11N40SISO_Ant2_5230

11AC20SISO_Ant1_5180

11AC20SISO_Ant2_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant2_5200

11AC20SISO_Ant1_5240

11AC20SISO_Ant2_5240

11AC40SISO_Ant1_5190

11AC40SISO_Ant2_5190

11AC40SISO_Ant1_5230

11AC40SISO_Ant2_5230

11AC80SISO_Ant1_5210

11AC80SISO_Ant2_5210

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.210000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
04:20:54 PM Jan 10, 2024
Ref Offset 1.83 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 5.214 96 GHz
-12.297 dBm
Center 5.21000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Span 160.0 MHz
Sweep 1.000 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.210000000 GHz
Start Freq
5.130000000 GHz
Stop Freq
5.290000000 GHz
CF Step
16.000000 MHz
Auto
Man
Freq Offset
0 Hz

Test Graphs B4

11A_Ant1_5745

11A_Ant2_5745

11A_Ant1_5785

11A_Ant2_5785

11A_Ant1_5825

11A_Ant2_5825

11N20SISO_Ant1_5745

11N20SISO_Ant2_5745

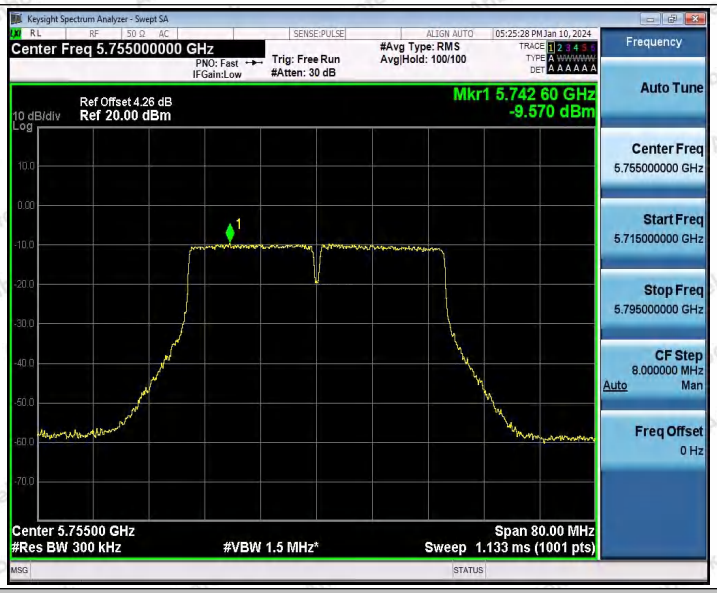
11N20SISO_Ant1_5785

11N20SISO_Ant2_5785

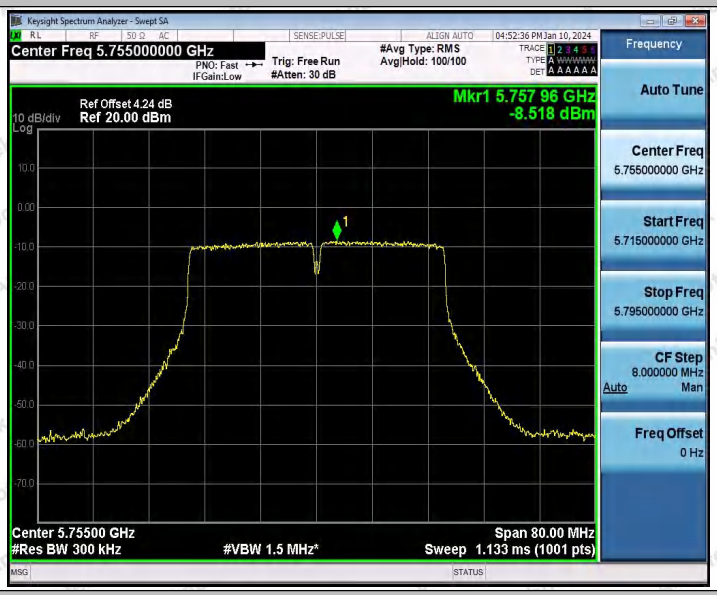
11N20SISO_Ant1_5825

11N20SISO_Ant2_5825

11N40SISO_Ant1_5755



11N40SISO_Ant2_5755



11N40SISO_Ant1_5795

11N40SISO_Ant2_5795

11AC20SISO_Ant1_5745

11AC20SISO_Ant2_5745

11AC20SISO_Ant1_5785

11AC20SISO_Ant2_5785

11AC20SISO_Ant1_5825

11AC20SISO_Ant2_5825

11AC40SISO_Ant1_5755

11AC40SISO_Ant2_5755

11AC40SISO_Ant1_5795

11AC40SISO_Ant2_5795

11AC80SISO_Ant1_5775

11AC80SISO_Ant2_5775

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
05:09:35 PM Jan 10, 2024
Ref Offset 4.05 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 5.783 32 GHz
-12.447 dBm
Center 5.77500 GHz
#Res BW 300 kHz
#VBW 1.5 MHz*
Span 160.0 MHz
Sweep 2.200 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.775000000 GHz
Start Freq
5.695000000 GHz
Stop Freq
5.855000000 GHz
CF Step
16.000000 MHz
Auto
Man
Freq Offset
0 Hz

Appendix E: Band edge measurements

Test Result B1

TestMode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-41.94	≤-27	PASS
11A	Ant2	Low	5180	-47.83	≤-27	PASS
11A	Ant1	High	5240	-48.24	≤-27	PASS
11A	Ant2	High	5240	-48.34	≤-27	PASS
11N20MIMO	Ant1	Low	5180	-41.58	≤-27	PASS
11N20MIMO	Ant2	Low	5180	-40.87	≤-27	PASS
11N20MIMO	Ant1	High	5240	-48.7	≤-27	PASS
11N20MIMO	Ant2	High	5240	-49.11	≤-27	PASS
11N40MIMO	Ant1	Low	5190	-37.46	≤-27	PASS
11N40MIMO	Ant2	Low	5190	-37.25	≤-27	PASS
11N40MIMO	Ant1	High	5230	-48.08	≤-27	PASS
11N40MIMO	Ant2	High	5230	-48.9	≤-27	PASS
11AC20MIMO	Ant1	Low	5180	-43.23	≤-27	PASS
11AC20MIMO	Ant2	Low	5180	-41.44	≤-27	PASS
11AC20MIMO	Ant1	High	5240	-48.48	≤-27	PASS
11AC20MIMO	Ant2	High	5240	-47.9	≤-27	PASS
11AC40MIMO	Ant1	Low	5190	-37.51	≤-27	PASS
11AC40MIMO	Ant2	Low	5190	-38.57	≤-27	PASS
11AC40MIMO	Ant1	High	5230	-48.19	≤-27	PASS
11AC40MIMO	Ant2	High	5230	-48.4	≤-27	PASS
11AC80MIMO	Ant1	Low	5210	-47.36	≤-27	PASS
11AC80MIMO	Ant1	High	5210	-48.9	≤-27	PASS
11AC80MIMO	Ant2	Low	5210	-46.16	≤-27	PASS
11AC80MIMO	Ant2	High	5210	-46.96	≤-27	PASS

Note: The margins is at least greater than the antenna gain plus cable loss value.

