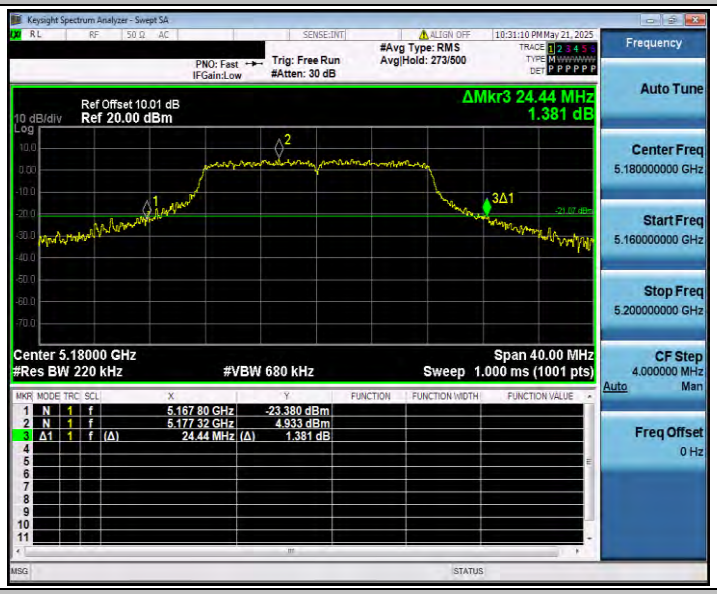
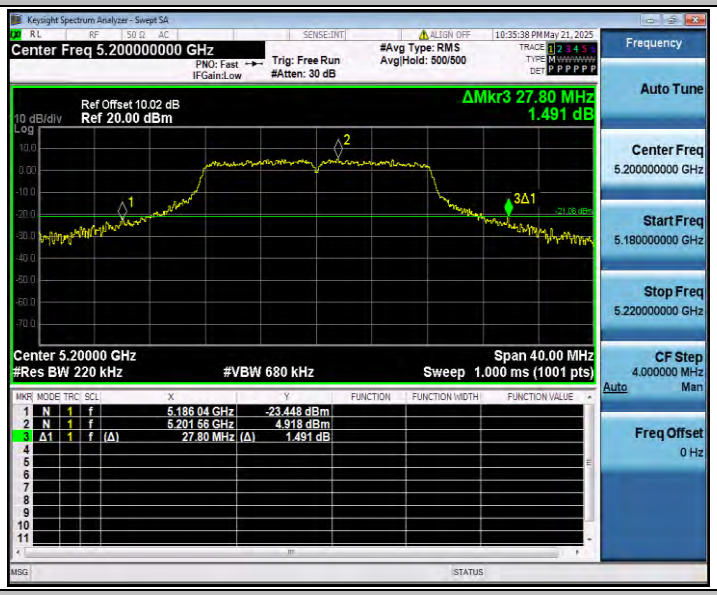
Case No. : GTS20250409003-5-04	
Ambient Condition: 22 ℃, 51 %RH	
According Standard: ■Part15E	
Test Date: 2025.5.21	**Test Engineer:** Evan ouyang

Appendix D.1: Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	24.440	5167.800	5192.240	---	---
		5200	27.800	5186.040	5213.840	---	---
		5240	24.880	5227.080	5251.960	---	---
11N20SISO	Ant1	5180	27.040	5166.360	5193.400	---	---
		5200	25.720	5186.880	5212.600	---	---
		5240	25.320	5227.080	5252.400	---	---
11N40SISO	Ant1	5190	48.320	5167.200	5215.520	---	---
		5230	47.520	5207.120	5254.640	---	---
11AC20SISO	Ant1	5180	26.120	5166.760	5192.880	---	---
		5200	24.960	5187.480	5212.440	---	---
		5240	25.920	5226.480	5252.400	---	---
11AC40SISO	Ant1	5190	47.440	5167.120	5214.560	---	---
		5230	46.880	5205.920	5252.800	---	---
11AX20SISO	Ant1	5180	24.280	5168.040	5192.320	---	---
		5200	25.160	5187.800	5212.960	---	---
		5240	25.160	5227.200	5252.360	---	---
11AX40SISO	Ant1	5190	44.560	5167.440	5212.000	---	---
		5230	44.800	5207.600	5252.400	---	---

Test Graphs

11A_Ant1_5180

11A_Ant1_5200

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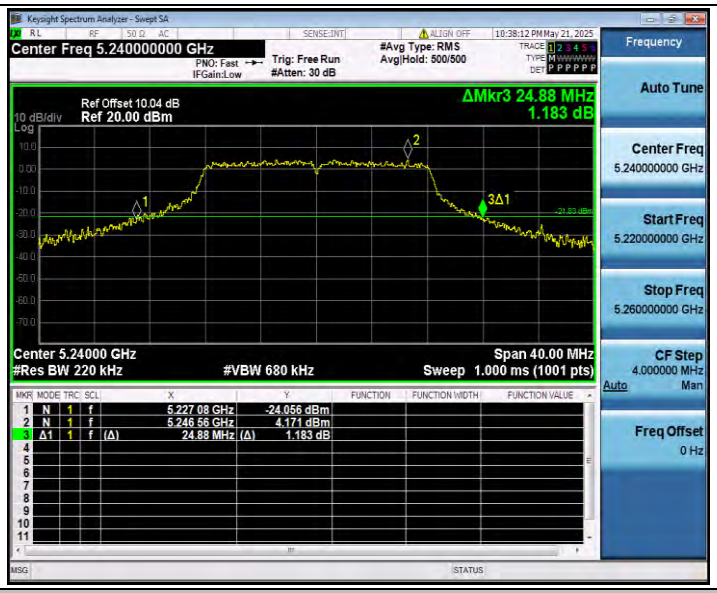

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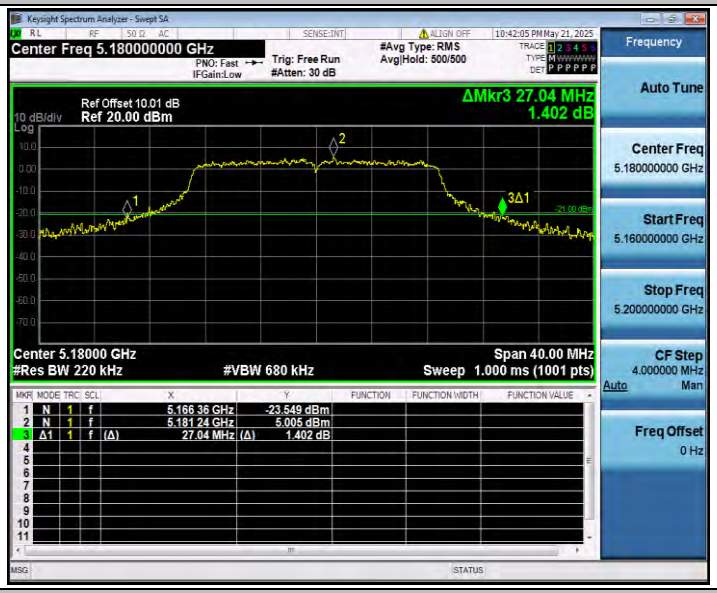

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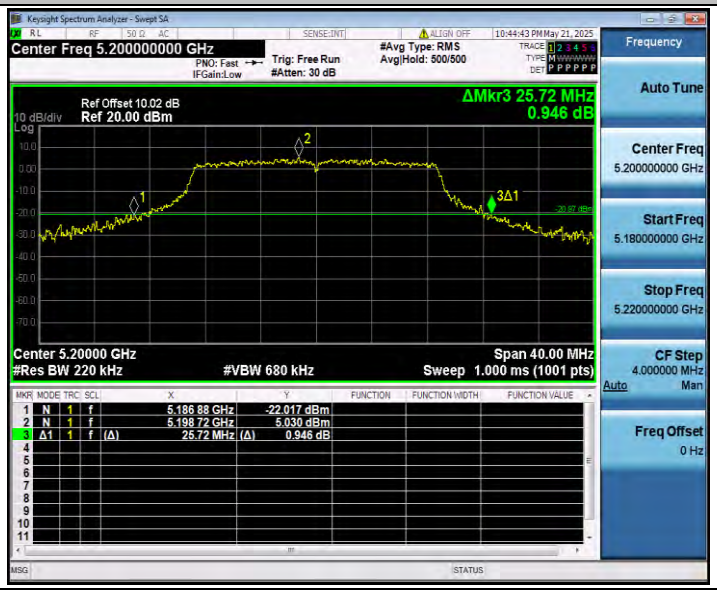

