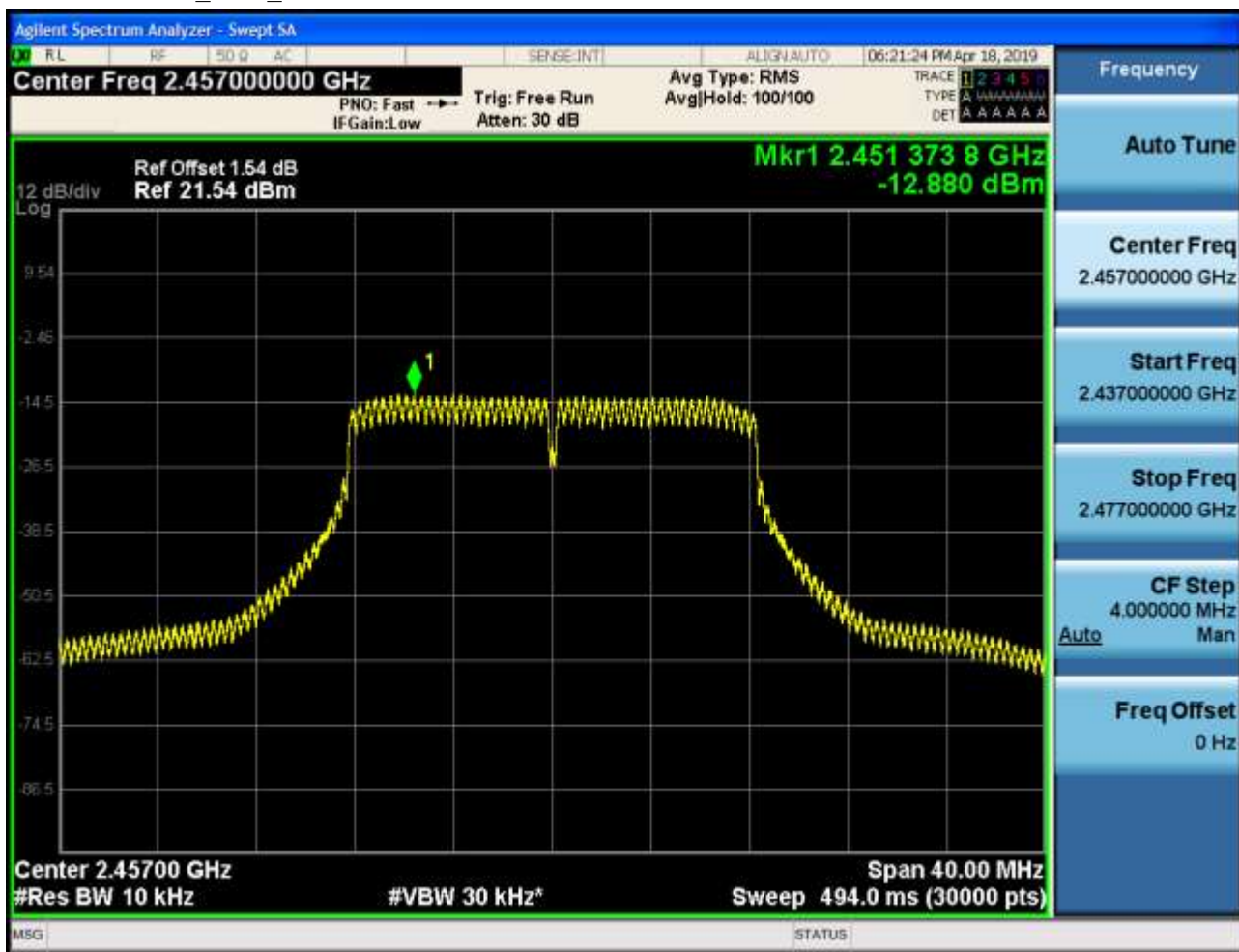


1.24 11G20CDD_Ant2_2437





1.25 11G20CDD_Ant1_2457





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 09:54:57 AM Apr 19, 2019

Center Freq 2.45700000 GHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5 6
PNO: Fast → Trig: Free Run Avg/Hold: 100/100 TYPE A W W W W W W W
IF Gain: Low Atten: 30 dB DET A A A A A A

Ref Offset 1.54 dB Mkr1 2.459 510 1 GHz
Ref 21.54 dBm -12.118 dBm

12 dB/div Log

Center 2.45700 GHz Span 40.00 MHz
#Res BW 10 kHz #VBW 30 kHz* Sweep 494 ms (30000 pts)