Test Result B4

TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-42.01	≤18.96	PASS
11A	Ant1	Low	5745	5700~5720	-41.11	≤14.24	PASS
11A	Ant1	Low	5745	5650~5700	-50.72	≤-26.96	PASS
11A	Ant1	Low	5745	5760~5650	-49.22	≤-27	PASS
11A	Ant2	Low	5745	5720~5725	-42.85	≤21.58	PASS
11A	Ant2	Low	5745	5700~5720	-41.11	≤14.34	PASS
11A	Ant2	Low	5745	5650~5700	-49.97	≤-26.87	PASS
11A	Ant2	Low	5745	5760~5650	-49.51	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-39.07	≤18.80	PASS

11A	Ant1	High	5825	5855~5875	-38.71	≤15.09	PASS
11A	Ant1	High	5825	5875~5925	-49.62	≤-26.51	PASS
11A	Ant1	High	5825	5925~5935	-49.37	≤-27	PASS
11A	Ant2	High	5825	5850~5855	-39.66	≤17.88	PASS
11A	Ant2	High	5825	5855~5875	-39.68	≤14.59	PASS
11A	Ant2	High	5825	5875~5925	-49.04	≤-26.01	PASS
11A	Ant2	High	5825	5925~5935	-49.32	≤-27	PASS
11N20MIMO	Ant1	Low	5745	5720~5725	-41.38	≤15.82	PASS
11N20MIMO	Ant1	Low	5745	5700~5720	-40.44	≤14.85	PASS
11N20MIMO	Ant1	Low	5745	5650~5700	-49.24	≤-26.70	PASS
11N20MIMO	Ant1	Low	5745	5760~5650	-49.85	≤-27	PASS
11N20MIMO	Ant2	Low	5745	5720~5725	-38.8	≤20.01	PASS
11N20MIMO	Ant2	Low	5745	5700~5720	-43.52	≤11.70	PASS
11N20MIMO	Ant2	Low	5745	5650~5700	-48.2	≤-25.34	PASS
11N20MIMO	Ant2	Low	5745	5760~5650	-49.72	≤-27	PASS
11N20MIMO	Ant1	High	5825	5850~5855	-40.64	≤15.73	PASS
11N20MIMO	Ant1	High	5825	5855~5875	-38.8	≤15.39	PASS
11N20MIMO	Ant1	High	5825	5875~5925	-49.2	≤-26.61	PASS
11N20MIMO	Ant1	High	5825	5925~5935	-48.95	≤-27	PASS
11N20MIMO	Ant2	High	5825	5850~5855	-37.58	≤18.80	PASS
11N20MIMO	Ant2	High	5825	5855~5875	-38.33	≤15.46	PASS
11N20MIMO	Ant2	High	5825	5875~5925	-49.81	≤-25.91	PASS
11N20MIMO	Ant2	High	5825	5925~5935	-49.72	≤-27	PASS
11N40MIMO	Ant1	Low	5755	5720~5725	-36.58	≤17.28	PASS
11N40MIMO	Ant1	Low	5755	5700~5720	-39.59	≤12.40	PASS

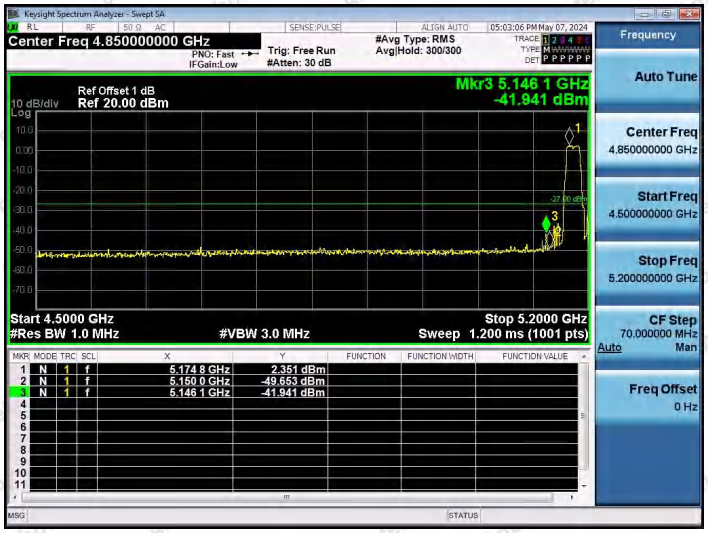
11N40MIMO	Ant1	Low	5755	5650~5700	-48.91	≤-26.00	PASS
11N40MIMO	Ant1	Low	5755	5780~5650	-48.23	≤-27	PASS
11N40MIMO	Ant2	Low	5755	5720~5725	-37.67	≤16.35	PASS
11N40MIMO	Ant2	Low	5755	5700~5720	-39.59	≤12.67	PASS
11N40MIMO	Ant2	Low	5755	5650~5700	-49.88	≤-26.40	PASS
11N40MIMO	Ant2	Low	5755	5780~5650	-48.4	≤-27	PASS
11N40MIMO	Ant1	High	5795	5850~5855	-42.65	≤16.41	PASS
11N40MIMO	Ant1	High	5795	5855~5875	-43.23	≤12.37	PASS
11N40MIMO	Ant1	High	5795	5875~5925	-49.97	≤-26.71	PASS
11N40MIMO	Ant1	High	5795	5925~5935	-49.61	≤-27	PASS
11N40MIMO	Ant2	High	5795	5850~5855	-42.7	≤18.29	PASS
11N40MIMO	Ant2	High	5795	5855~5875	-43.19	≤12.37	PASS
11N40MIMO	Ant2	High	5795	5875~5925	-49.36	≤-26.10	PASS
11N40MIMO	Ant2	High	5795	5925~5935	-48.93	≤-27	PASS
11AC20MIMO	Ant1	Low	5745	5720~5725	-39.26	≤17.39	PASS
11AC20MIMO	Ant1	Low	5745	5700~5720	-42.43	≤11.51	PASS
11AC20MIMO	Ant1	Low	5745	5650~5700	-50.67	≤-26.70	PASS
11AC20MIMO	Ant1	Low	5745	5760~5650	-49.16	≤-27	PASS
11AC20MIMO	Ant2	Low	5745	5720~5725	-39.86	≤15.82	PASS
11AC20MIMO	Ant2	Low	5745	5700~5720	-42.26	≤10.64	PASS
11AC20MIMO	Ant2	Low	5745	5650~5700	-50.09	≤-26.62	PASS
11AC20MIMO	Ant2	Low	5745	5760~5650	-48.46	≤-27	PASS

11AC20M IMO	Ant1	High	5825	5850~5855	-47.93	≤16.96	PASS
11AC20M IMO	Ant1	High	5825	5855~5875	-43.05	≤10.55	PASS
11AC20M IMO	Ant1	High	5825	5875~5925	-50.83	≤-26.91	PASS
11AC20M IMO	Ant1	High	5825	5925~5935	-49.49	≤-27	PASS
11AC20M IMO	Ant2	High	5825	5850~5855	-37.26	≤15.73	PASS
11AC20M IMO	Ant2	High	5825	5855~5875	-39.35	≤14.03	PASS
11AC20M IMO	Ant2	High	5825	5875~5925	-49.44	≤-26.41	PASS
11AC20M IMO	Ant2	High	5825	5925~5935	-48.65	≤-27	PASS
11AC40M IMO	Ant1	Low	5755	5720~5725	-36.99	≤16.35	PASS
11AC40M IMO	Ant1	Low	5755	5700~5720	-37.67	≤14.97	PASS
11AC40M IMO	Ant1	Low	5755	5650~5700	-50.2	≤-26.70	PASS
11AC40M IMO	Ant1	Low	5755	5780~5650	-49.2	≤-27	PASS
11AC40M IMO	Ant2	Low	5755	5720~5725	-37.1	≤18.51	PASS
11AC40M IMO	Ant2	Low	5755	5700~5720	-39.77	≤12.78	PASS
11AC40M IMO	Ant2	Low	5755	5650~5700	-48.62	≤-26.80	PASS
11AC40M IMO	Ant2	Low	5755	5780~5650	-49.13	≤-27	PASS
11AC40M IMO	Ant1	High	5795	5850~5855	-41.72	≤16.79	PASS
11AC40M IMO	Ant1	High	5795	5855~5875	-43.51	≤12.65	PASS
11AC40M IMO	Ant1	High	5795	5875~5925	-49.63	≤-26.46	PASS
11AC40M IMO	Ant1	High	5795	5925~5935	-49.38	≤-27	PASS
11AC40M IMO	Ant2	High	5795	5850~5855	-41.74	≤15.66	PASS
11AC40M IMO	Ant2	High	5795	5855~5875	-44.07	≤11.50	PASS