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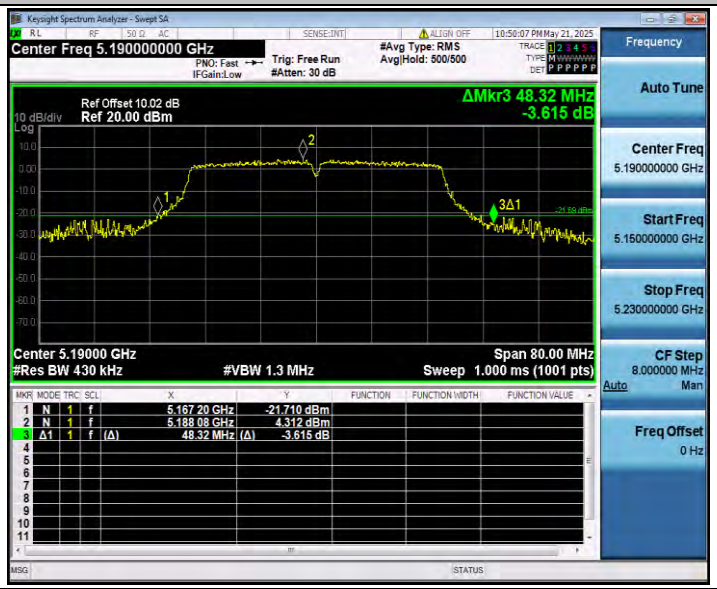

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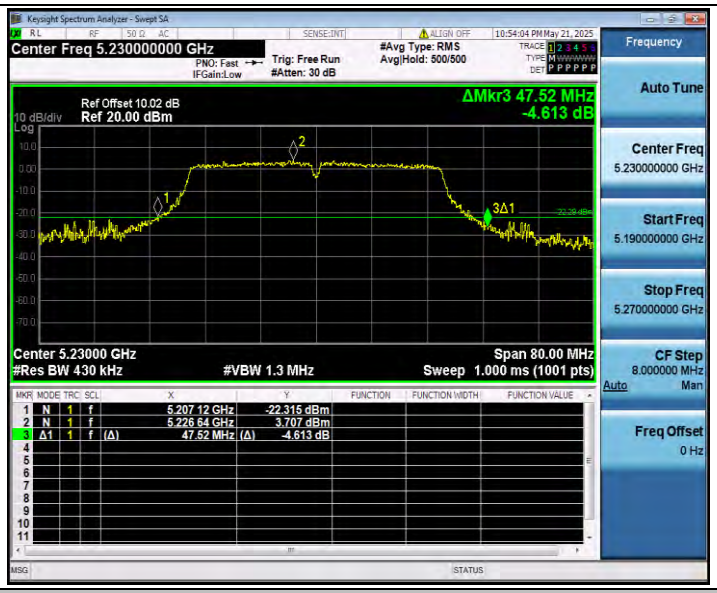

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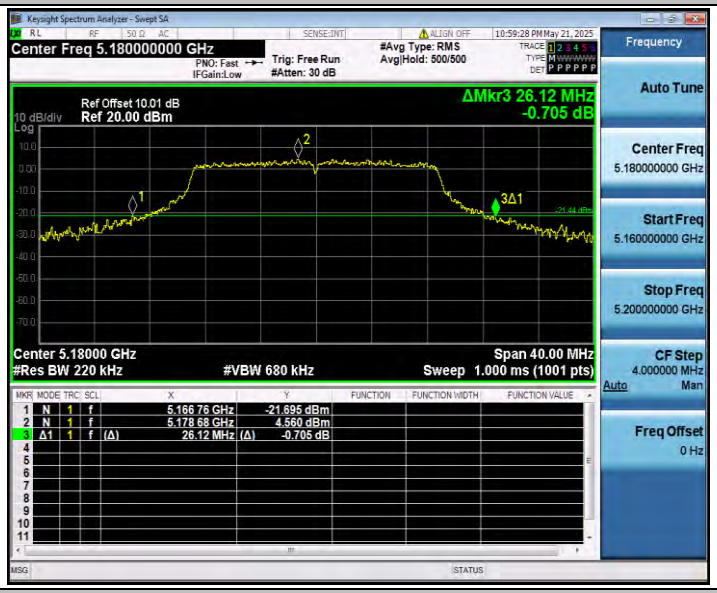

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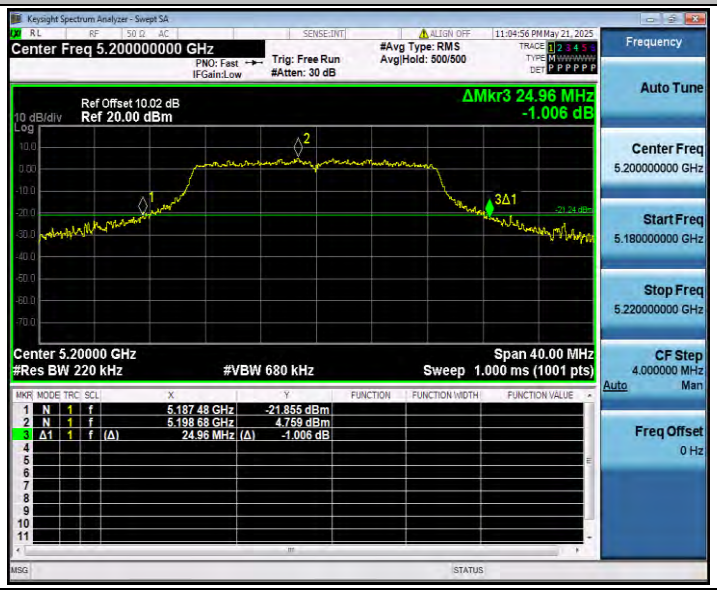

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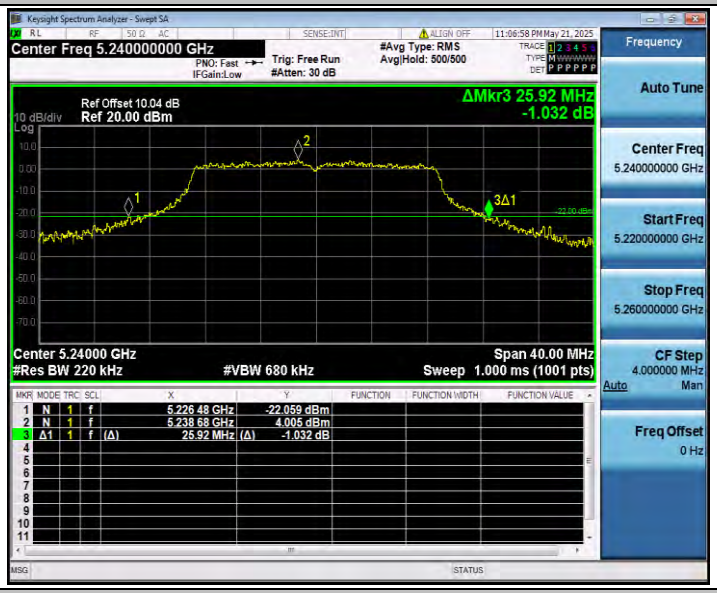

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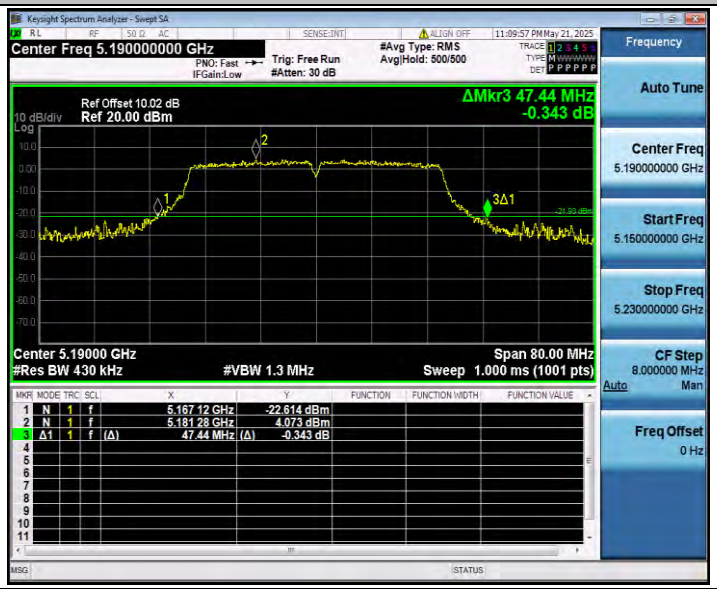