MSG STATUS

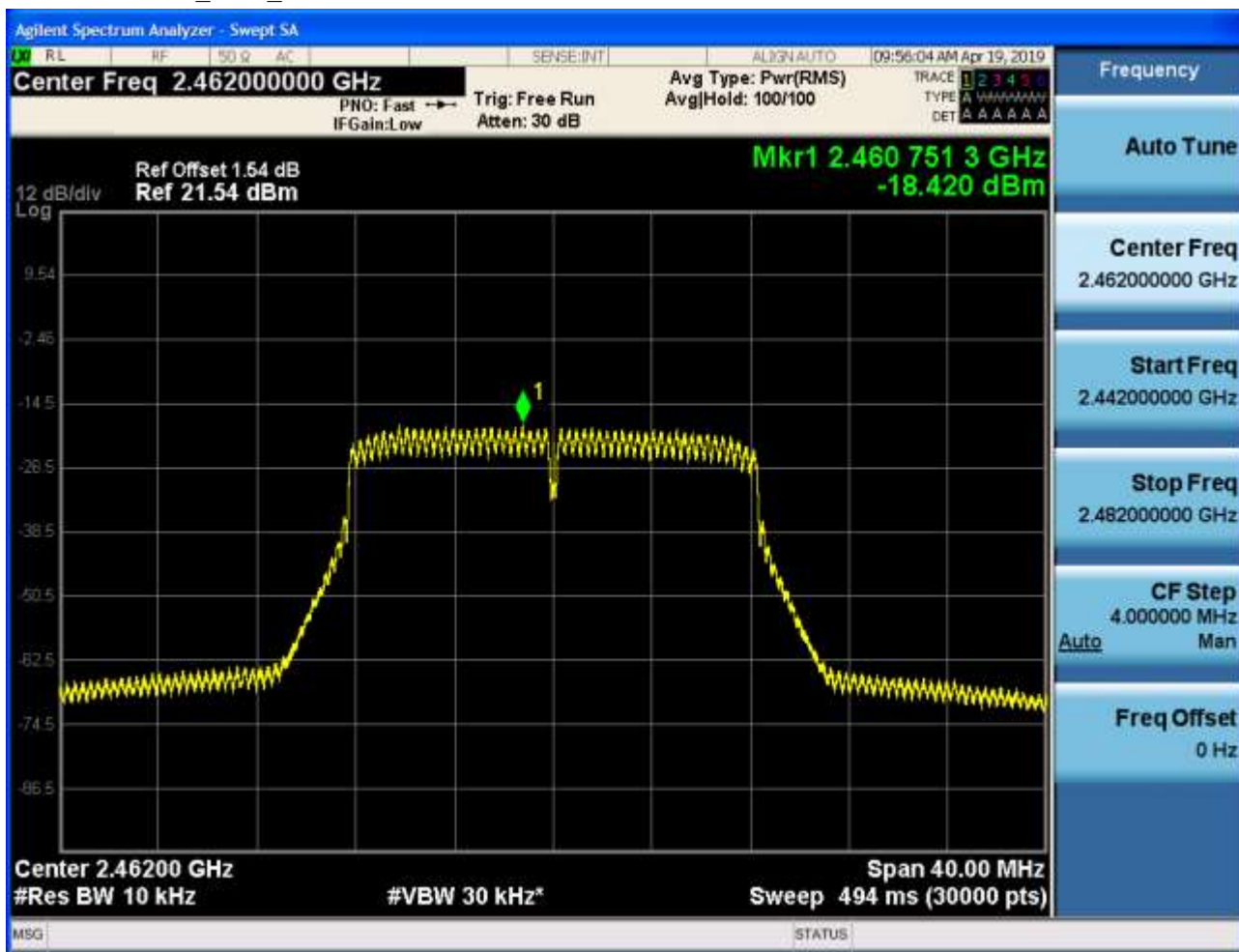


1.27 11G20CDD_Ant1_2462





1.28 11G20CDD_Ant2_2462



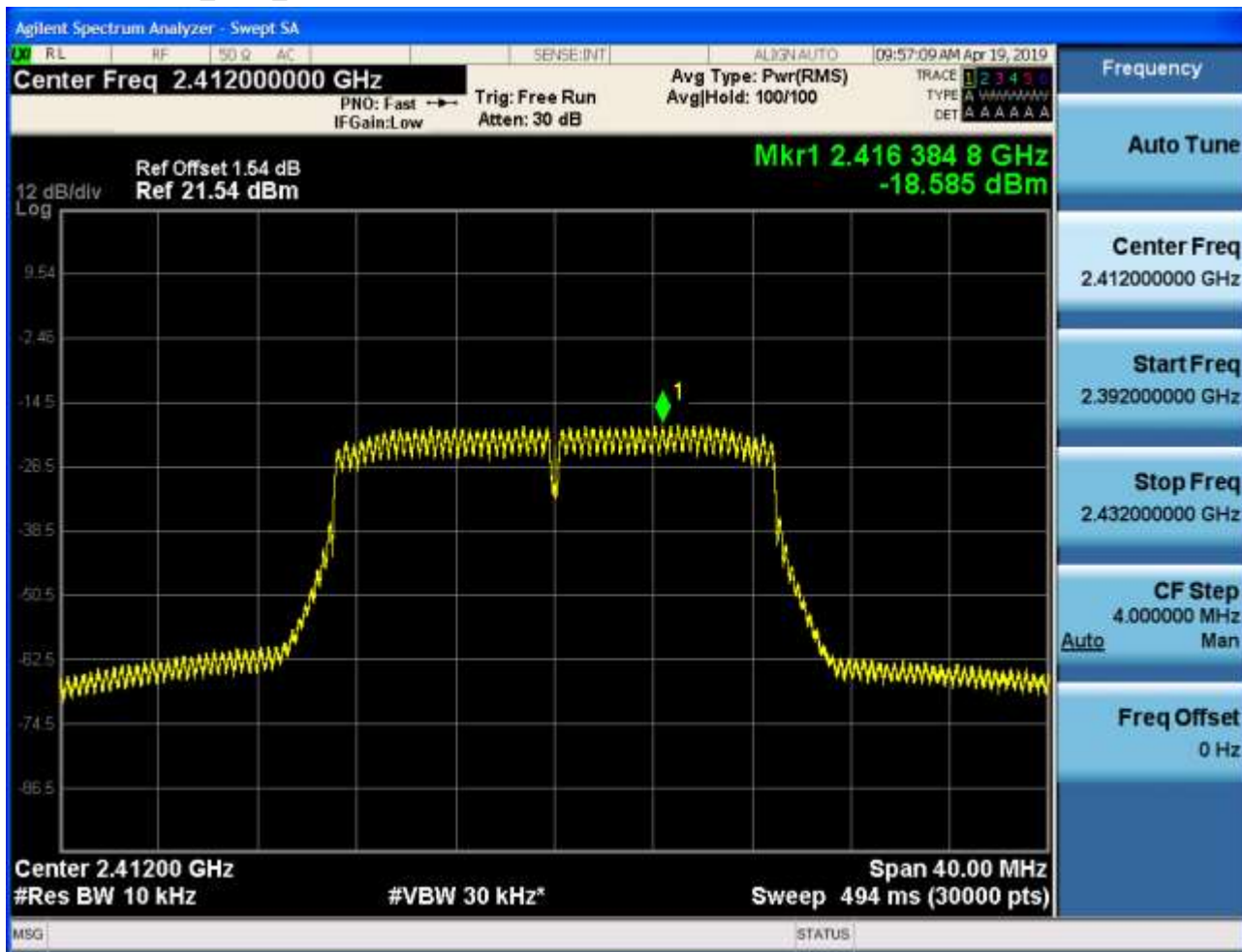


1.29 11N20SISO_Ant1_2412



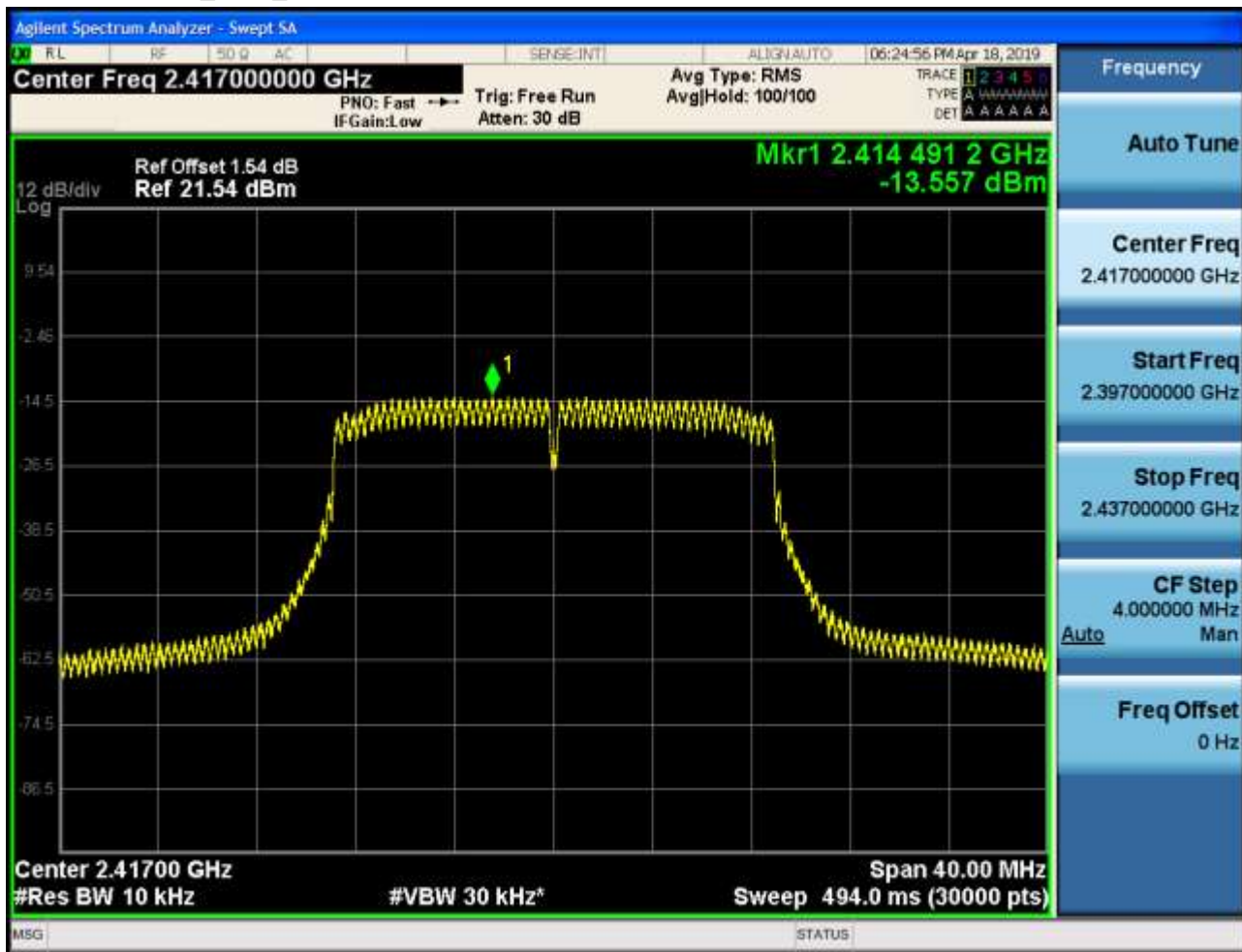


1.30 11N20SISO_Ant2_2412





1.31 11N20SISO_Ant1_2417





1.32 11N20SISO_Ant2_2417



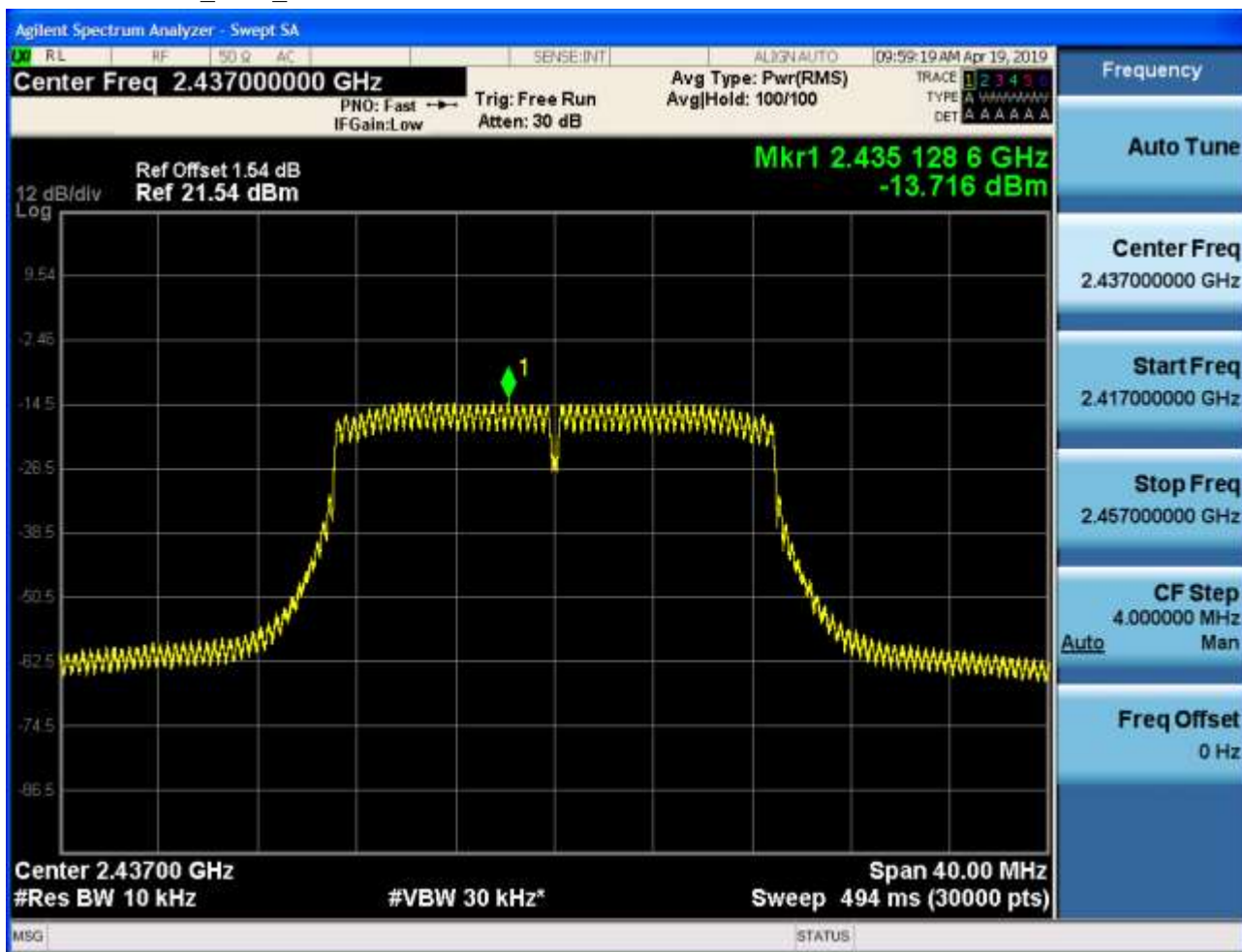


1.33 11N20SISO_Ant1_2437





1.34 11N20SISO_Ant2_2437



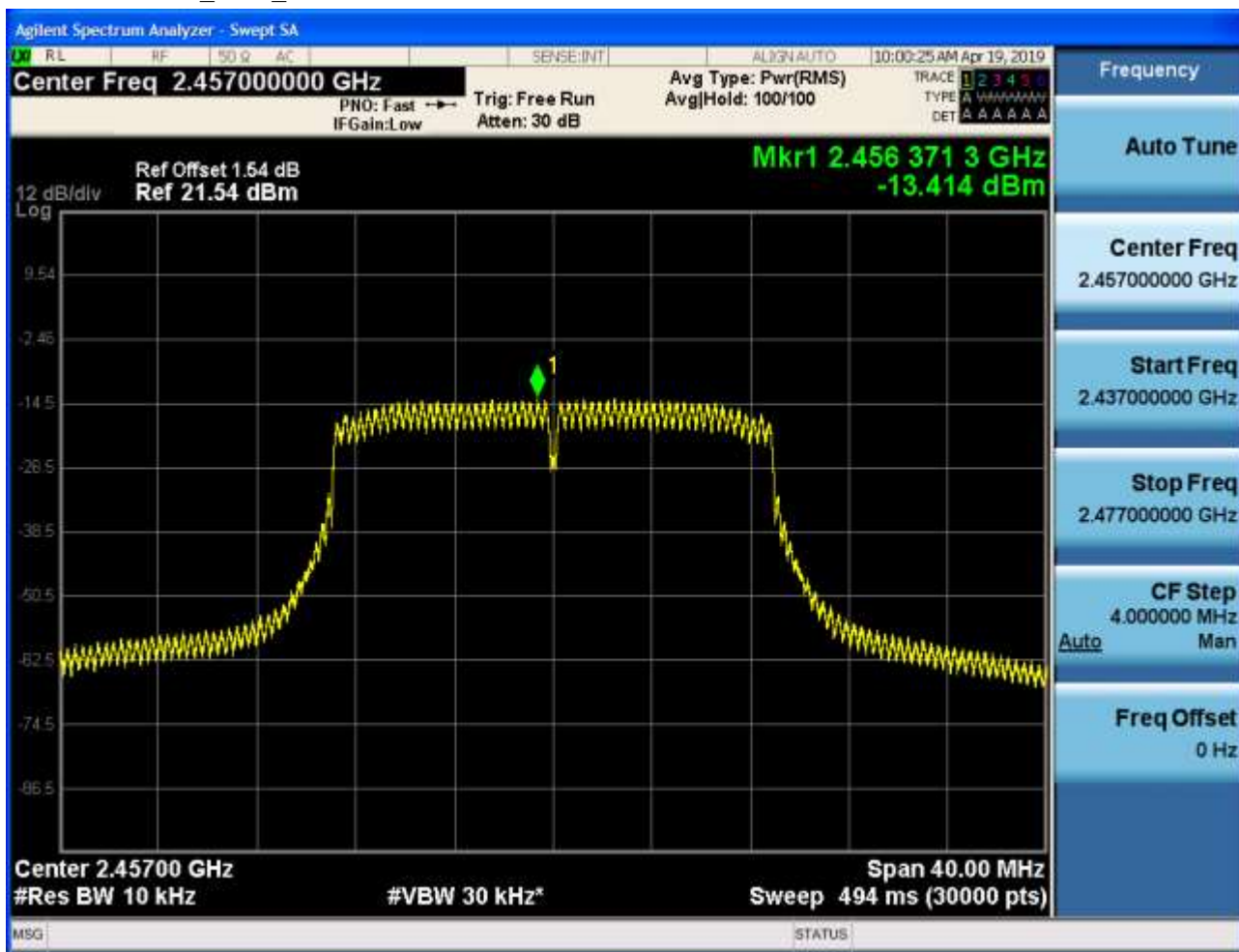


1.35 11N20SISO_Ant1_2457





1.36 11N20SISO_Ant2_2457



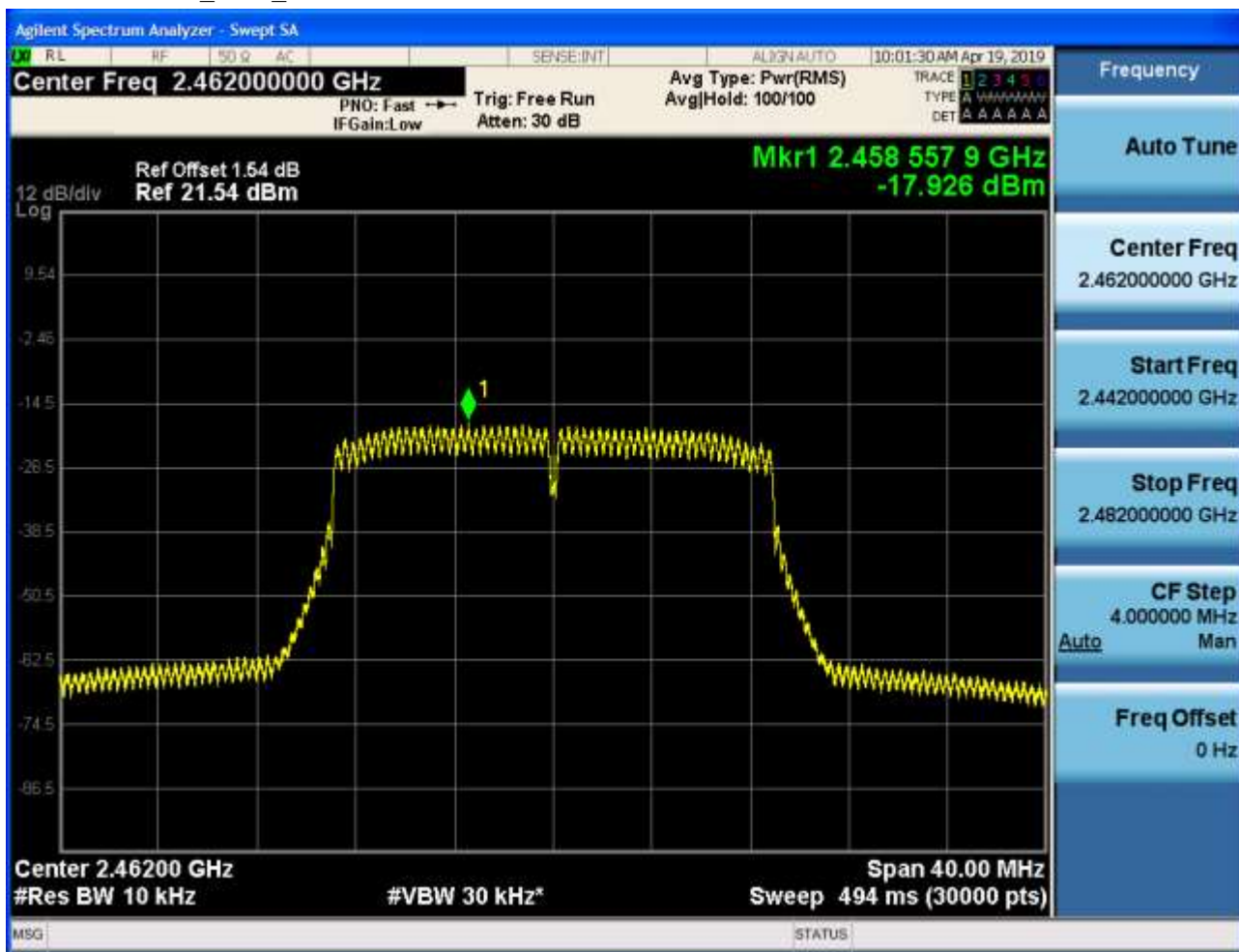


1.37 11N20SISO_Ant1_2462



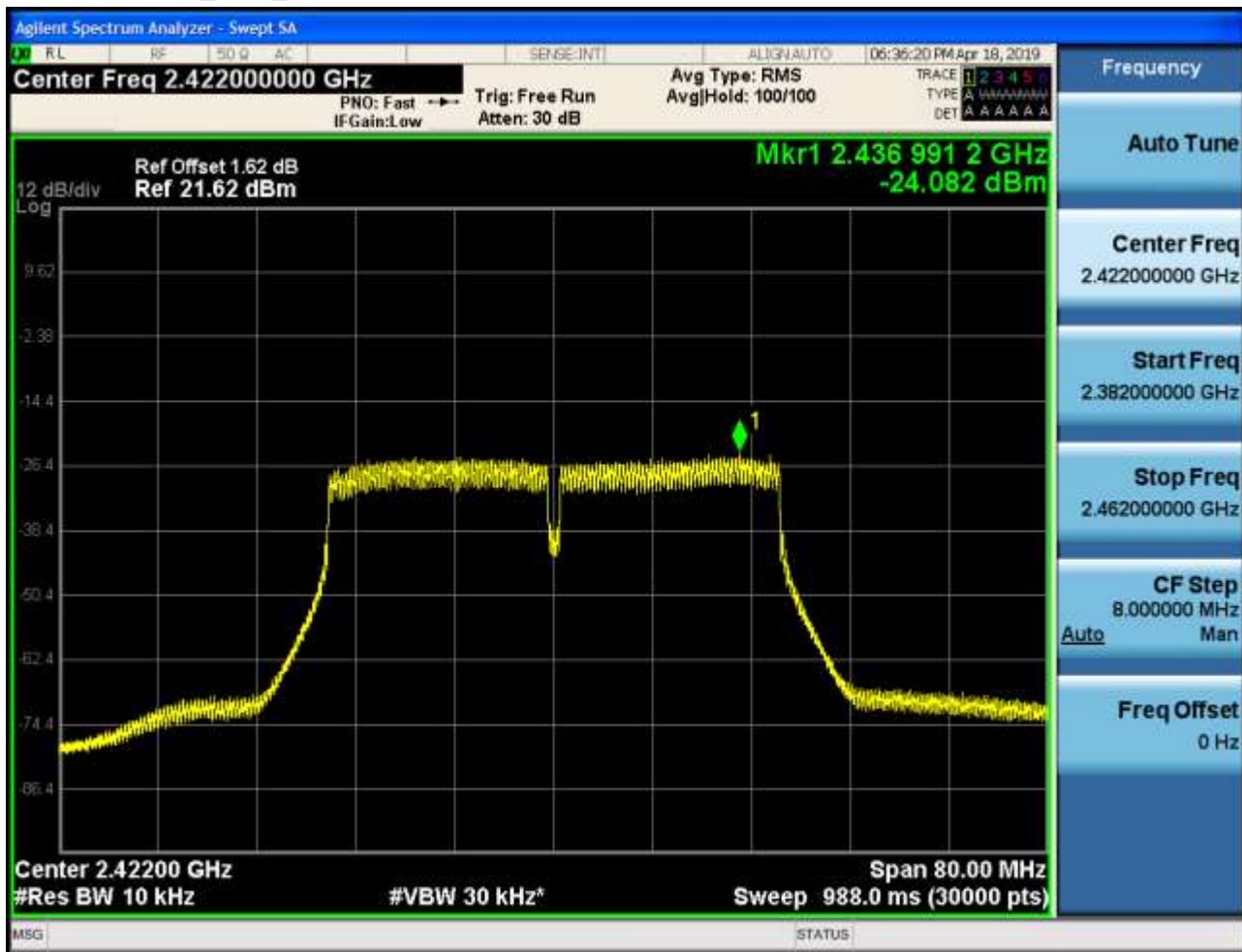