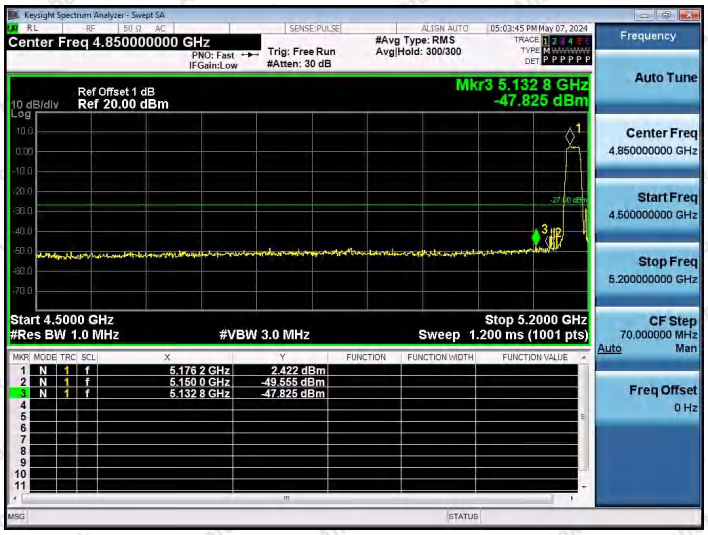
11AC40M IMO	Ant2	High	5795	5875~5925	-49.48	≤-26.22	PASS
11AC40M IMO	Ant2	High	5795	5925~5935	-49.44	≤-27	PASS
11AC80M IMO	Ant1	Low	5775	5720~5725	-49.03	≤15.65	PASS
11AC80M IMO	Ant1	Low	5775	5700~5720	-48.89	≤10.05	PASS
11AC80M IMO	Ant1	Low	5775	5650~5700	-50.95	≤-26.91	PASS
11AC80M IMO	Ant1	Low	5775	5800~5650	-48.8	≤-27	PASS
11AC80M IMO	Ant1	High	5775	5850~5855	-49.55	≤15.84	PASS
11AC80M IMO	Ant1	High	5775	5855~5875	-47.58	≤11.64	PASS
11AC80M IMO	Ant1	High	5775	5875~5925	-50.59	≤-26.60	PASS
11AC80M IMO	Ant1	High	5775	5925~5935	-49.61	≤-27	PASS
11AC80M IMO	Ant2	Low	5775	5720~5725	-49.07	≤15.65	PASS
11AC80M IMO	Ant2	Low	5775	5700~5720	-48.31	≤10.53	PASS
11AC80M IMO	Ant2	Low	5775	5650~5700	-49.14	≤-26.11	PASS
11AC80M IMO	Ant2	Low	5775	5800~5650	-49.2	≤-27	PASS
11AC80M IMO	Ant2	High	5775	5850~5855	-49.7	≤16.68	PASS
11AC80M IMO	Ant2	High	5775	5855~5875	-48.27	≤10.04	PASS
11AC80M IMO	Ant2	High	5775	5875~5925	-50.08	≤-26.73	PASS
11AC80M IMO	Ant2	High	5775	5925~5935	-49.5	≤-27	PASS

Note: The margins is at least greater than the antenna gain plus cable loss value.