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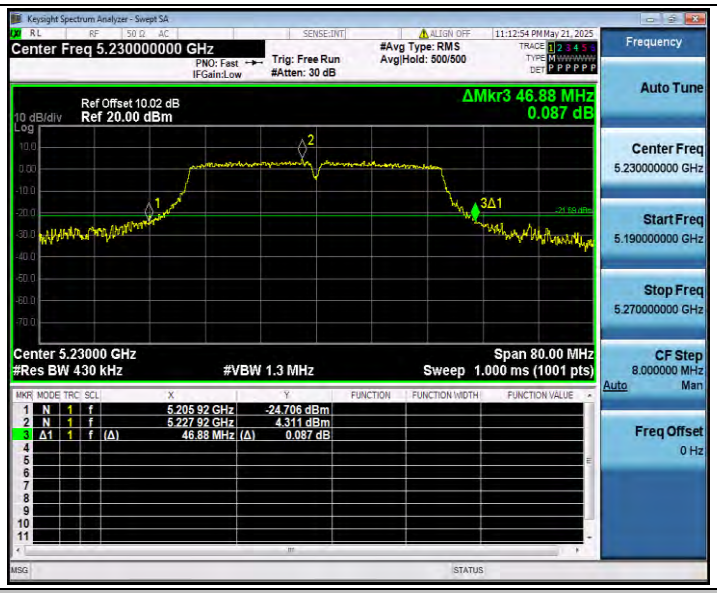

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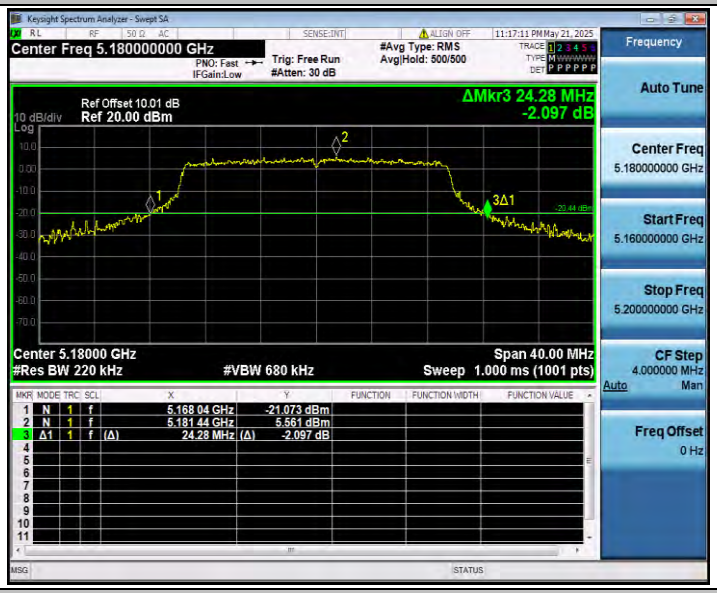

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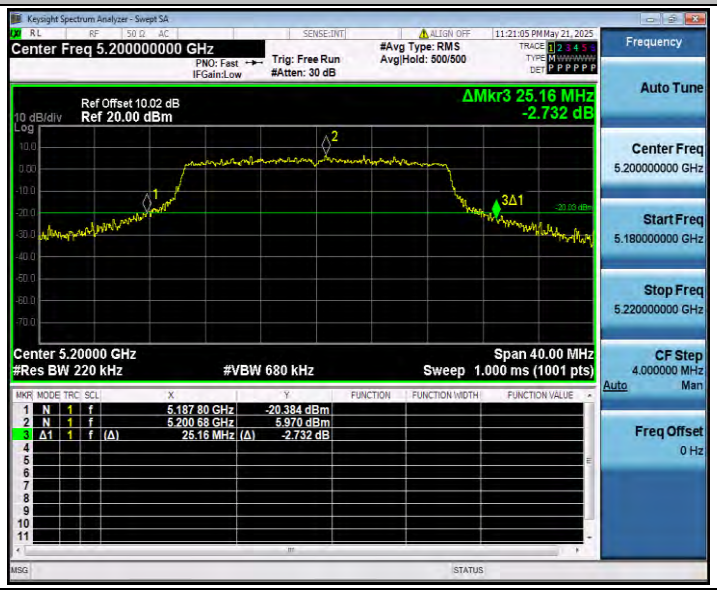

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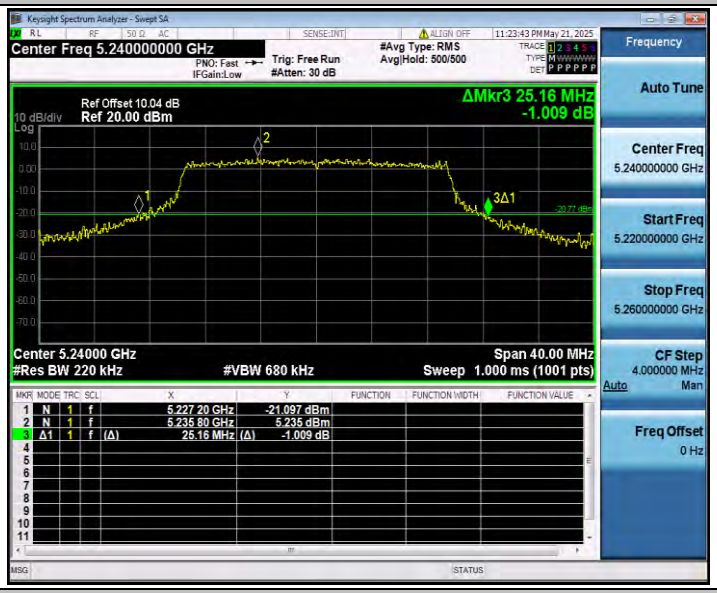

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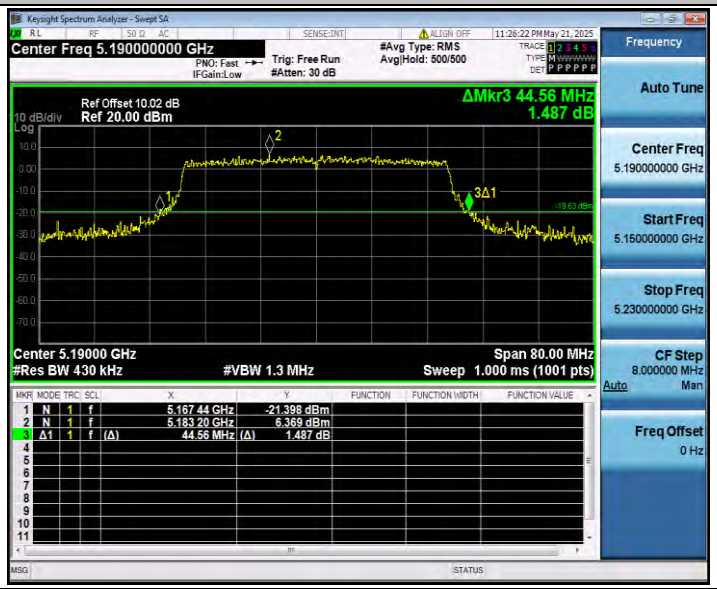
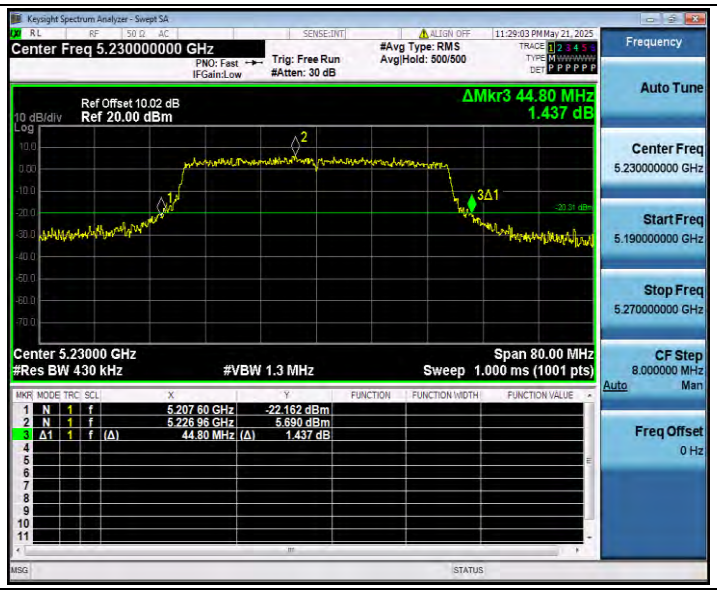


11AX40SISO_Ant1_5230


Keysight Spectrum Analyzer - Swept SA
Center Freq 5.230000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 500/500
11:29:03 PM May 21, 2025
Frequency
Auto Tune
Center Freq
5.230000000 GHz
Start Freq
5.190000000 GHz
Stop Freq
5.270000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 10.02 dB
10 dB/div
Ref 20.00 dBm
Log
ΔMkr3 44.80 MHz
1.437 dB
Center 5.23000 GHz
#Res BW 430 kHz
#VBW 1.3 MHz
Span 80.00 MHz
Sweep 1.000 ms (1001 pts)
1 N 1 f 5.207 60 GHz -22.162 dBm
2 N 1 f 5.226 96 GHz 5.690 dBm
3 Δ1 1 f (Δ) 44.80 MHz (Δ) 1.437 dB