1.38 11N20SISO_Ant2_2462



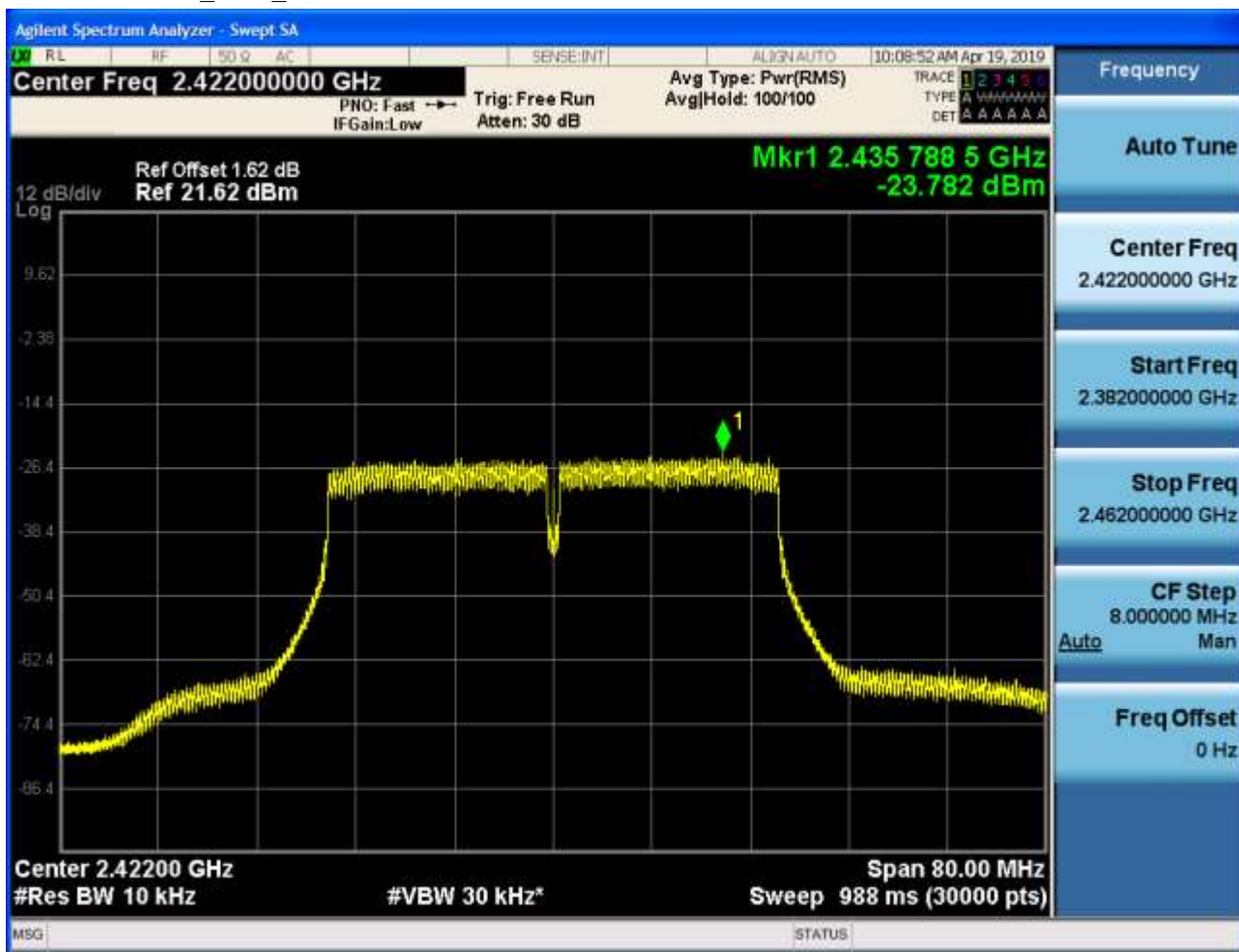


1.39 11N40SISO_Ant1_2422





1.40 11N40SISO_Ant2_2422



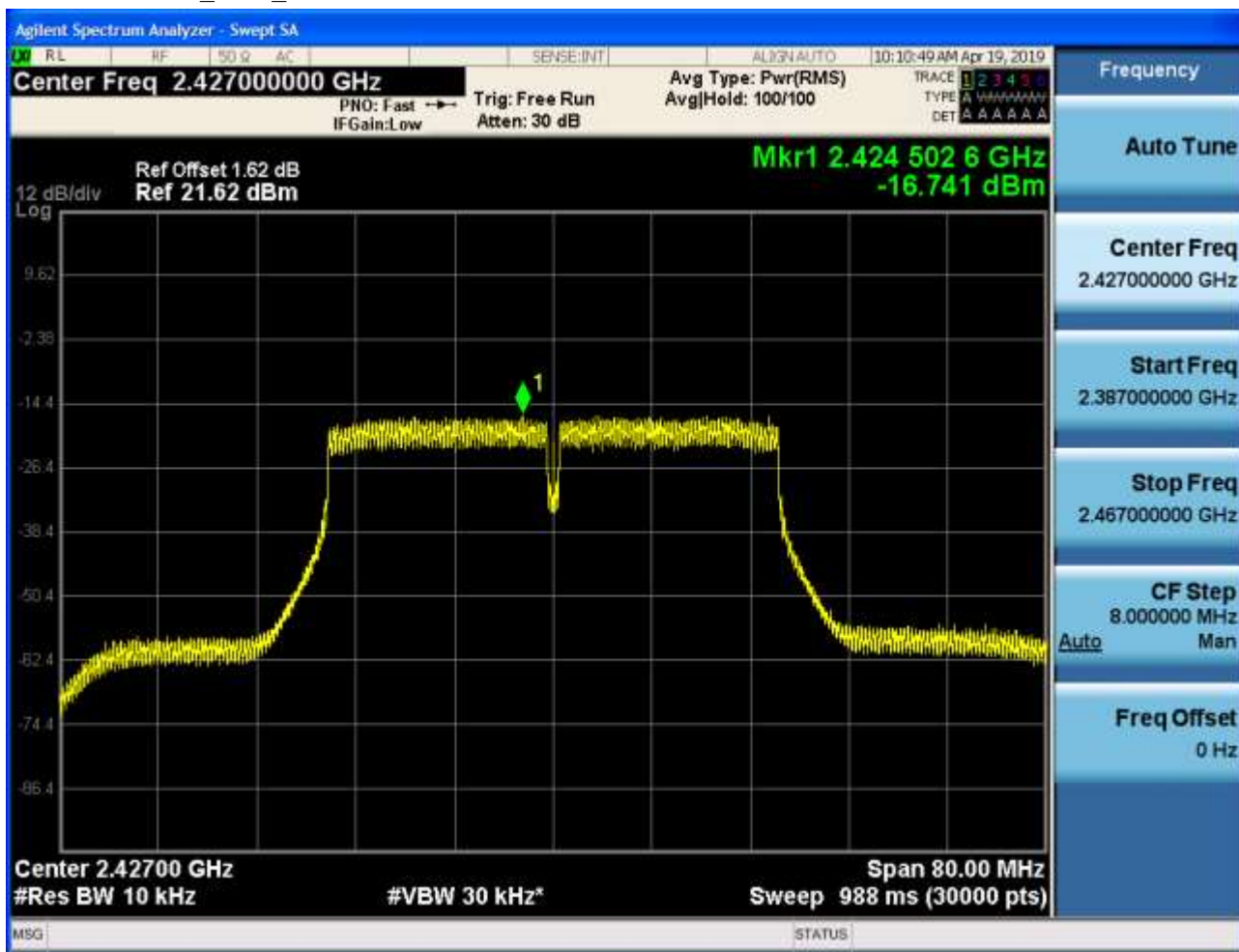


1.41 11N40SISO_Ant1_2427



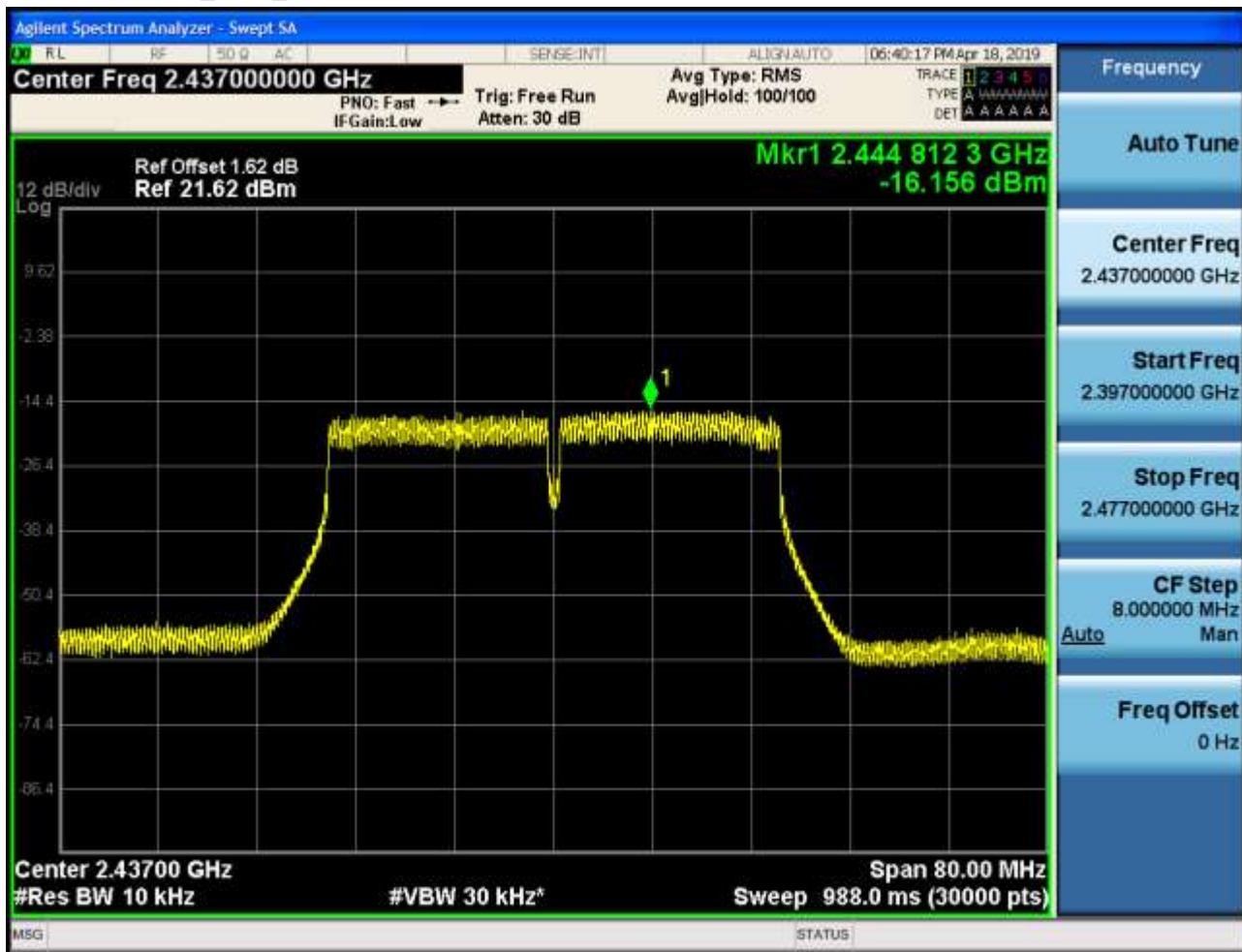


1.42 11N40SISO_Ant2_2427





1.43 11N40SISO_Ant1_2437





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.43700000 GHz

PNO: Fast → Trig: Free Run

IF Gain: Low Atten: 30 dB

Avg Type: Pwr(RMS)

Avg/Hold: 100/100

TRACE 1 2 3 4 5 6

TYPE A W W W W W W W W

DET A A A A A A

Ref Offset 1.62 dB

Ref 21.62 dBm

Mkr1 2.451 996 GHz

-16.444 dBm

12 dB/div

Log

The spectrum analyzer display shows a swept signal. The vertical axis represents power in dBm, ranging from -86.4 to 9.62. The horizontal axis represents frequency in GHz, ranging from 2.397 to 2.477. The signal is a yellow trace that rises from a noise floor of approximately -82.4 dBm at 2.397 GHz to a plateau of approximately -26.4 dBm between 2.437 GHz and 2.477 GHz, then falls back to the noise floor. A green marker labeled 'Mkr1' is positioned at 2.451996 GHz with a power level of -16.444 dBm. The display includes various control parameters such as Center Freq (2.43700000 GHz), Span (80.00 MHz), Res BW (10 kHz), and VBW (30 kHz*).