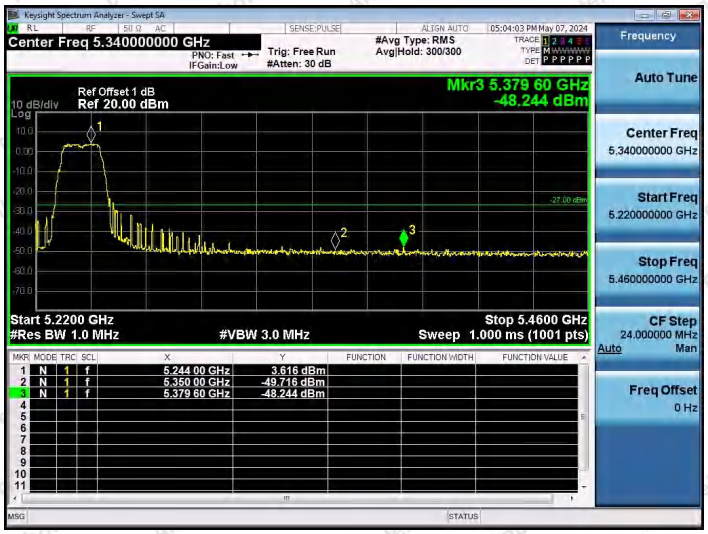
Test Graphs B1



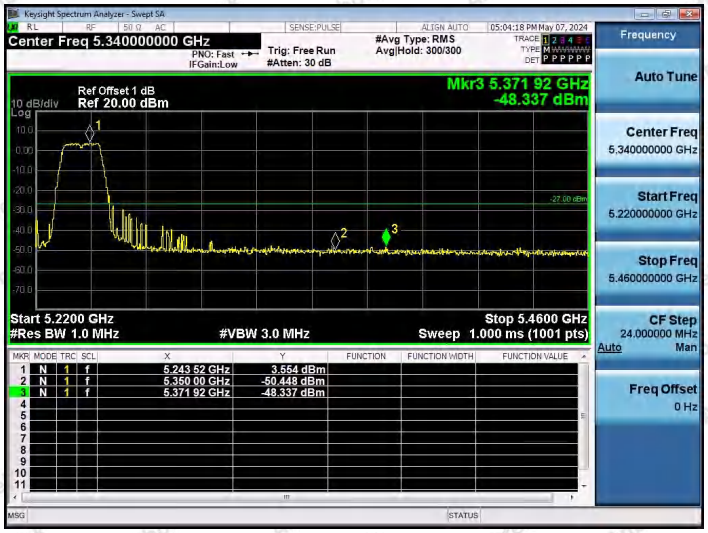
11A-Ant1-5180-PASS



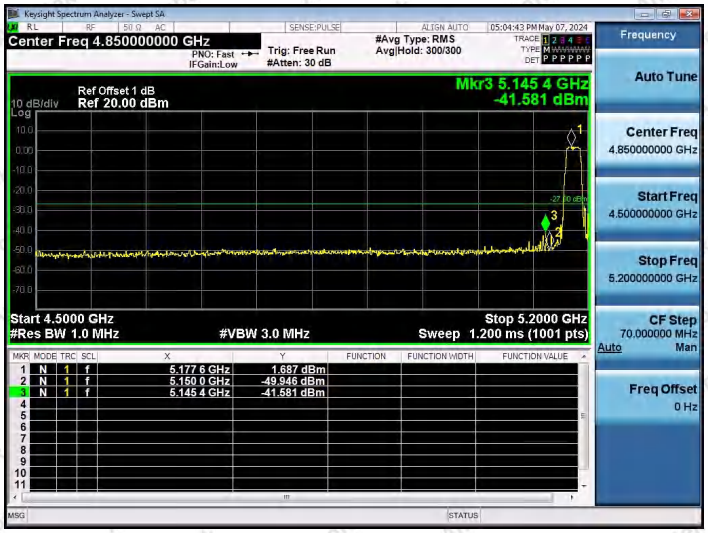
11A-Ant2-5180-PASS



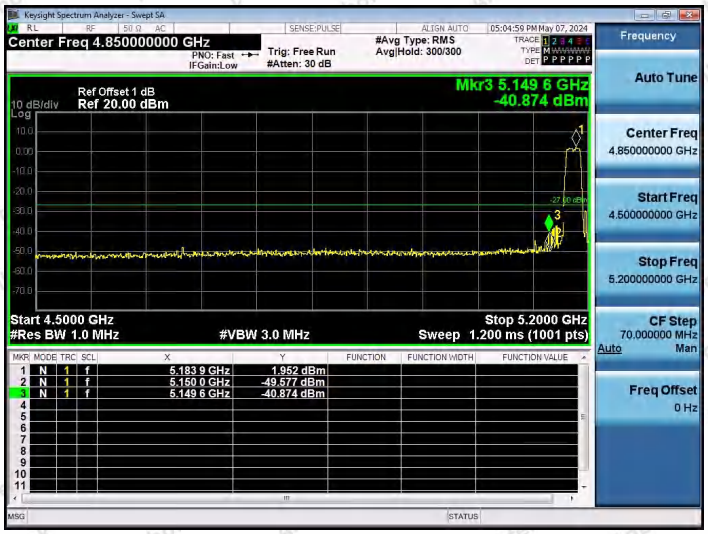
11A-Ant1-5240-PASS



11A-Ant2-5240-PASS



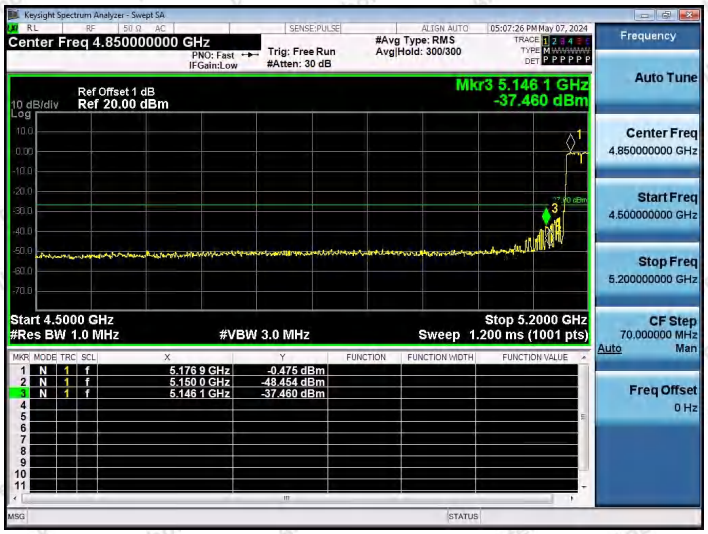
11N20MIMO-Ant1-5180-PASS



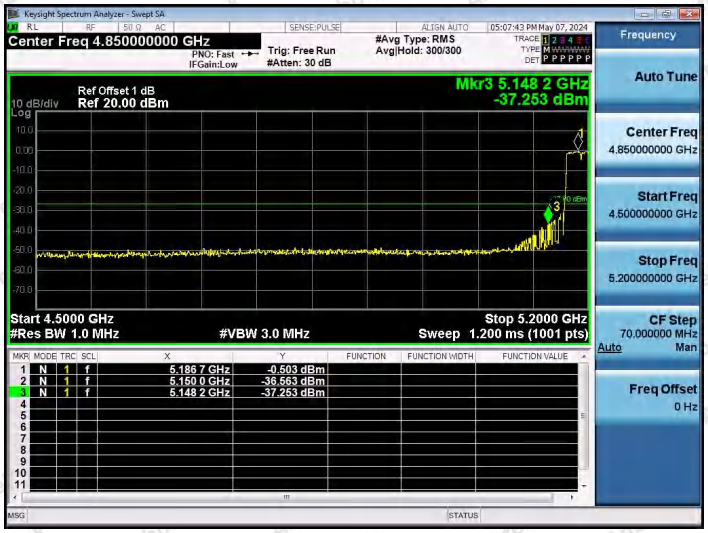
11N20MIMO-Ant2-5180-PASS

11N20MIMO-Ant1-5240-PASS

11N20MIMO-Ant2-5240-PASS