Appendix D.2: Occupied channel bandwidth

Test Result

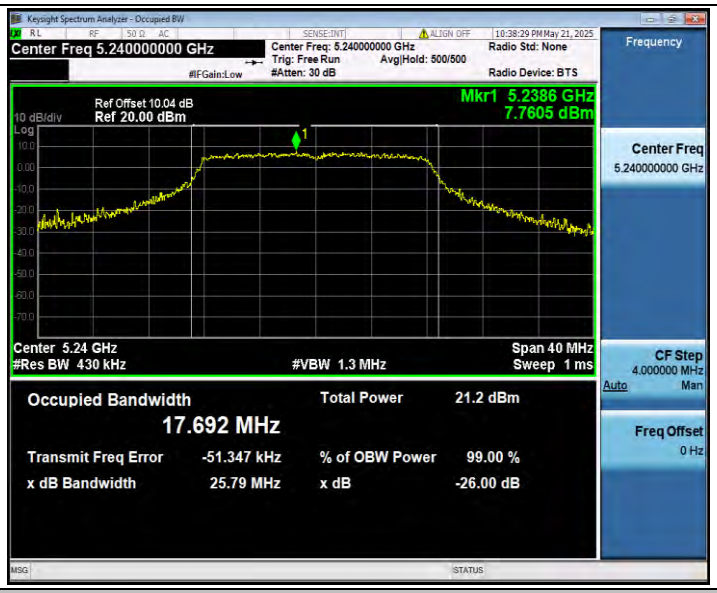
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.649	5171.1738	5188.8228	---	---
		5200	17.561	5191.2142	5208.7752	---	---
		5240	17.692	5231.1027	5248.7947	---	---
11N20SISO	Ant1	5180	18.796	5170.6156	5189.4116	---	---
		5200	18.753	5190.5724	5209.3254	---	---
		5240	18.769	5230.5444	5249.3134	---	---
11N40SISO	Ant1	5190	37.328	5171.3328	5208.6608	---	---
		5230	37.472	5211.0833	5248.5553	---	---
11AC20SISO	Ant1	5180	18.832	5170.5132	5189.3452	---	---
		5200	18.694	5190.5826	5209.2766	---	---
		5240	18.776	5230.4803	5249.2563	---	---
11AC40SISO	Ant1	5190	37.293	5171.2723	5208.5653	---	---
		5230	37.413	5211.1261	5248.5391	---	---
11AX20SISO	Ant1	5180	19.436	5170.2536	5189.6896	---	---
		5200	19.446	5190.2341	5209.6801	---	---
		5240	19.452	5230.2358	5249.6878	---	---
11AX40SISO	Ant1	5190	38.309	5170.8148	5209.1238	---	---
		5230	38.288	5210.7865	5249.0745	---	---

Test Graphs

11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240



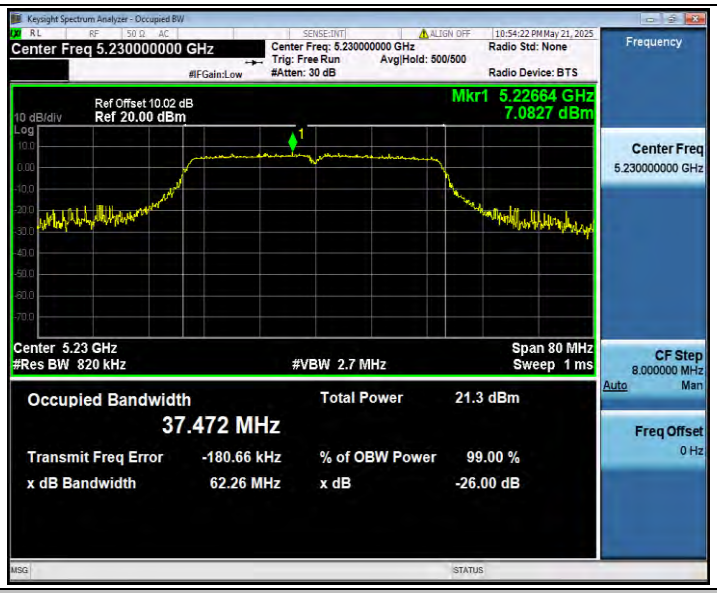
11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230



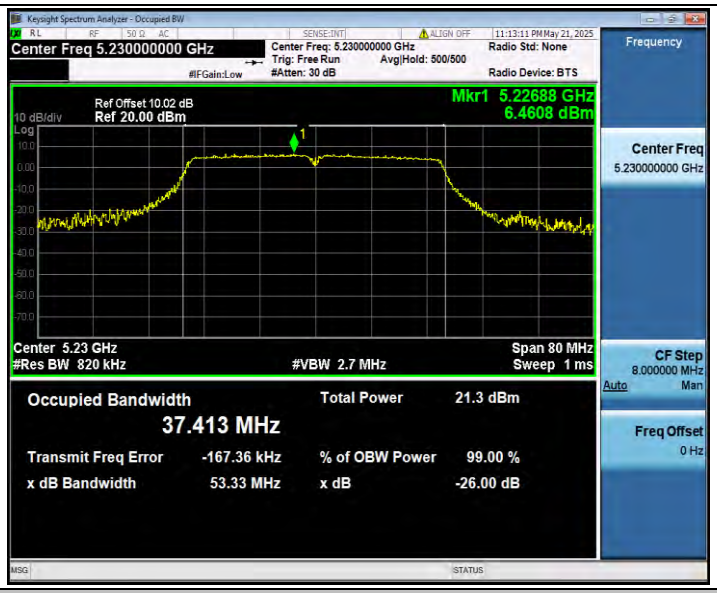
11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230



11AX20SISO_Ant1_5180

11AX20SISO_Ant1_5200

11AX20SISO_Ant1_5240

11AX40SISO_Ant1_5190

11AX40SISO_Ant1_5230

Keysight Spectrum Analyzer - Occupied BW
Center Freq 5.230000000 GHz
Center Freq: 5.230000000 GHz
Trig: Free Run
Avg|Hold: 500/500
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 10.02 dB
10 dB/div
Ref 20.00 dBm
Mkr1 5.22224 GHz
9.2195 dBm
Center Freq
5.230000000 GHz
Center 5.23 GHz
#Res BW 820 kHz
#VBW 2.7 MHz
Span 80 MHz
Sweep 1 ms
CF Step
8.000000 MHz
Auto
Man
Occupied Bandwidth
38.288 MHz
Total Power 22.7 dBm
Transmit Freq Error -69.479 kHz
% of OBW Power 99.00 %
x dB Bandwidth 46.66 MHz
x dB -26.00 dB
Freq Offset
0 Hz