Center 2.43700 GHz

#Res BW 10 kHz

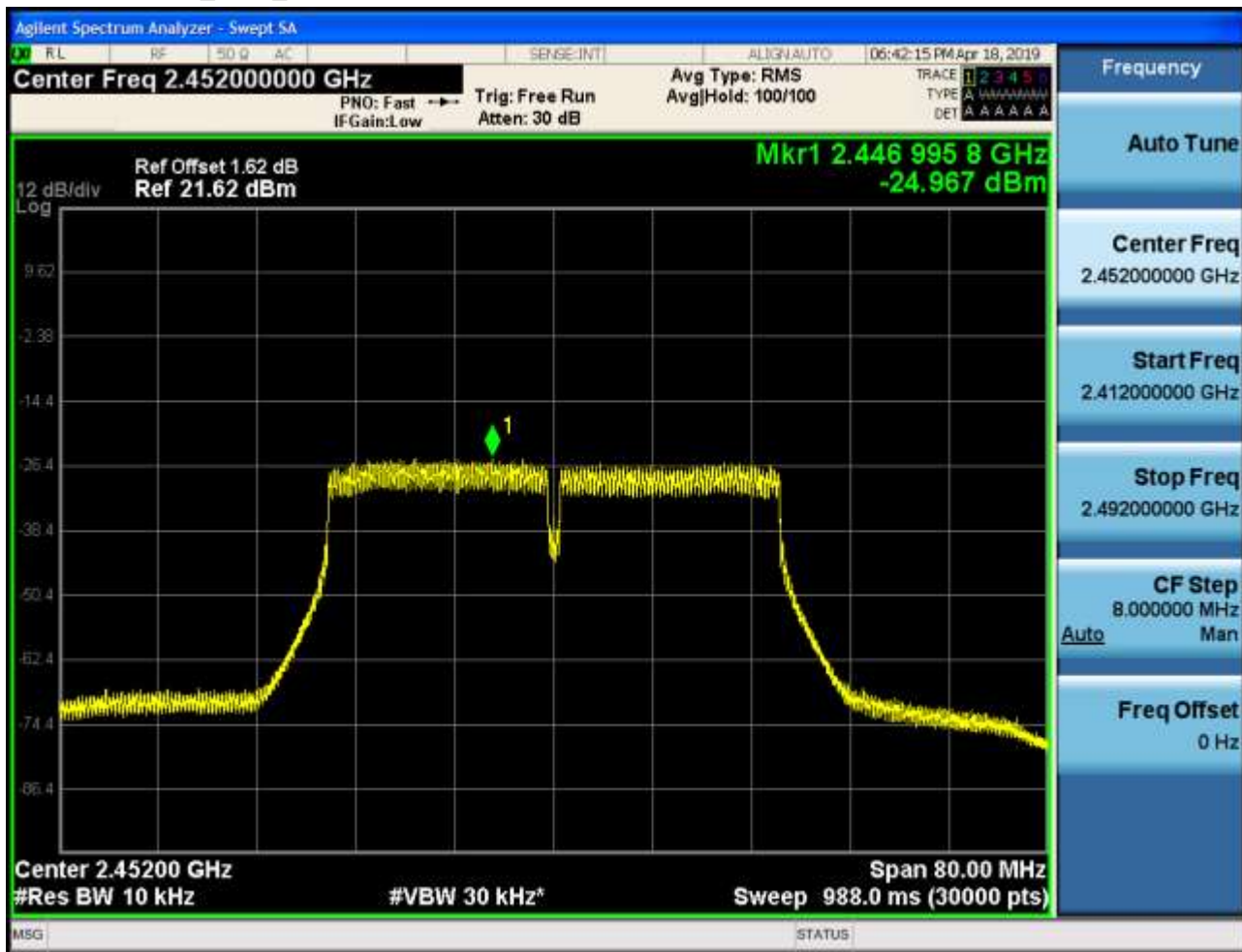
#VBW 30 kHz*

Span 80.00 MHz

Sweep 988 ms (30000 pts)



1.45 11N40SISO_Ant1_2452





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.45200000 GHz

PNO: Fast → Trig: Free Run

IF Gain: Low Atten: 30 dB

Avg Type: Pwr(RMS)

Avg/Hold: 100/100

TRACE 1 2 3 4 5 6

TYPE A W W W W W W W

DET A A A A A A

Ref Offset 1.62 dB

Ref 21.62 dBm

Mkr1 2.464 500 4 GHz

-25.235 dBm

12 dB/div

Log

Center 2.45200 GHz

#Res BW 10 kHz

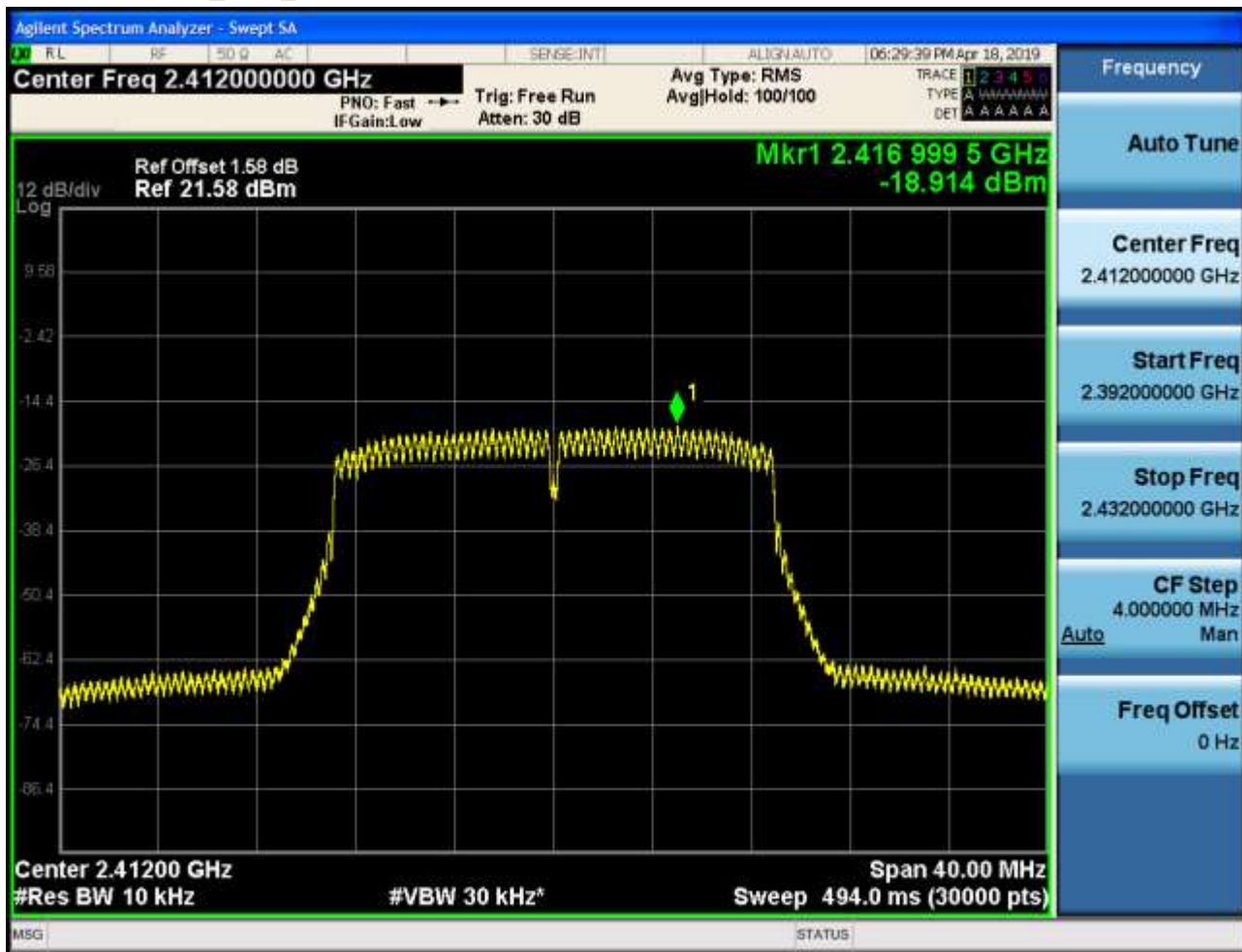
#VBW 30 kHz*

Span 80.00 MHz

Sweep 988 ms (30000 pts)