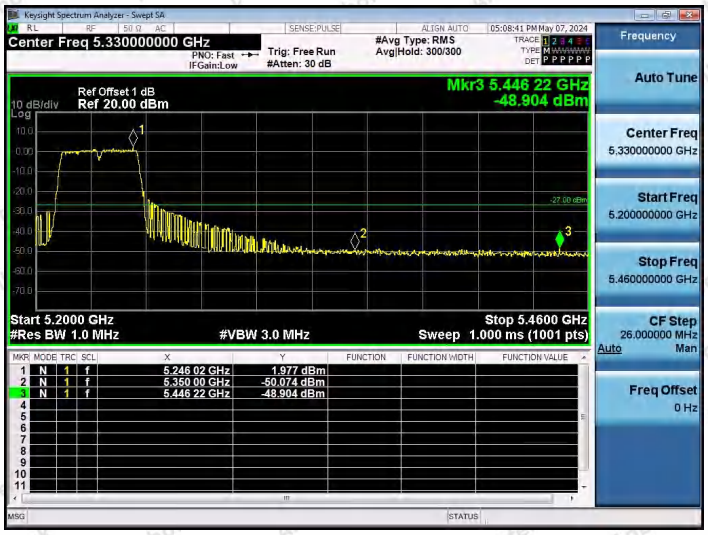


11N40MIMO-Ant1-5190-PASS

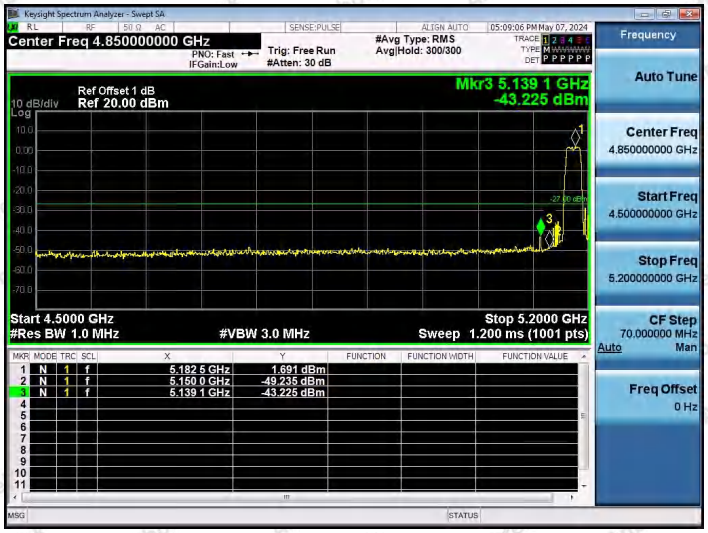


11N40MIMO-Ant2-5190-PASS

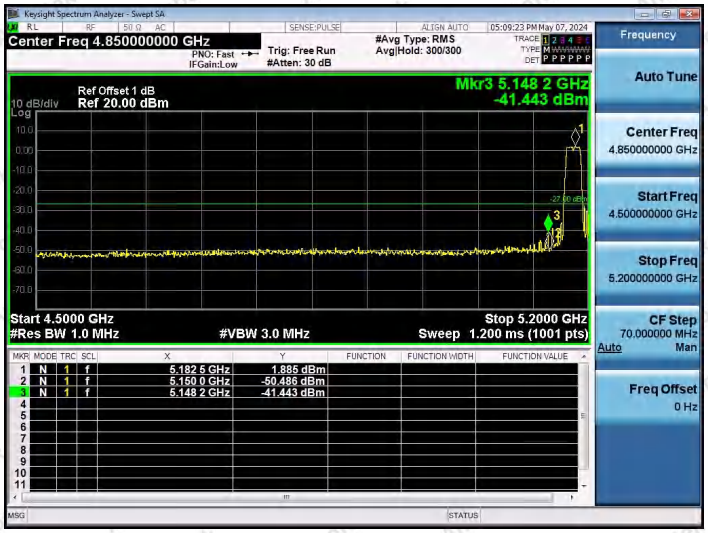
11N40MIMO-Ant1-5230-PASS



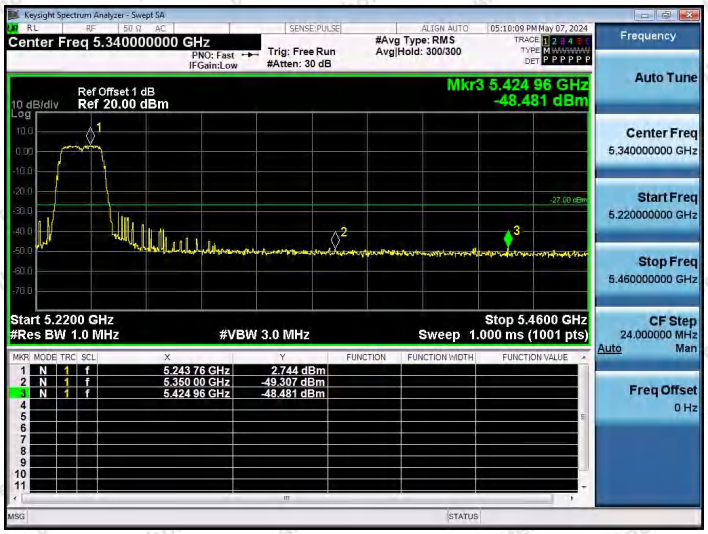
11N40MIMO-Ant2-5230-PASS



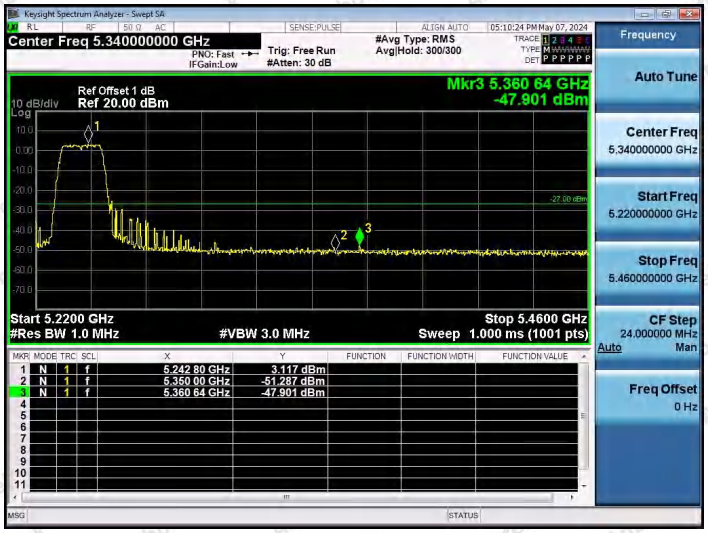
11AC20MIMO-Ant1-5180-PASS



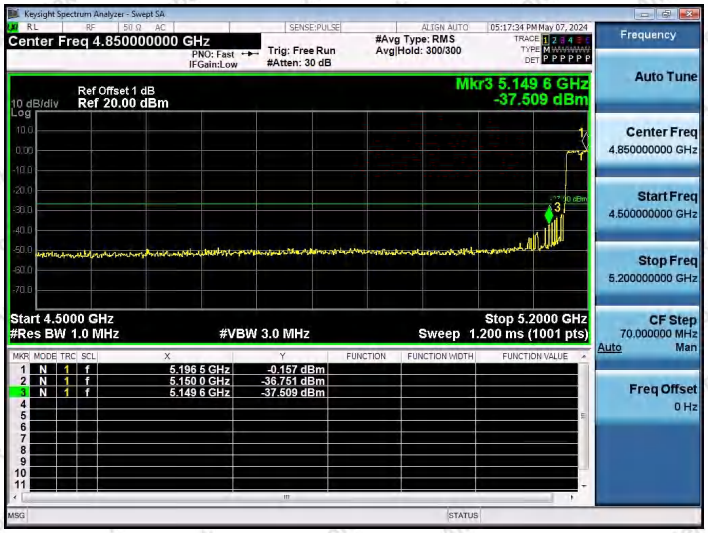
11AC20MIMO-Ant2-5180-PASS