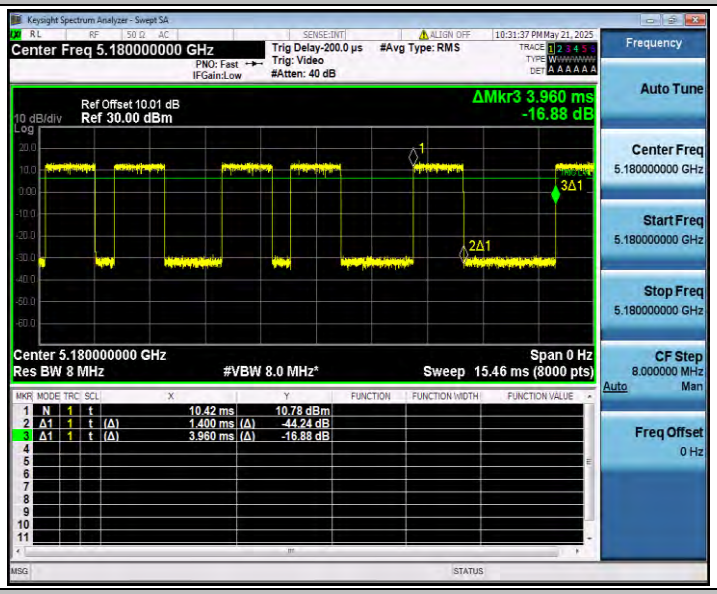
Appendix D.3: Duty Cycle

Test Result

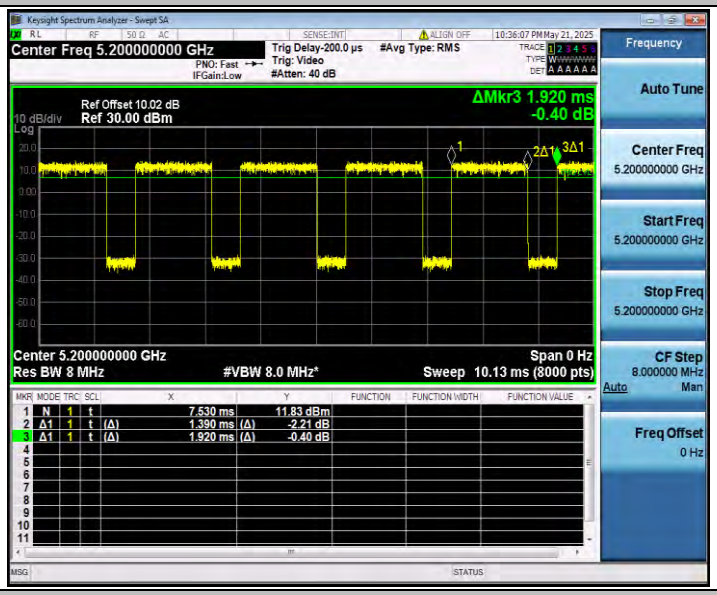
TestMode	Antenna	Freq(MHz)	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
11A	Ant1	5180	1.40	3.96	35.35	4.52	0.71
		5200	1.39	1.92	72.40	1.40	0.72
		5240	1.40	1.91	73.30	1.35	0.71
11N20SISO	Ant1	5180	5.09	5.61	90.73	0.42	0.20
		5200	5.09	5.61	90.73	0.42	0.20
		5240	5.09	5.61	90.73	0.42	0.20
11N40SISO	Ant1	5190	4.90	5.41	90.57	0.43	0.20
		5230	4.90	5.41	90.57	0.43	0.20
11AC20SISO	Ant1	5180	5.10	5.62	90.75	0.42	0.20
		5200	5.09	5.61	90.73	0.42	0.20
		5240	5.10	5.62	90.75	0.42	0.20
11AC40SISO	Ant1	5190	4.91	5.43	90.42	0.44	0.20
		5230	4.90	5.42	90.41	0.44	0.20
11AX20SISO	Ant1	5180	3.88	4.40	88.18	0.55	0.26
		5200	3.88	4.39	88.38	0.54	0.26
		5240	3.88	4.40	88.18	0.55	0.26
11AX40SISO	Ant1	5190	3.88	4.39	88.38	0.54	0.26
		5230	3.88	4.40	88.18	0.55	0.26

Test Graphs

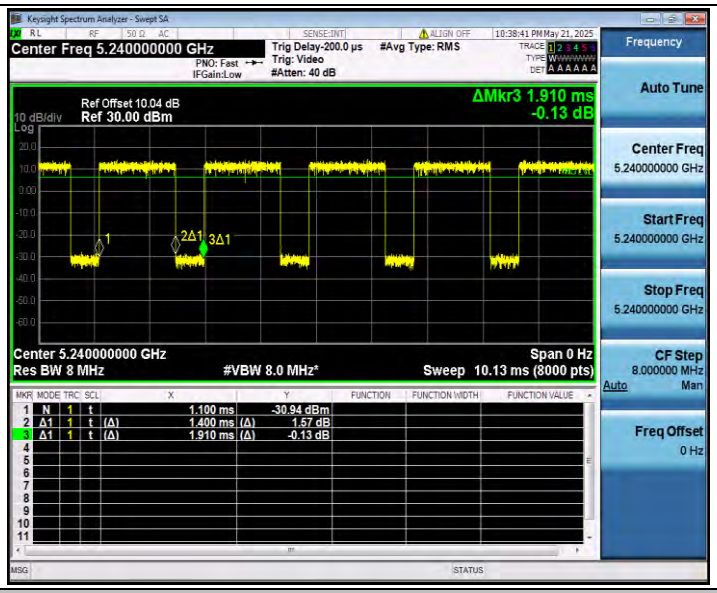
11A_Ant1_5180



11A_Ant1_5200



11A_Ant1_5240



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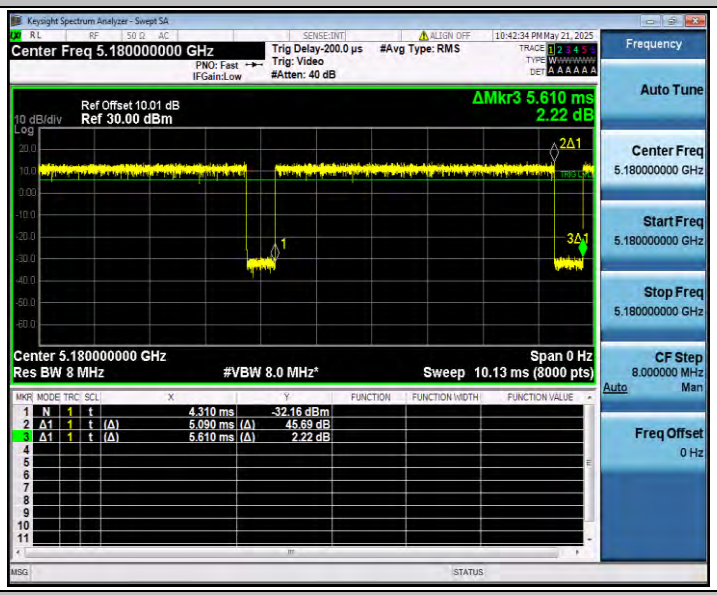

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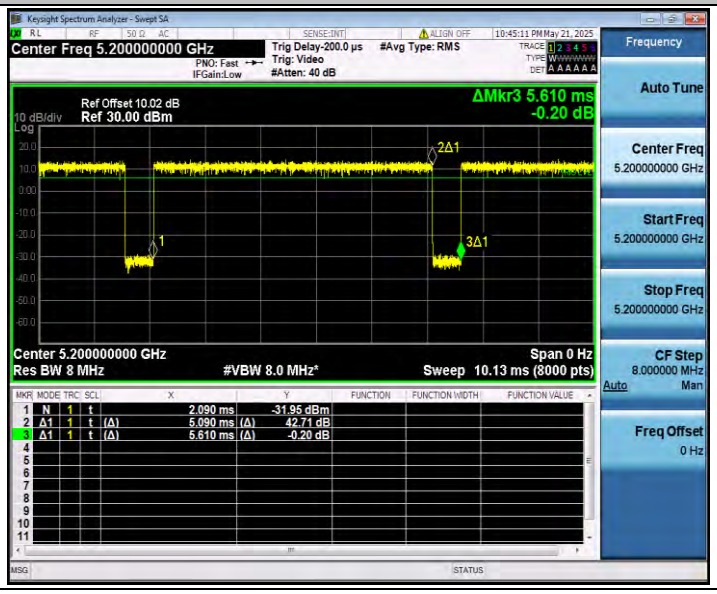

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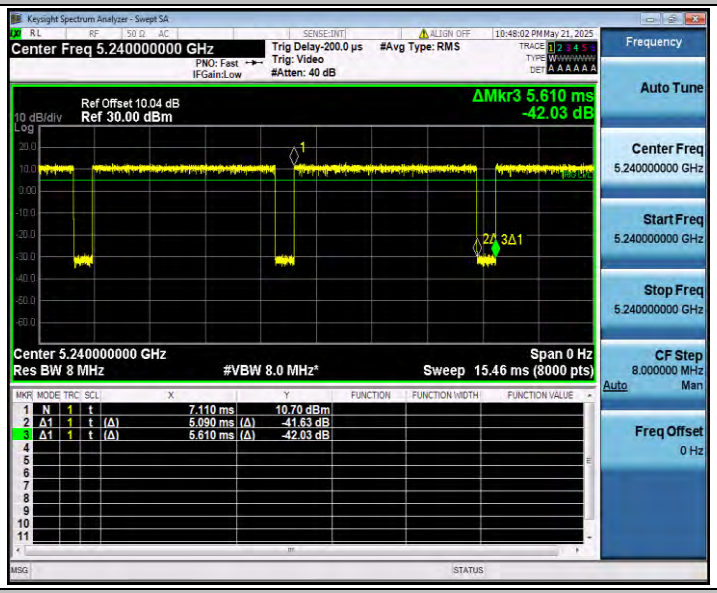

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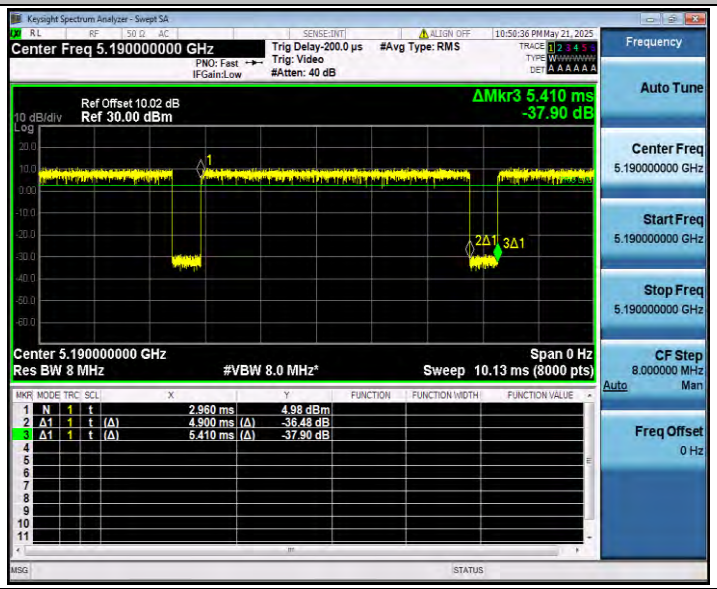