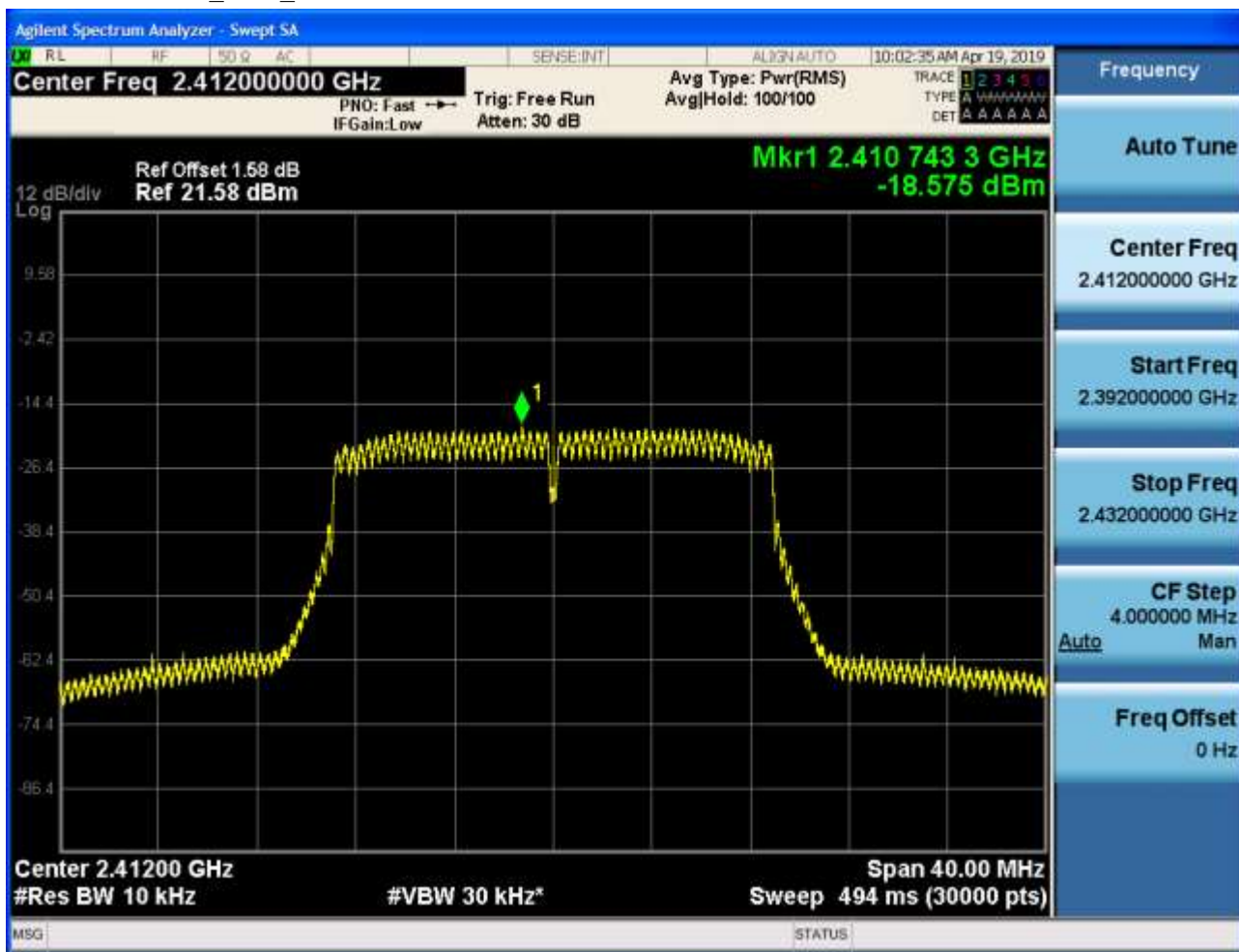


1.47 11N20MIMO_Ant1_2412





1.48 11N20MIMO_Ant2_2412





1.49 11N20MIMO_Ant1_2417





1.50 11N20MIMO_Ant2_2417





1.51 11N20MIMO_Ant1_2437





1.52 11N20MIMO_Ant2_2437



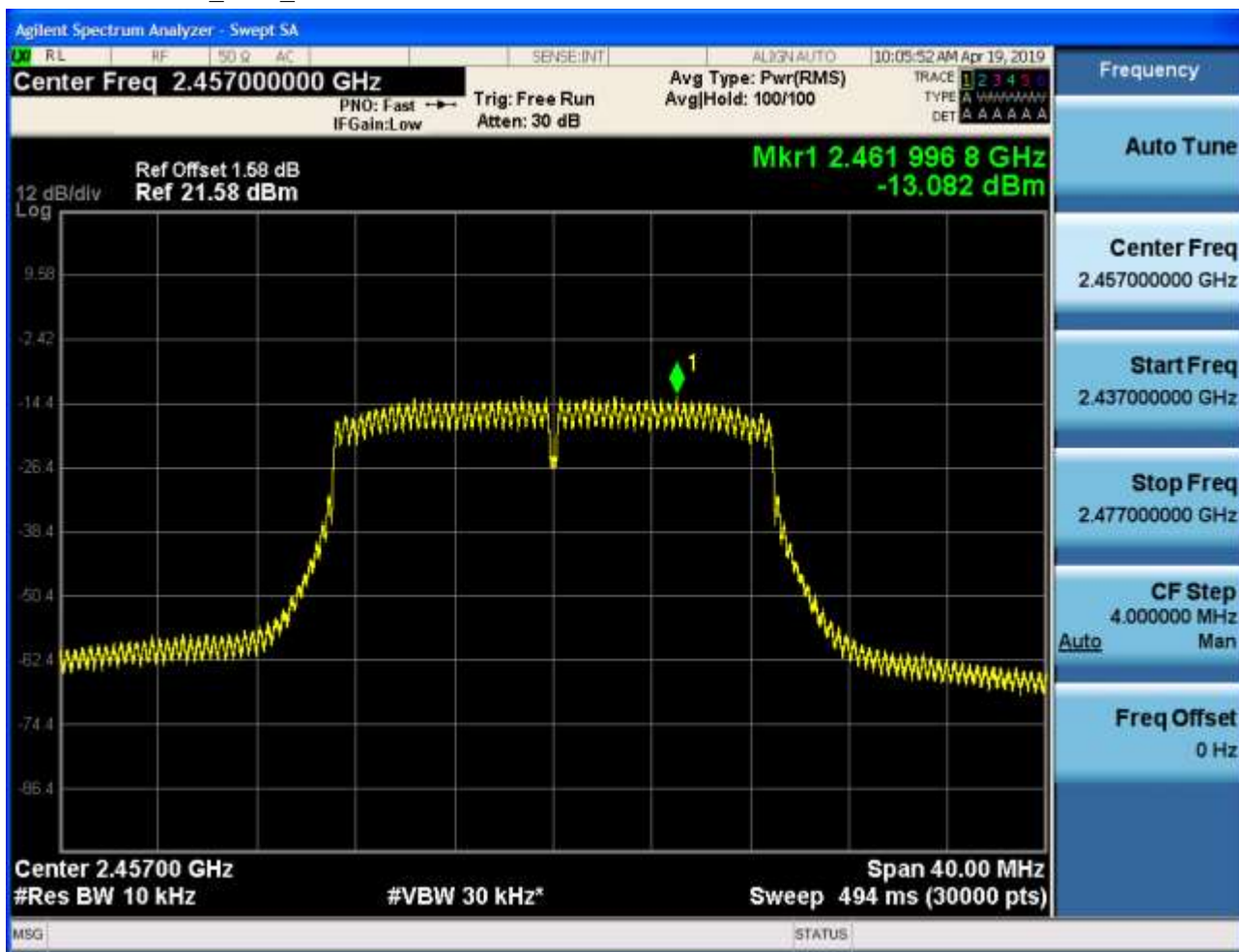


1.53 11N20MIMO_Ant1_2457





1.54 11N20MIMO_Ant2_2457



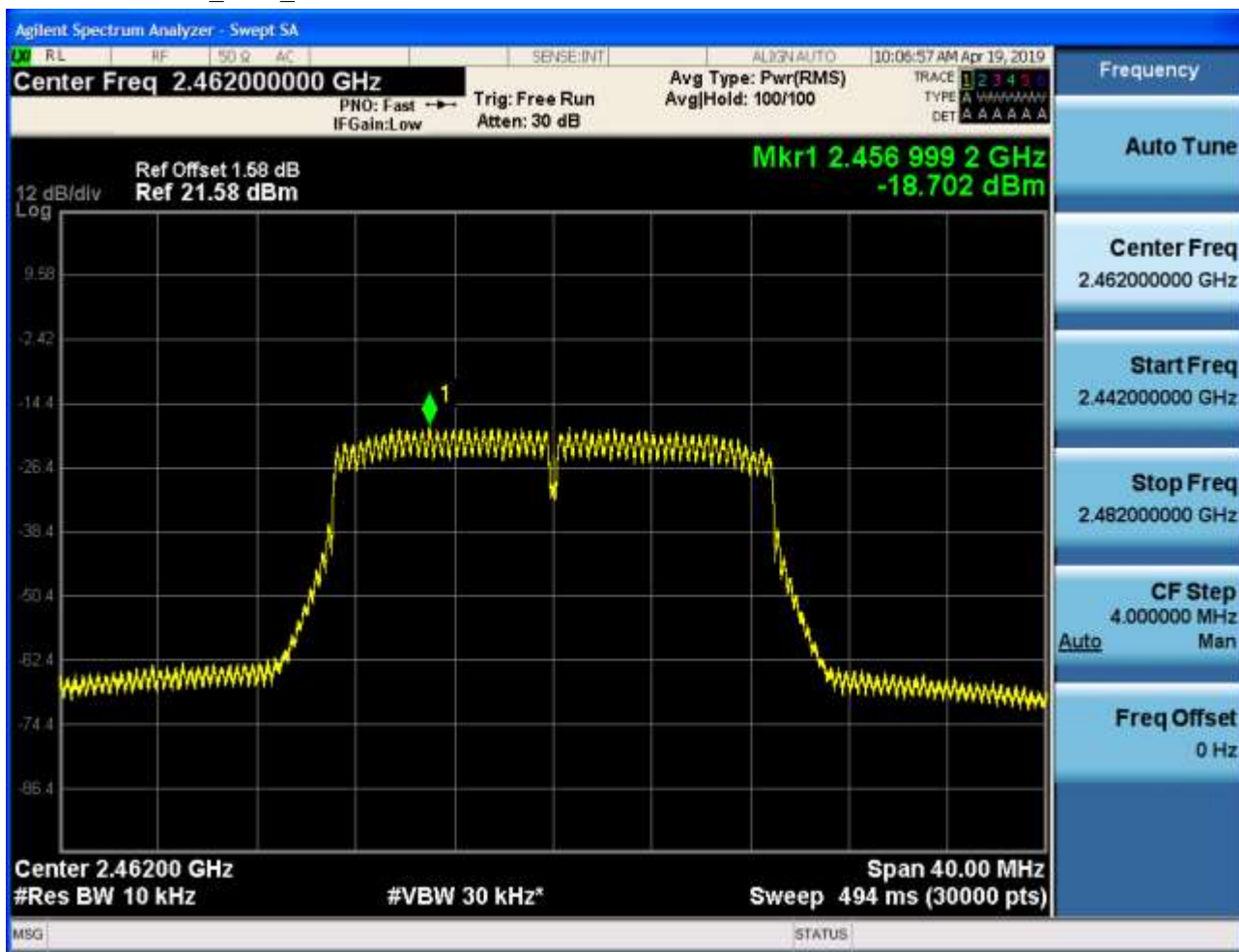


1.55 11N20MIMO_Ant1_2462



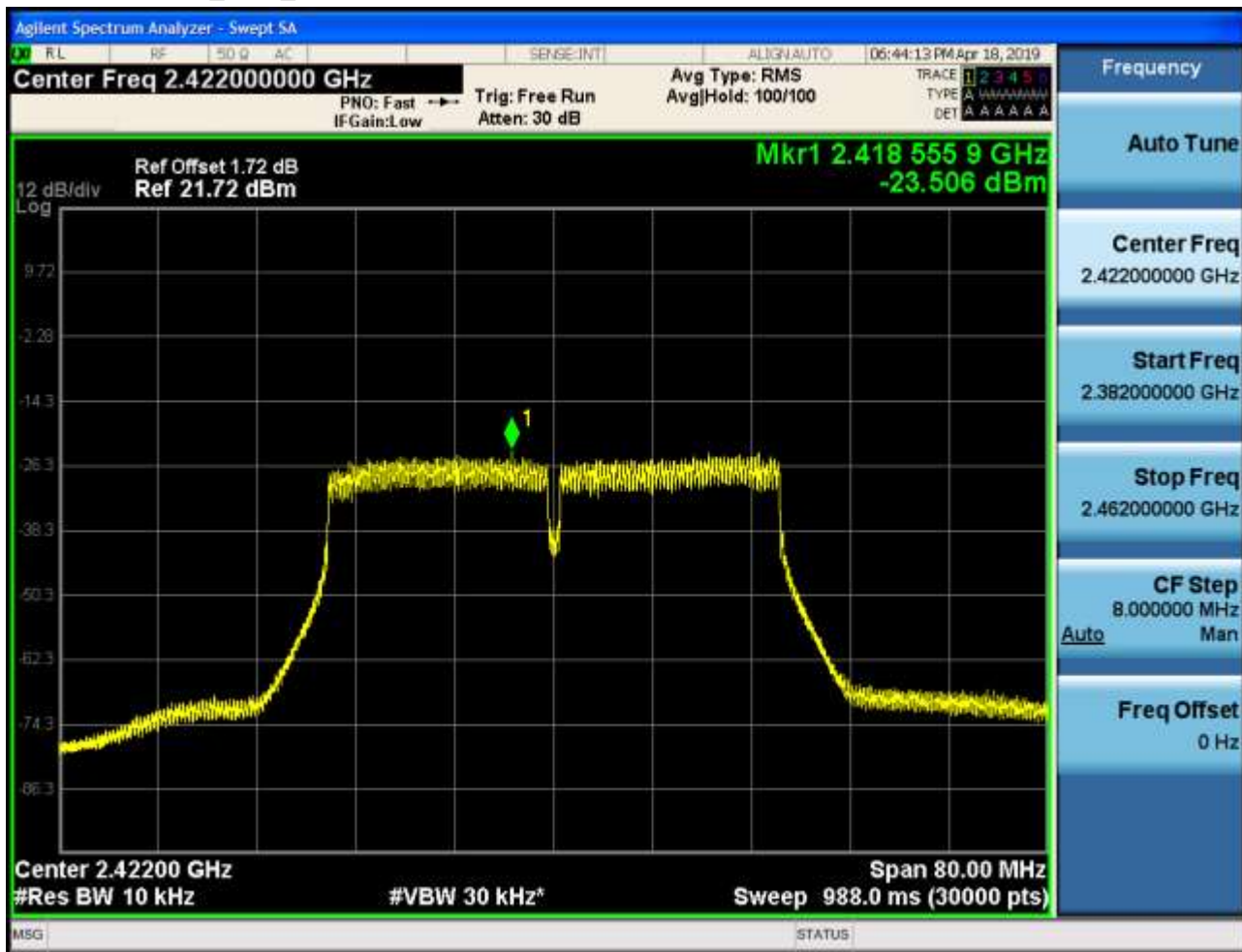


1.56 11N20MIMO_Ant2_2462



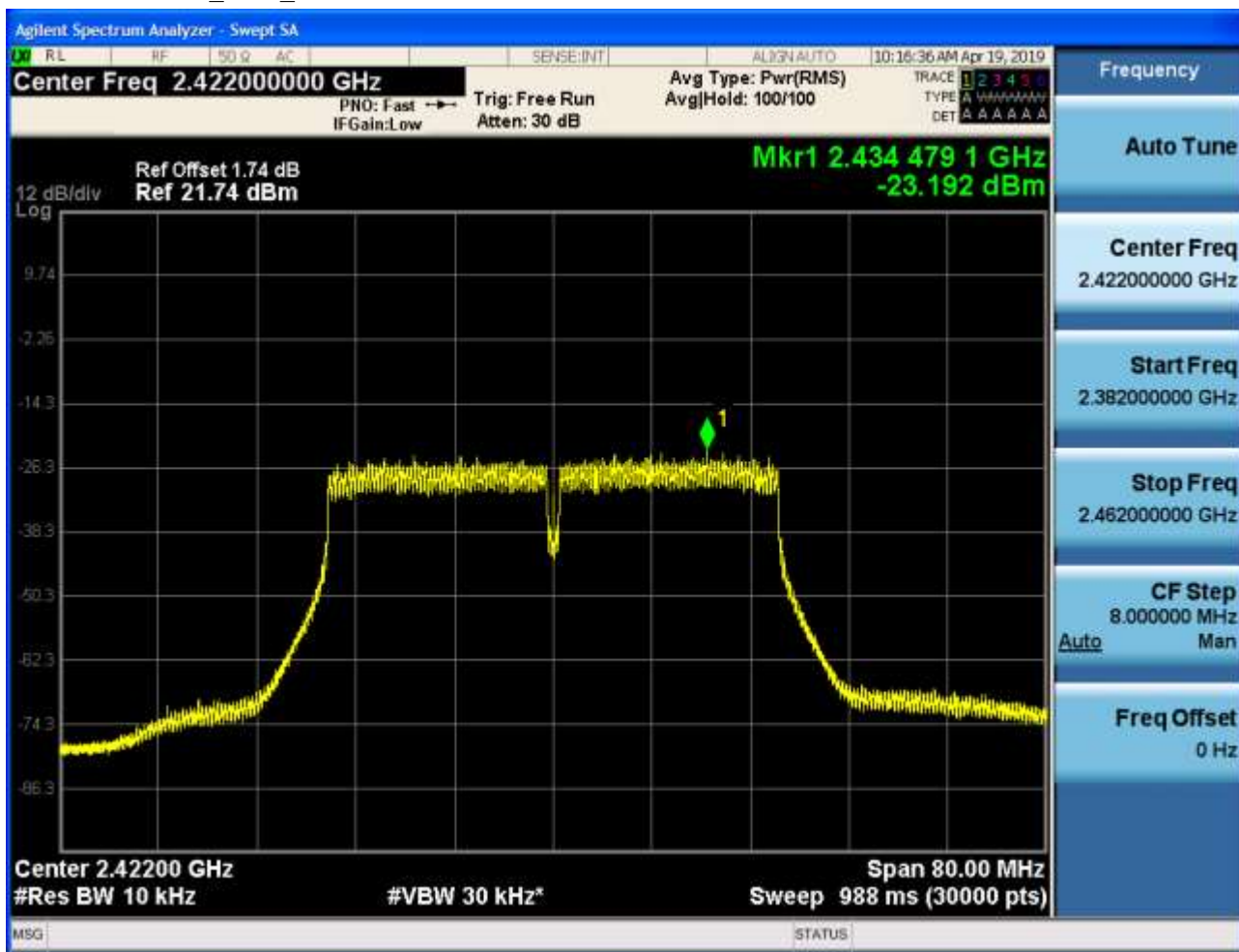


1.57 11N40MIMO_Ant1_2422





1.58 11N40MIMO_Ant2_2422



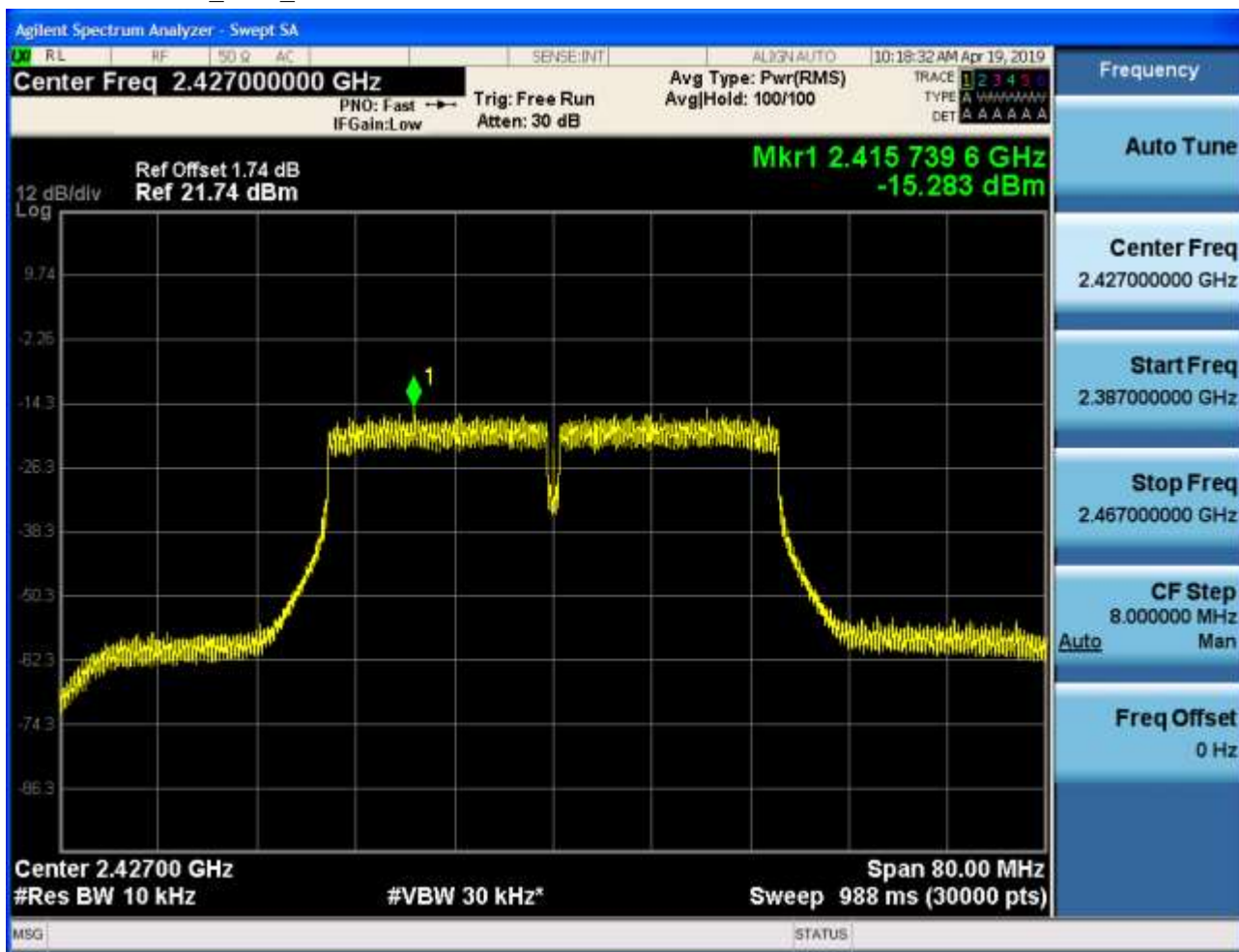


1.59 11N40MIMO_Ant1_2427





1.60 11N40MIMO_Ant2_2427



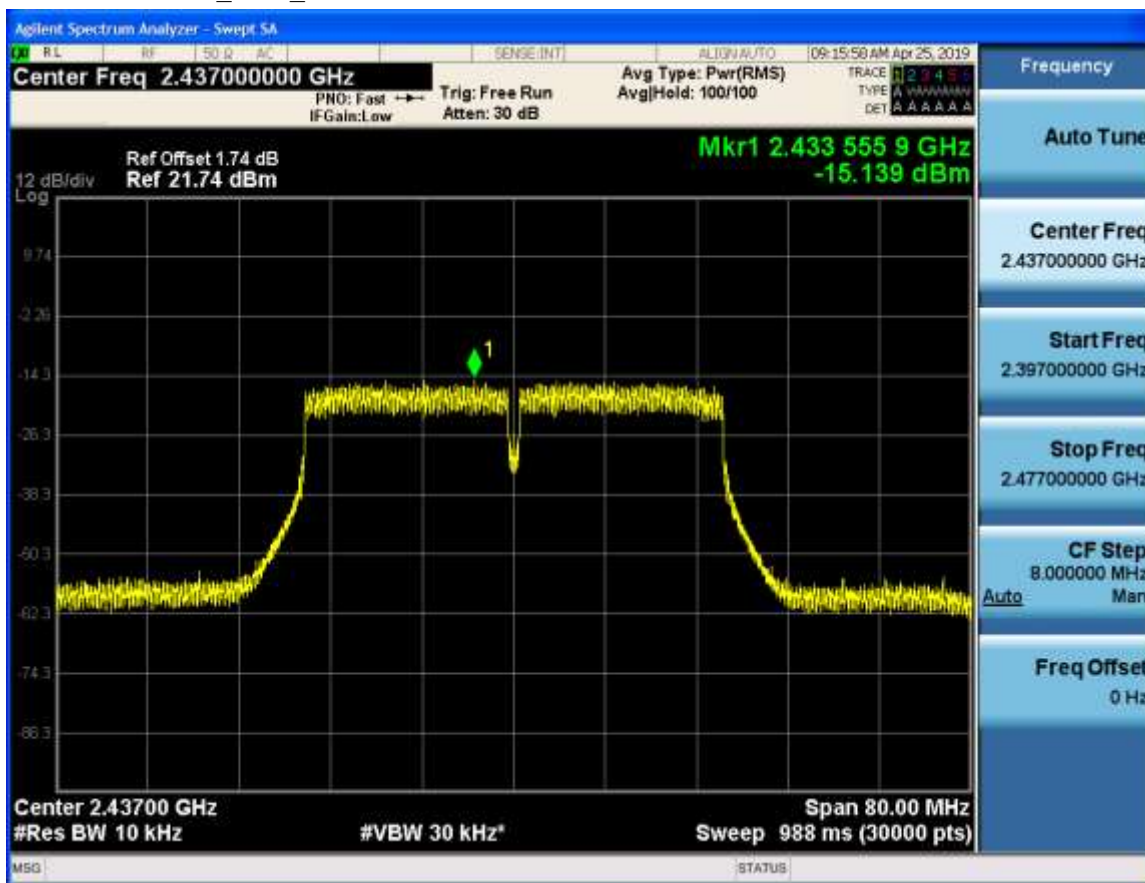


1.61 11N40MIMO_Ant1_2437



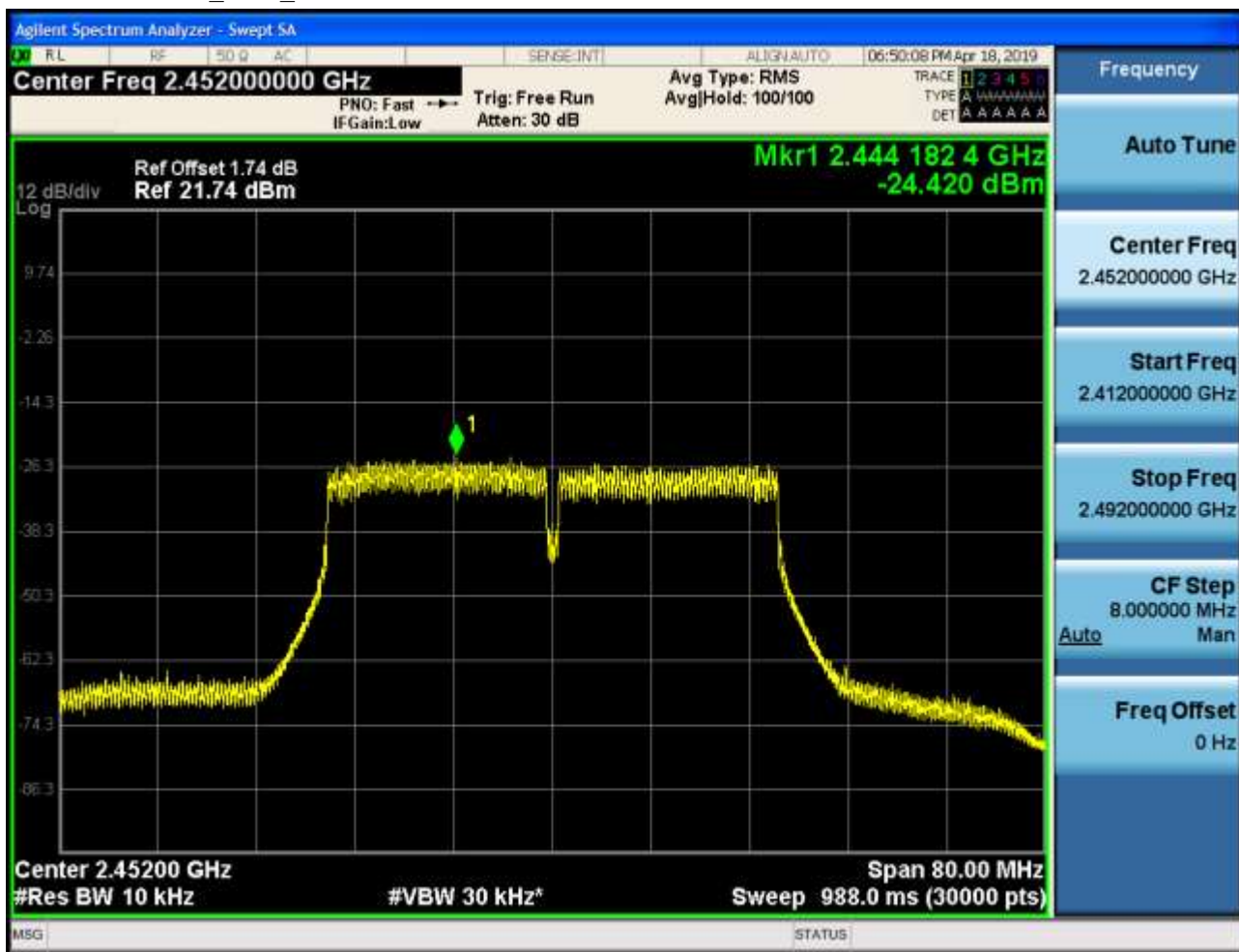


1.62 11N40MIMO_Ant2_2437



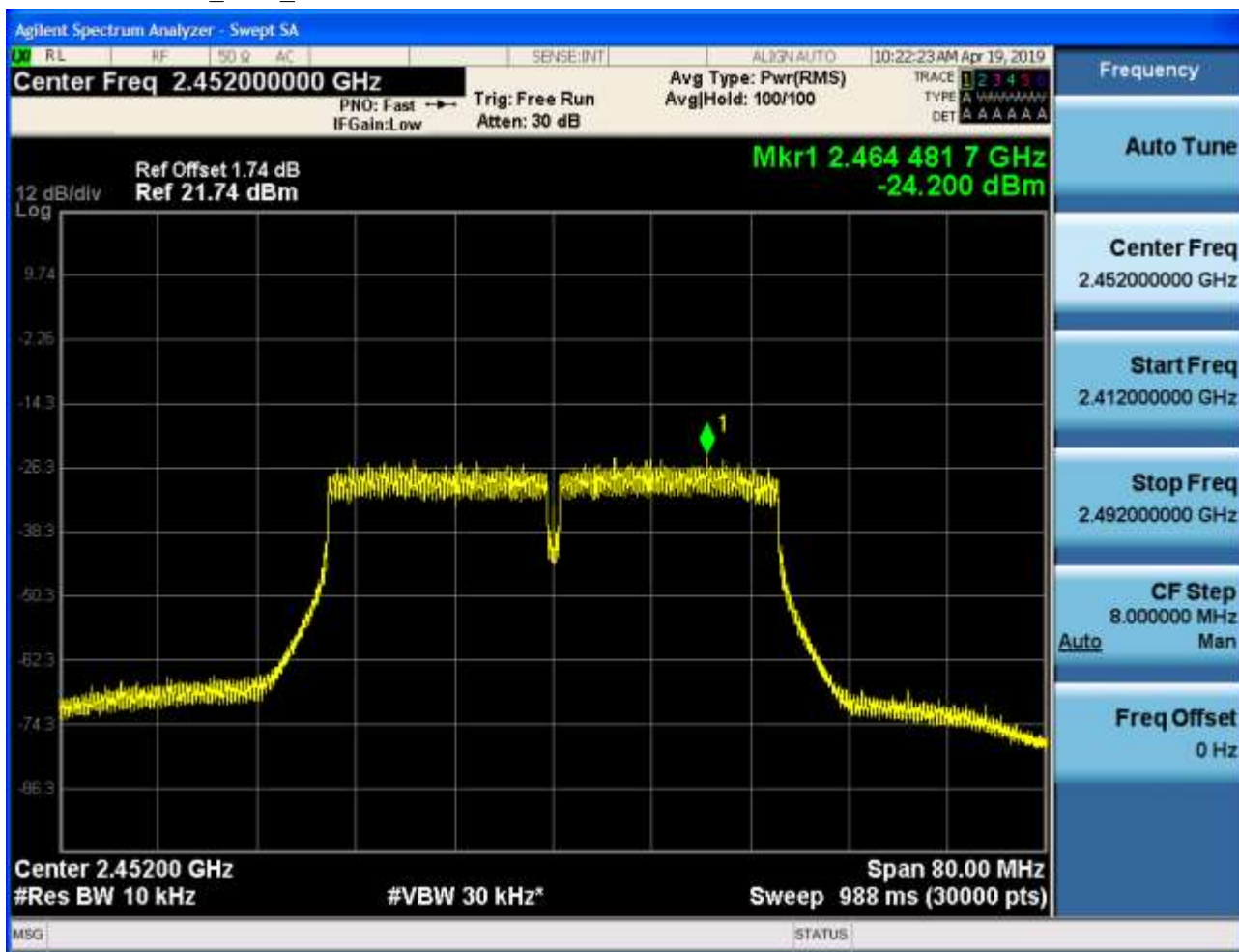


1.63 11N40MIMO_Ant1_2452





1.64 11N40MIMO_Ant2_2452





Appendix F: Band Edges Compliance

Part I - Test Results

Test Mode	Antenna	ChName	Channel	RefLevel [dBm/100 kHz]	Result [dBm/100 kHz]	Limit [dBm/ 100kHz]	Verdict
11B	Ant1	Low	2412	7.19	-33.58	-22.81	PASS
11B	Ant2	Low	2412	8.7	-32.97	-21.3	PASS