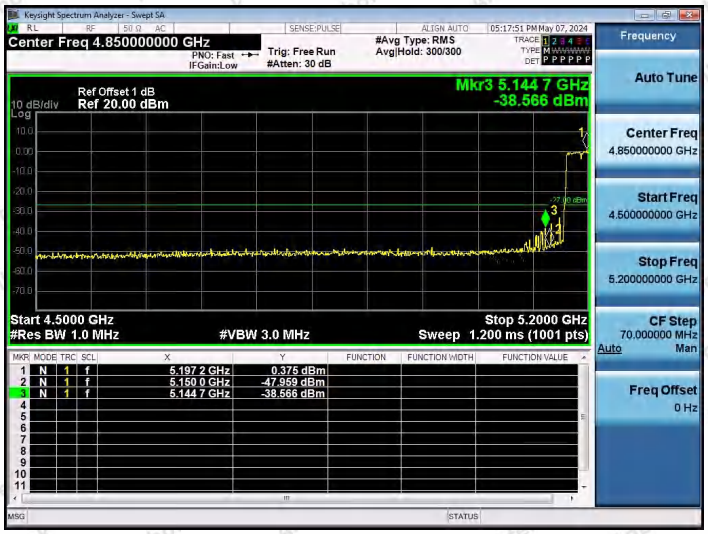
11AC20MIMO-Ant1-5240-PASS



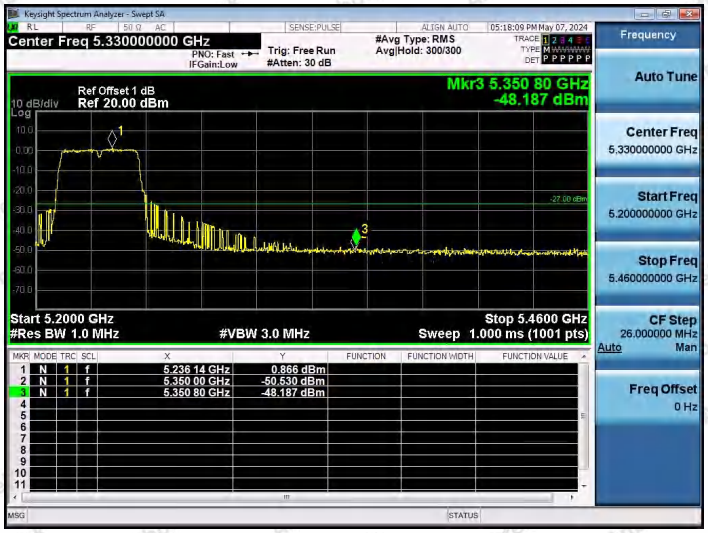
11AC20MIMO-Ant2-5240-PASS



11AC40MIMO-Ant1-5190-PASS

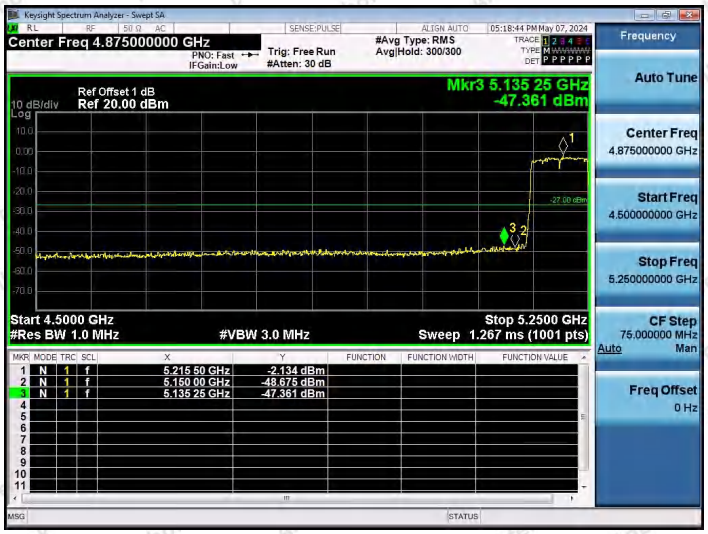


11AC40MIMO-Ant2-5190-PASS

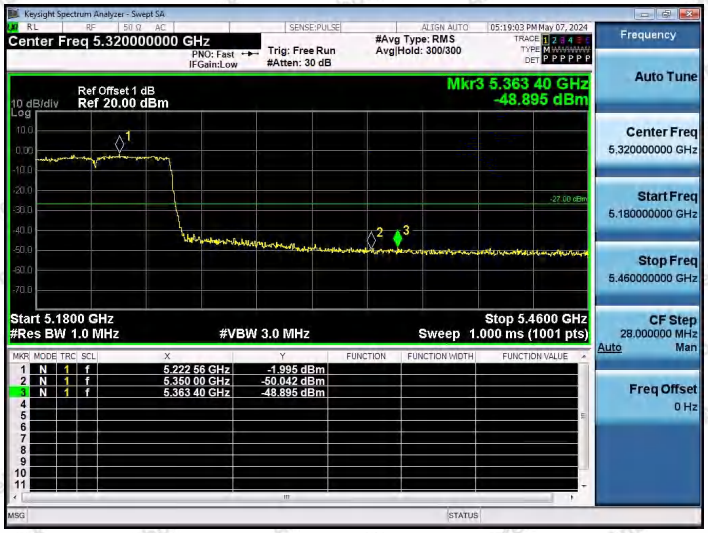


11AC40MIMO-Ant1-5230-PASS

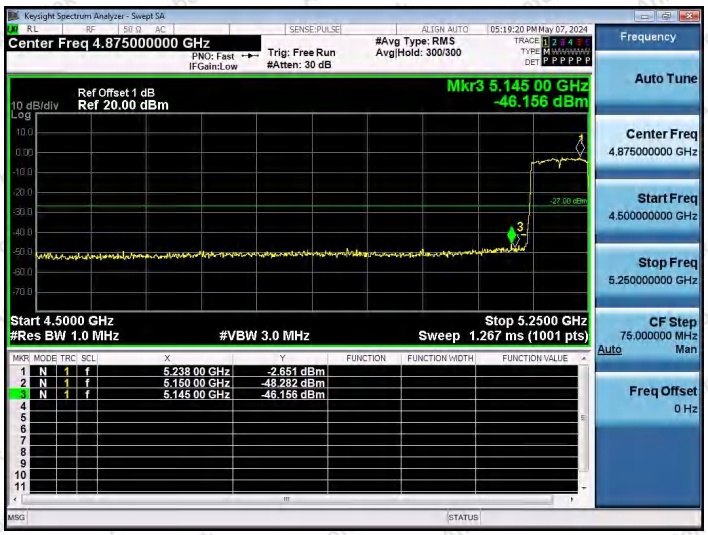
11AC40MIMO-Ant2-5230-PASS



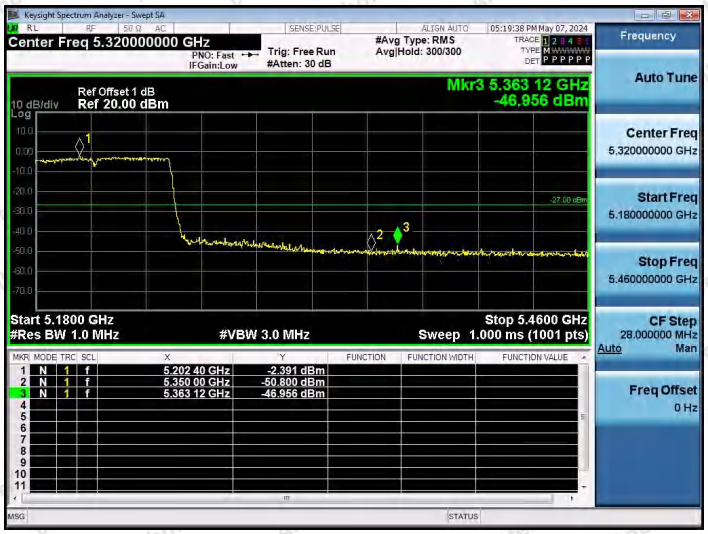
11AC80MIMO-Ant1-5210-PASS



11AC80MIMO-Ant1-5210-PASS