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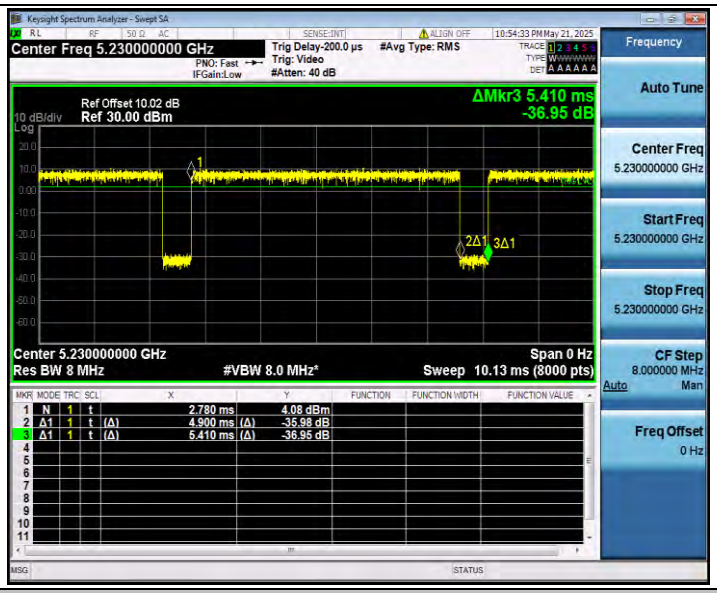

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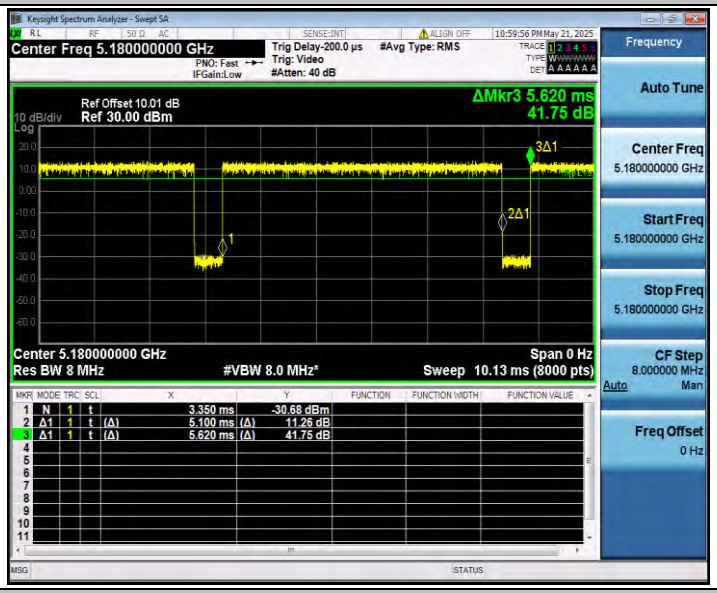

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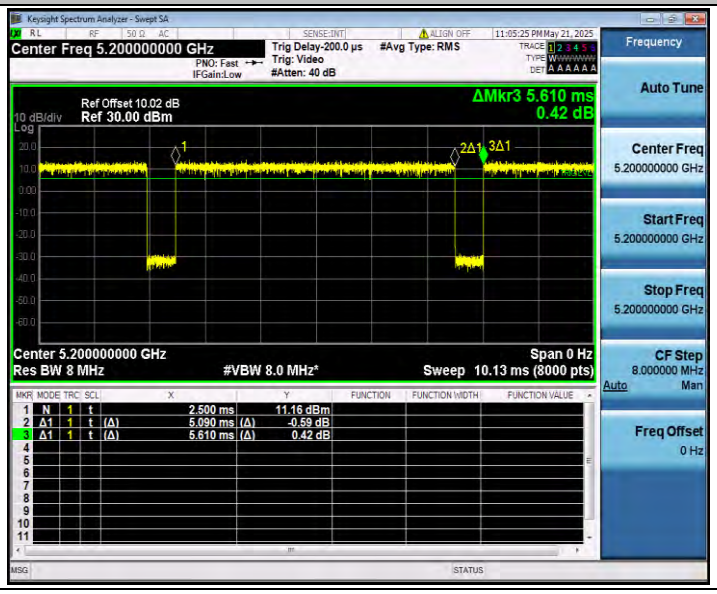

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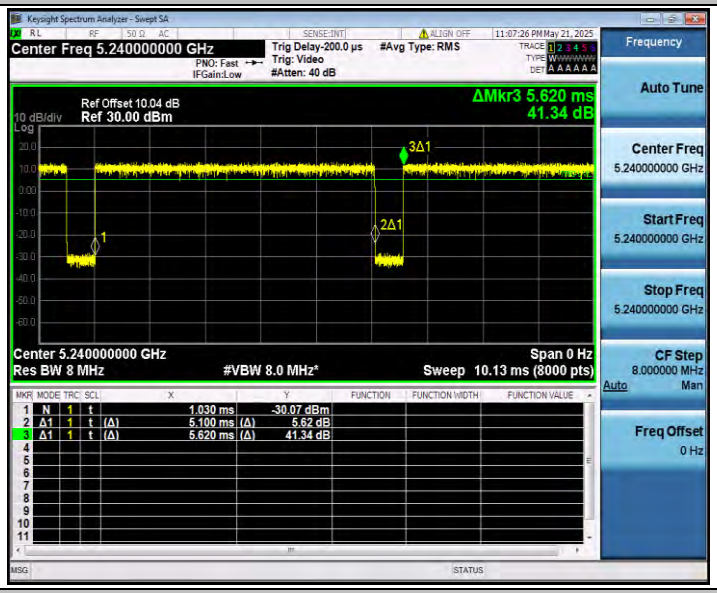

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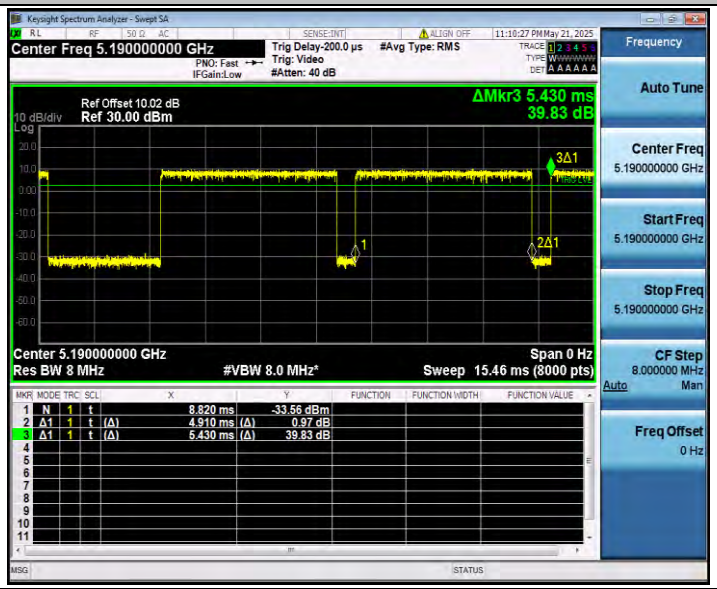

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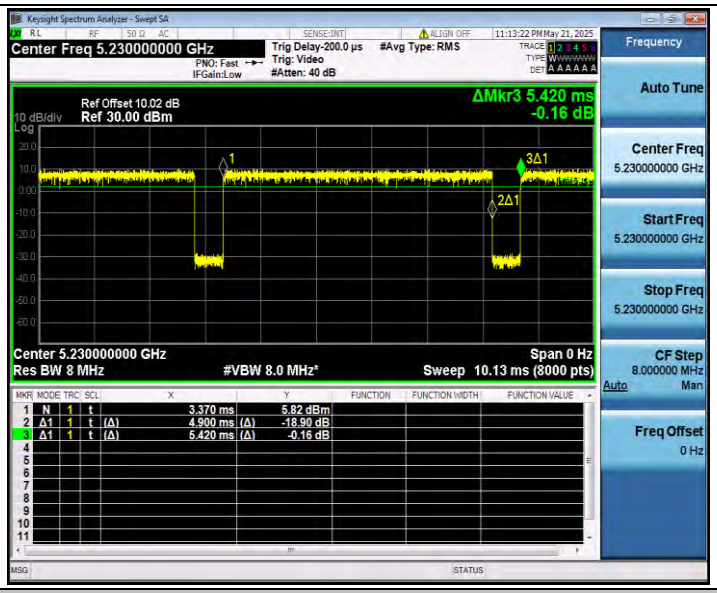