11B	Ant1	High	2417	8.11	-47.95	-21.89	PASS
11B	Ant2	High	2417	9.44	-47.56	-20.56	PASS
11B	Ant1	High	2462	8.61	-45.37	-21.39	PASS
11B	Ant2	High	2462	8.84	-46.49	-21.16	PASS
11G	Ant1	Low	2412	-1.42	-42.48	-31.42	PASS
11G	Ant2	Low	2412	-0.66	-40.64	-30.66	PASS
11G	Ant1	High	2417	4.86	-47.08	-25.14	PASS
11G	Ant2	High	2417	5.87	-46.25	-24.13	PASS
11G	Ant1	High	2457	5.23	-46.7	-24.77	PASS
11G	Ant2	High	2457	5.33	-46.89	-24.67	PASS
11G	Ant1	High	2462	-4.28	-47.24	-34.28	PASS
11G	Ant2	High	2462	-1.19	-47.41	-31.19	PASS
11G20CDD	Ant1	Low	2412	-2.35	-43.0	-32.35	PASS
11G20CDD	Ant2	Low	2412	-2.25	-41.42	-32.25	PASS
11G20CDD	Ant1	High	2417	5.32	-47.38	-24.68	PASS
11G20CDD	Ant2	High	2417	4.8	-46.08	-25.2	PASS
11G20CDD	Ant1	High	2457	5.43	-46.59	-24.57	PASS
11G20CDD	Ant2	High	2457	5.58	-46.79	-24.42	PASS
11G20CDD	Ant1	High	2462	-3.67	-47.51	-33.67	PASS
11G20CDD	Ant2	High	2462	-1.11	-46.63	-31.11	PASS
11N20SISO	Ant1	Low	2412	-2.15	-43.49	-32.15	PASS
11N20SISO	Ant2	Low	2412	-1.83	-42.38	-31.83	PASS
11N20SISO	Ant1	High	2417	2.91	-47.04	-27.09	PASS
11N20SISO	Ant2	High	2417	3.6	-46.82	-26.4	PASS
11N20SISO	Ant1	High	2457	3.32	-46.08	-26.68	PASS