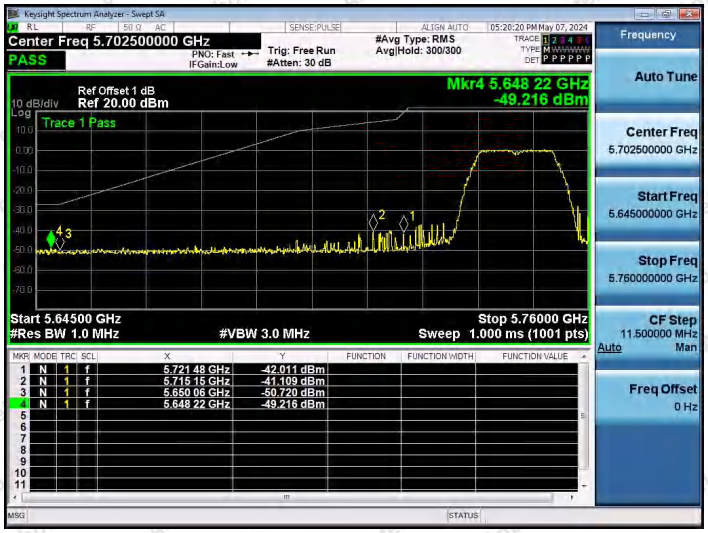


11AC80MIMO-Ant2-5210-PASS

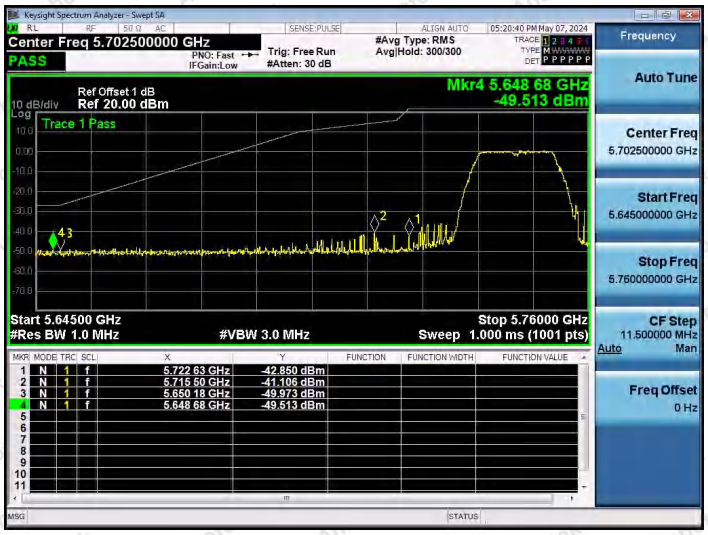


11AC80MIMO-Ant2-5210-PASS

Test Graphs B4

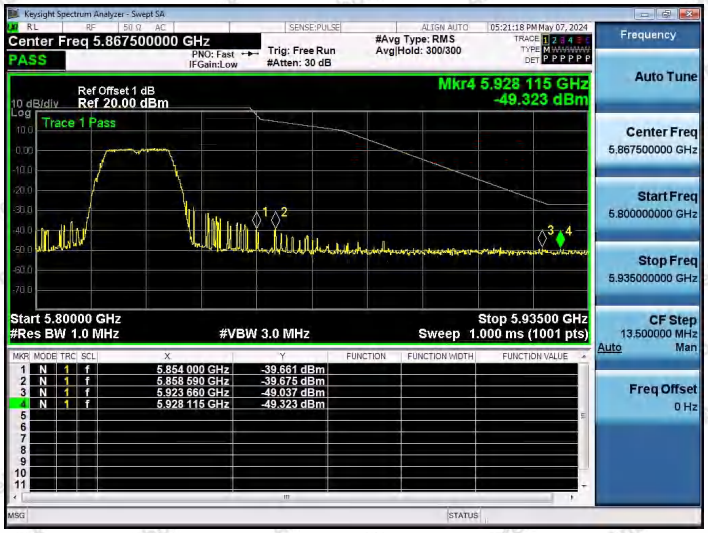


11A-Ant1-5745-PASS



11A-Ant2-5745-PASS

11A-Ant1-5825-PASS



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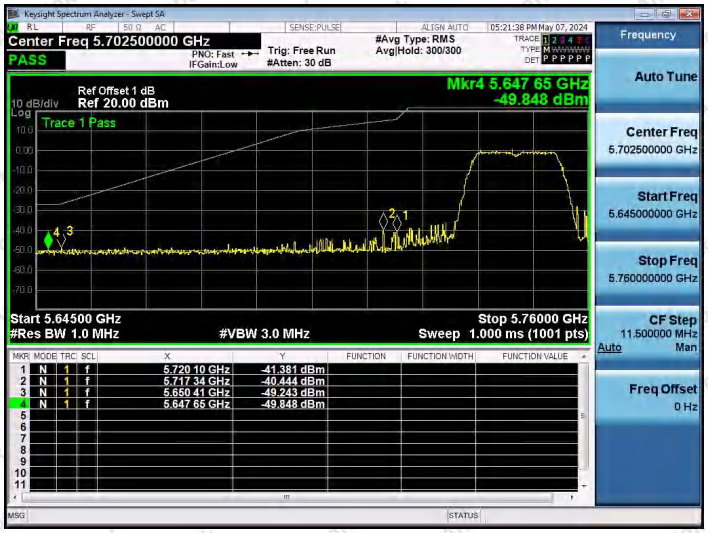
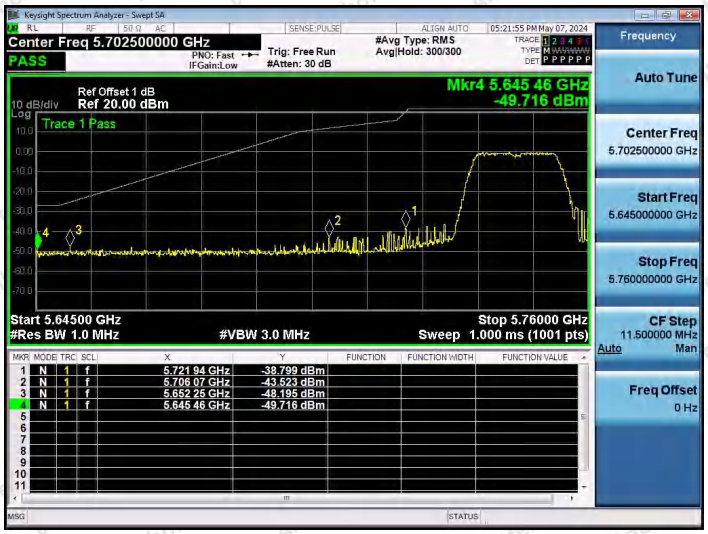
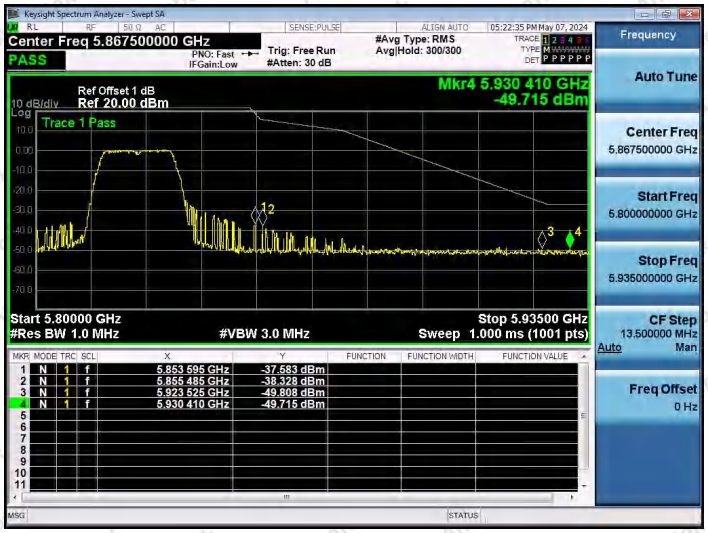