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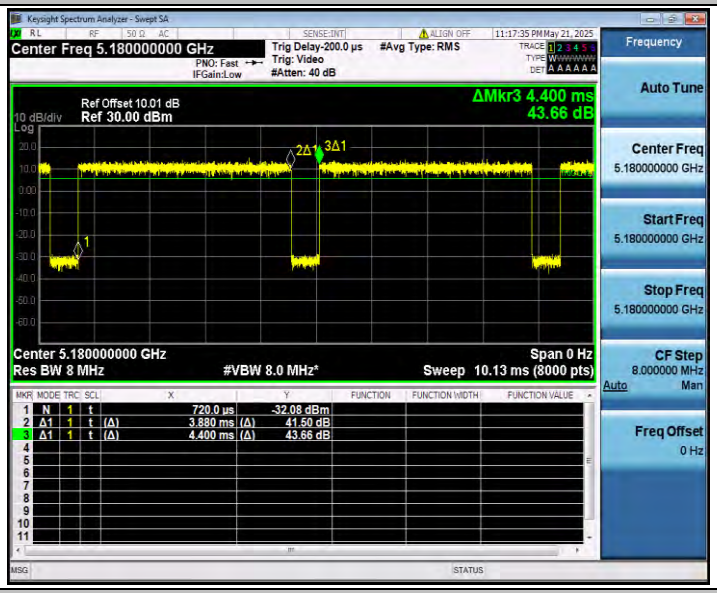

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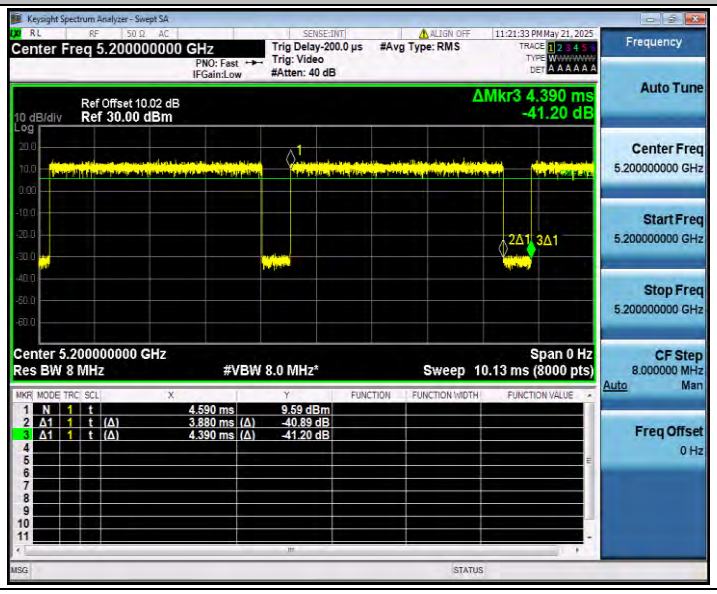

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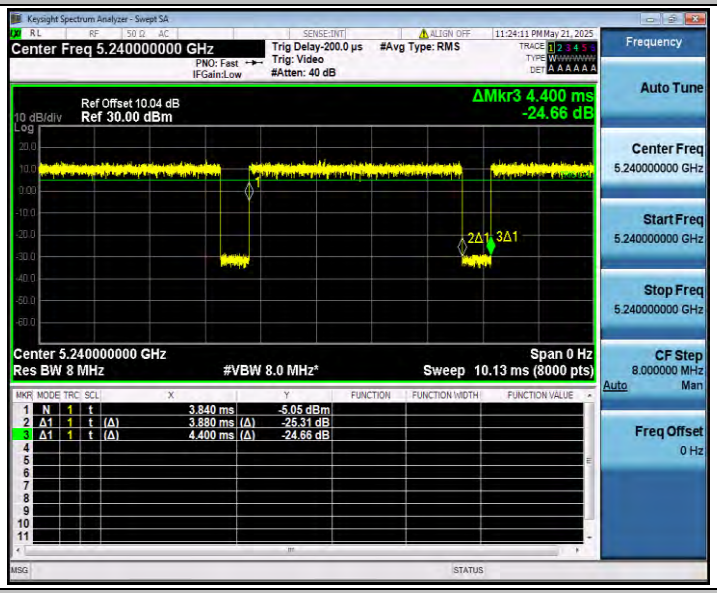

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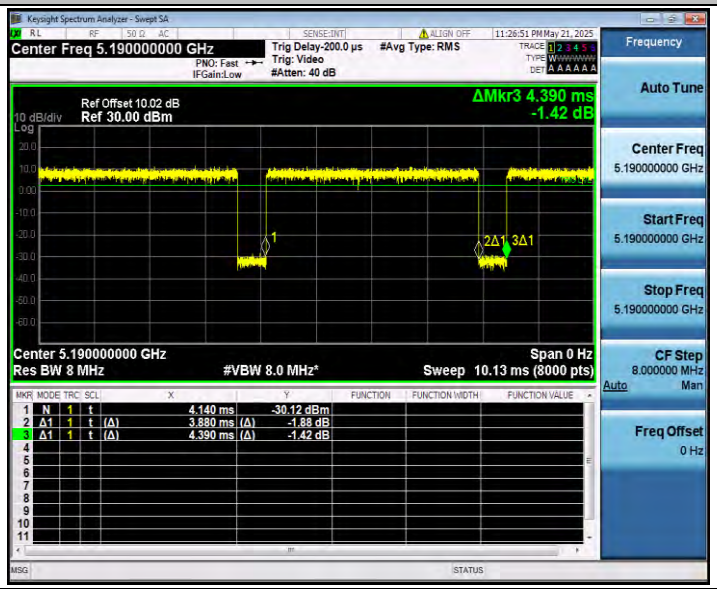
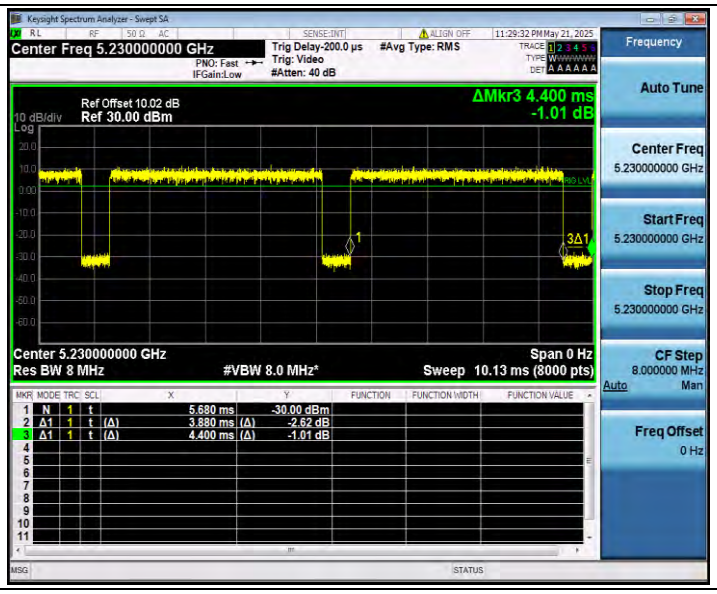


11AX40SISO_Ant1_5230


Keysight Spectrum Analyzer - Swept SA
Center Freq 5.230000000 GHz
Trig Delay-200.0 µs
Trig: Video
#Atten: 40 dB
#Avg Type: RMS
11:29:32 PM May 21, 2025
Frequency
Auto Tune
Center Freq
5.230000000 GHz
Start Freq
5.230000000 GHz
Stop Freq
5.230000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Ref Offset 10.02 dB
10 dB/div
Ref 30.00 dBm
Log
ΔMkr3 4.400 ms
-1.01 dB
Center 5.230000000 GHz
Res BW 8 MHz
#VBW 8.0 MHz*
Span 0 Hz
Sweep 10.13 ms (8000 pts)
1 N 1 t 5.680 ms -30.00 dBm
2 Δ1 1 t (Δ) 3.880 ms (Δ) -2.62 dB
3 Δ1 1 t (Δ) 4.400 ms (Δ) -1.01 dB