11N20SISO	Ant2	High	2457	4.38	-46.85	-25.62	PASS
11N20SISO	Ant1	High	2462	-0.93	-50.07	-30.93	PASS
11N20SISO	Ant2	High	2462	-2.39	-46.31	-32.39	PASS
11N20MIMO	Ant1	Low	2412	-0.68	-41.14	-30.68	PASS
11N20MIMO	Ant2	Low	2412	-1.01	-40.57	-31.01	PASS
11N20MIMO	Ant1	High	2417	3.97	-47.48	-26.03	PASS
11N20MIMO	Ant2	High	2417	4.18	-47.02	-25.82	PASS
11N20MIMO	Ant1	High	2457	4.16	-46.37	-25.84	PASS
11N20MIMO	Ant2	High	2457	3.8	-46.74	-26.2	PASS
11N20MIMO	Ant1	High	2462	-2.01	-47.05	-32.01	PASS
11N20MIMO	Ant2	High	2462	-1.25	-46.97	-31.25	PASS
11N40SISO	Ant1	Low	2422	-6.19	-43.6	-36.19	PASS
11N40SISO	Ant2	Low	2422	-5.84	-44.14	-35.84	PASS
11N40SISO	Ant1	High	2427	1.44	-47.49	-28.56	PASS
11N40SISO	Ant2	High	2427	1.13	-46.07	-28.87	PASS
11N40SISO	Ant1	High	2452	-7.33	-47.65	-37.33	PASS
11N40SISO	Ant2	High	2452	-7.54	-45.93	-37.54	PASS



11N40MIMO	Ant1	Low	2422	-6.48	-43.45	-36.48	PASS
11N40MIMO	Ant2	Low	2422	-6.56	-44.34	-36.56	PASS
11N40MIMO	Ant1	High	2427	2.39	-46.34	-27.61	PASS
11N40MIMO	Ant2	High	2427	1.48	-45.32	-28.52	PASS
11N40MIMO	Ant1	High	2452	-7.37	-46.85	-37.37	PASS
11N40MIMO	Ant2	High	2452	-7.81	-47.49	-37.81	PASS