11N20MIMO-Ant1-5745-PASS

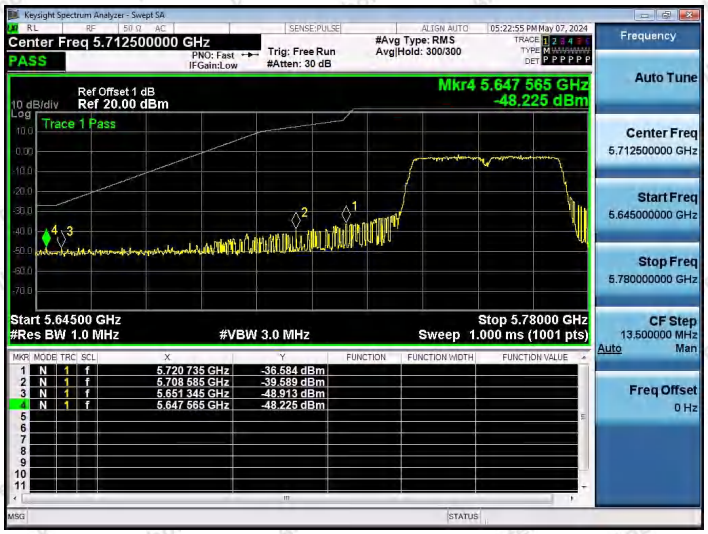


11N20MIMO-Ant2-5745-PASS

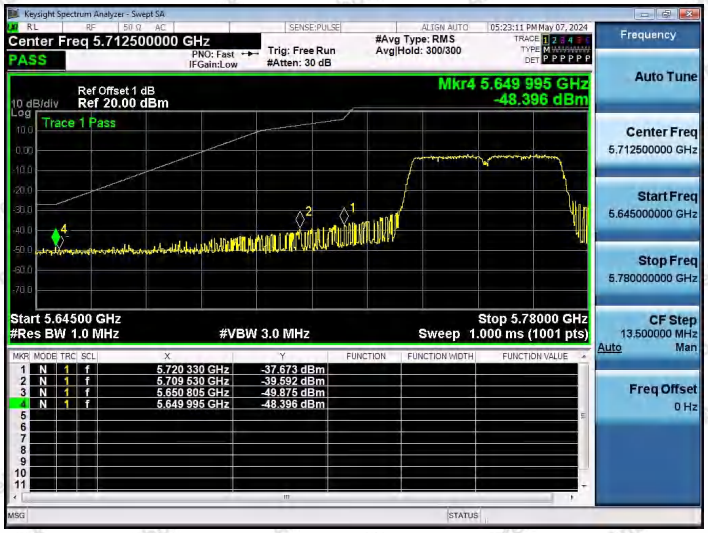
11N20MIMO-Ant1-5825-PASS



11N20MIMO-Ant2-5825-PASS



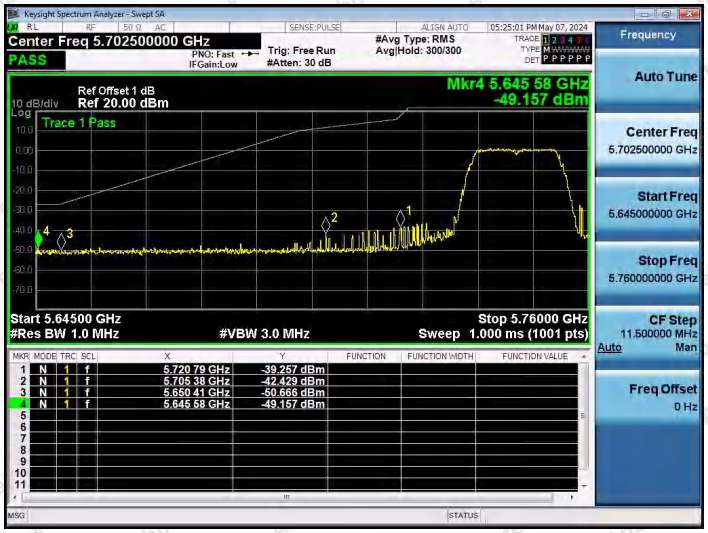
11N40MIMO-Ant1-5755-PASS



11N40MIMO-Ant2-5755-PASS

11N40MIMO-Ant1-5795-PASS

11N40MIMO-Ant2-5795-PASS



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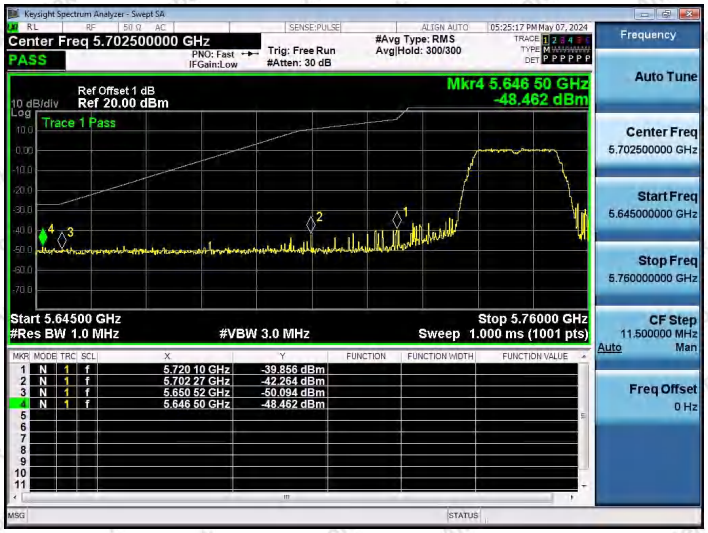
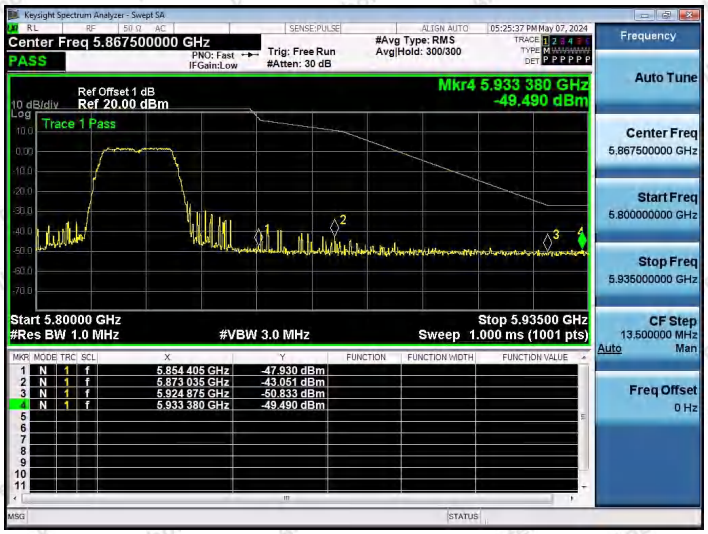
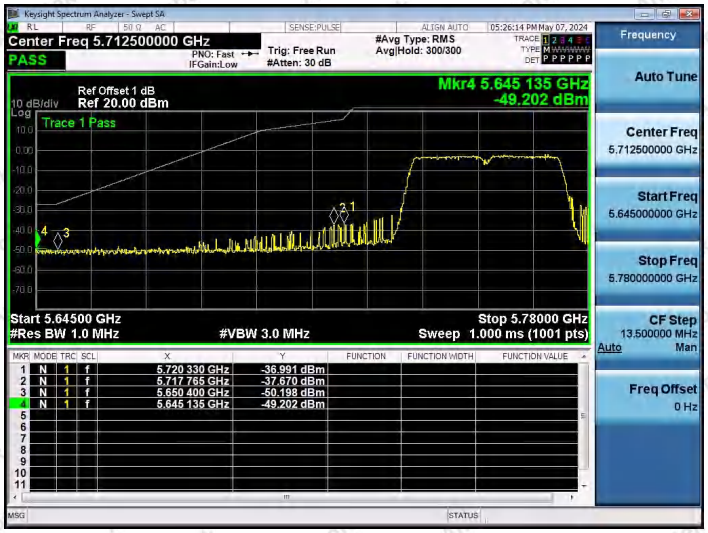


11AC20MIMO-Ant2-5745-PASS

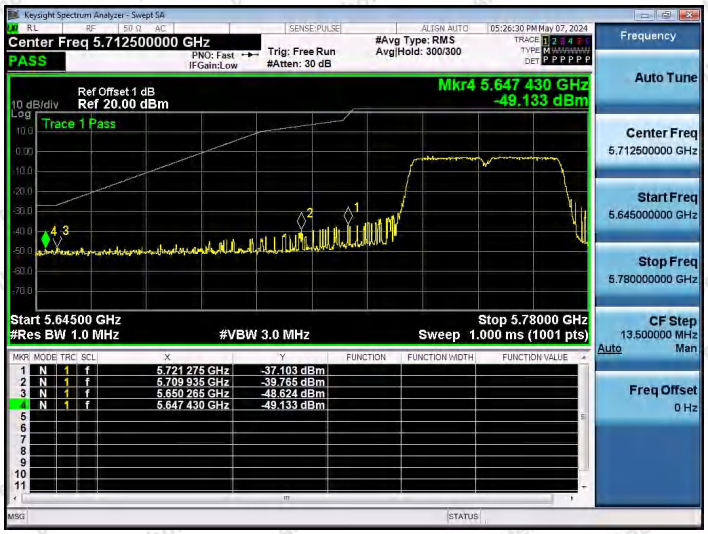


11AC20MIMO-Ant1-5825-PASS

11AC20MIMO-Ant2-5825-PASS



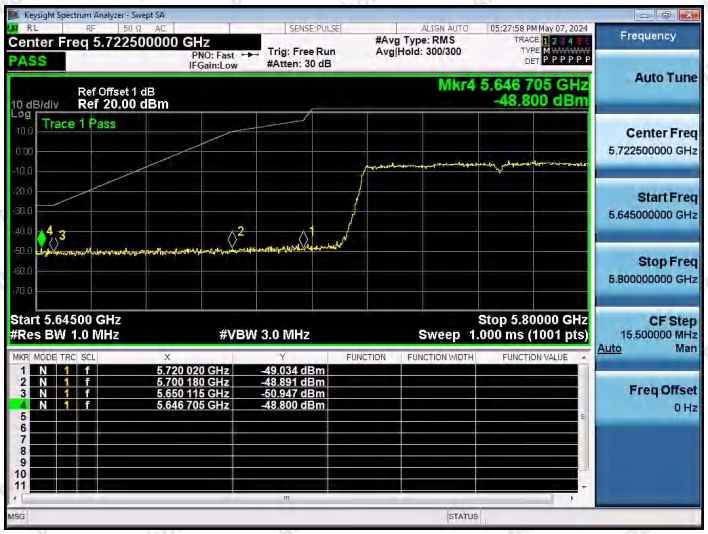
11AC40MIMO-Ant1-5755-PASS



11AC40MIMO-Ant2-5755-PASS

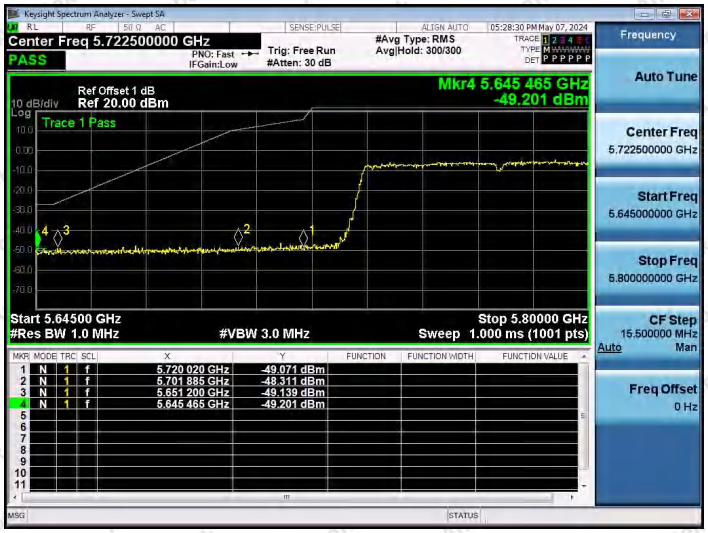
11AC40MIMO-Ant1-5795-PASS

11AC40MIMO-Ant2-5795-PASS



11AC80MIMO-Ant1-5775-PASS

11AC80MIMO-Ant1-5775-PASS



11AC80MIMO-Ant2-5775-PASS

11AC80MIMO-Ant2-5775-PASS

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