Appendix D.4: Maximum conducted output power

Test Result Channel Power

Test Mode	Antenna	Freq(MHz)	Channel Powert [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	13.21	35.35	4.52	17.73	≤23.98	PASS
		5200	12.90	72.40	1.40	14.30	≤23.98	PASS
		5240	13.11	73.30	1.35	14.46	≤23.98	PASS
11N20SISO	Ant1	5180	14.34	90.73	0.42	14.76	≤23.98	PASS
		5200	14.32	90.73	0.42	14.74	≤23.98	PASS
		5240	13.51	90.73	0.42	13.93	≤23.98	PASS
11N40SISO	Ant1	5190	13.88	90.57	0.43	14.31	≤23.98	PASS
		5230	12.85	90.57	0.43	13.28	≤23.98	PASS
11AC20SISO	Ant1	5180	14.01	90.75	0.42	14.43	≤23.98	PASS
		5200	14.05	90.73	0.42	14.47	≤23.98	PASS
		5240	13.38	90.75	0.42	13.80	≤23.98	PASS
11AC40SISO	Ant1	5190	13.90	90.42	0.44	14.34	≤23.98	PASS
		5230	13.40	90.41	0.44	13.84	≤23.98	PASS
11AX20SISO	Ant1	5180	14.03	88.18	0.55	14.58	≤23.98	PASS
		5200	14.09	88.38	0.54	14.63	≤23.98	PASS
		5240	13.20	88.18	0.55	13.75	≤23.98	PASS
11AX40SISO	Ant1	5190	13.87	88.38	0.54	14.41	≤23.98	PASS
		5230	13.25	88.18	0.55	13.80	≤23.98	PASS

Appendix D.5: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	7.94	≤11.00	PASS
		5200	4.86	≤11.00	PASS
		5240	4.47	≤11.00	PASS
11N20SISO	Ant1	5180	3.40	≤11.00	PASS
		5200	3.51	≤11.00	PASS
		5240	2.68	≤11.00	PASS
11N40SISO	Ant1	5190	0.57	≤11.00	PASS
		5230	-0.14	≤11.00	PASS
11AC20SISO	Ant1	5180	3.12	≤11.00	PASS
		5200	3.41	≤11.00	PASS
		5240	2.73	≤11.00	PASS
11AC40SISO	Ant1	5190	0.33	≤11.00	PASS
		5230	-0.11	≤11.00	PASS
11AX20SISO	Ant1	5180	3.14	≤11.00	PASS
		5200	3.13	≤11.00	PASS
		5240	2.44	≤11.00	PASS
11AX40SISO	Ant1	5190	0.22	≤11.00	PASS
		5230	-0.33	≤11.00	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant1_5180

11A_Ant1_5200

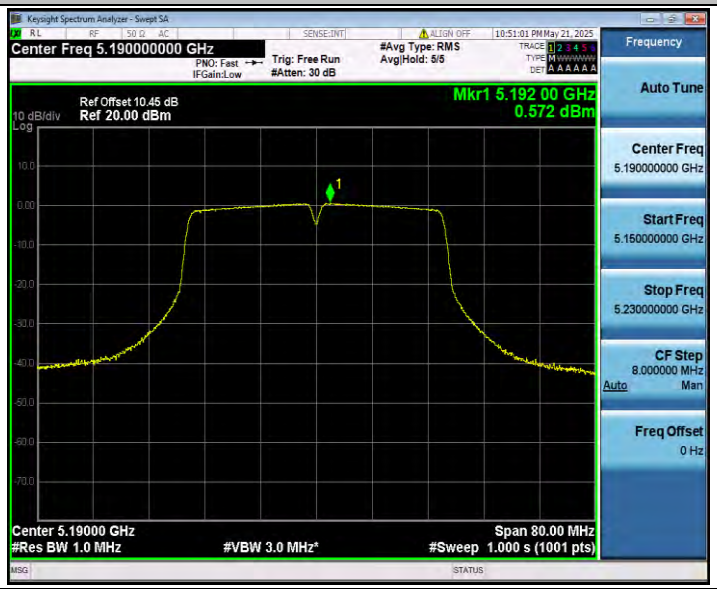
11A_Ant1_5240

11N20SISO_Ant1_5180

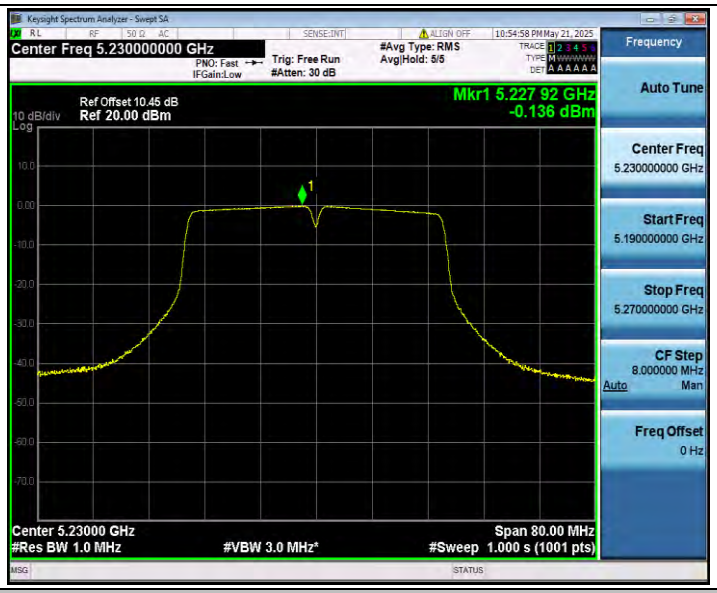
11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

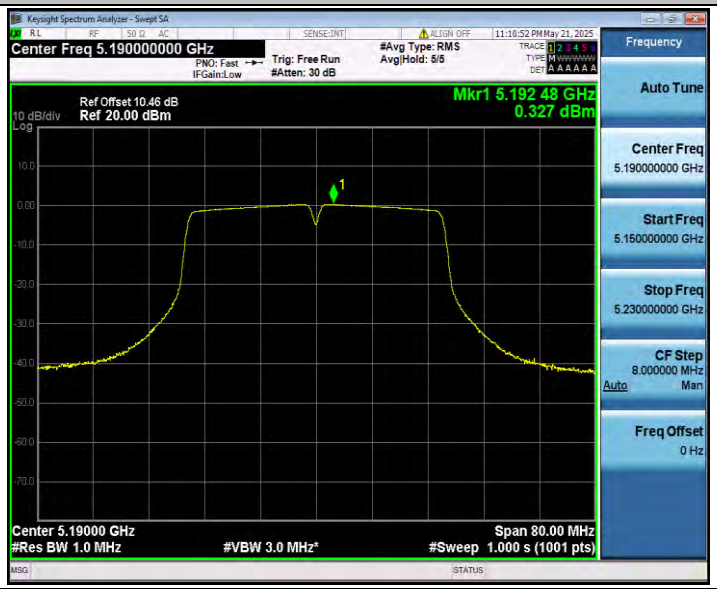


11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190



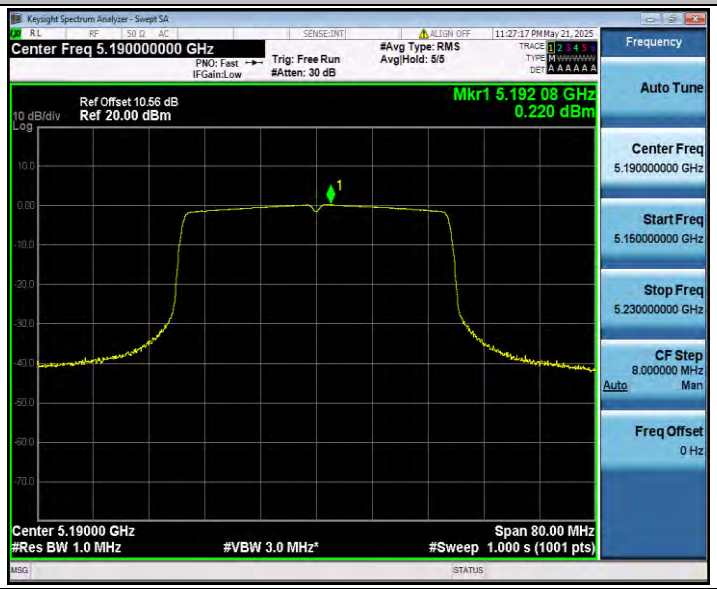
11AC40SISO_Ant1_5230

11AX20SISO_Ant1_5180

11AX20SISO_Ant1_5200

11AX20SISO_Ant1_5240

11AX40SISO_Ant1_5190



11AX40SISO_Ant1_5230

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.230000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 5/5
11:36:29 PM May 21, 2025
Ref Offset 10.57 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 5.227 84 GHz
-0.325 dBm
Center 5.23000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 80.00 MHz
#Sweep 1.000 s (1001 pts)
Frequency
Auto Tune
Center Freq
5.230000000 GHz
Start Freq
5.190000000 GHz
Stop Freq
5.270000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz