

Appendix Test Data for RLAN(5.8G) (Conducted Measurement)

Product Name: AoA positioning Locator

Trade Mark: Dusun

Test Model: DSGW-200

FCC ID: 2AUXBDSGW-200

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

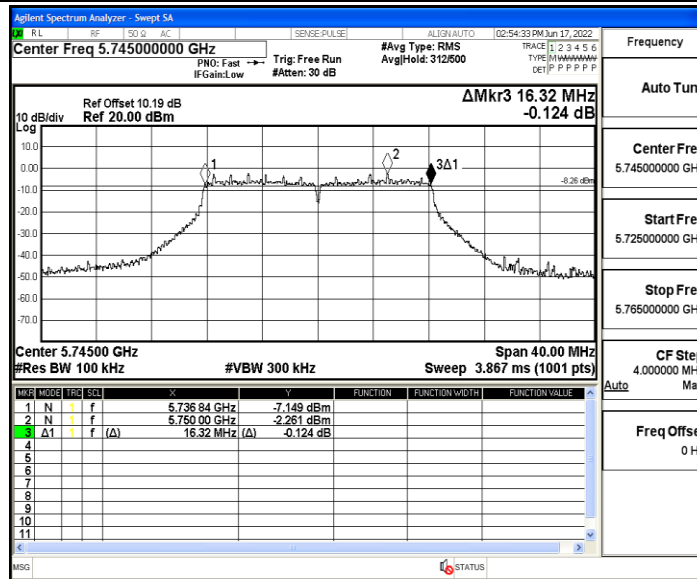
Appendix A: Min emission bandwidth

Test Result

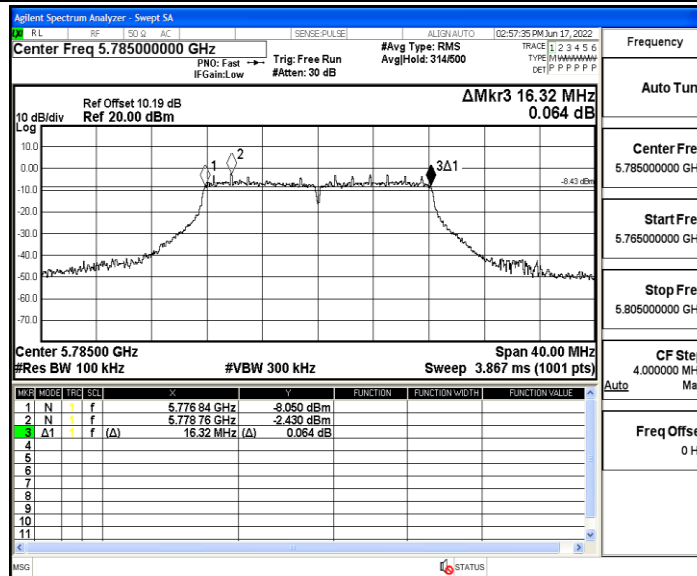
TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
		5785	16.320	5776.840	5793.160	0.5	PASS
		5825	16.320	5816.840	5833.160	0.5	PASS
11N20MIMO	Ant1	5745	17.280	5736.240	5753.520	0.5	PASS
		5785	17.560	5776.200	5793.760	0.5	PASS
		5825	17.520	5816.240	5833.760	0.5	PASS
11N40MIMO	Ant1	5755	36.080	5737.080	5773.160	0.5	PASS
		5795	35.360	5777.240	5812.600	0.5	PASS
11AC20MIMO	Ant1	5745	17.560	5736.240	5753.800	0.5	PASS
		5785	17.080	5776.440	5793.520	0.5	PASS
		5825	17.520	5816.240	5833.760	0.5	PASS
11AC40MIMO	Ant1	5755	36.080	5736.840	5772.920	0.5	PASS
		5795	35.680	5776.840	5812.520	0.5	PASS
11AC80MIMO	Ant1	5775	75.040	5737.400	5812.440	0.5	PASS

Test Graphs

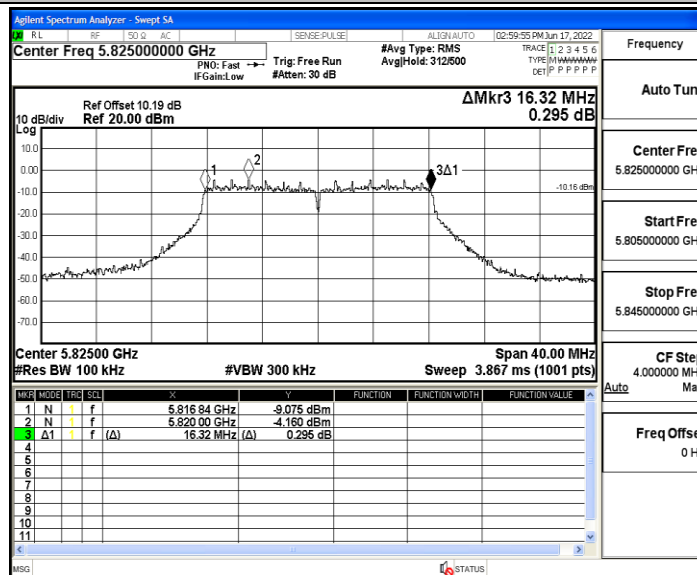
11A_Ant1_5745



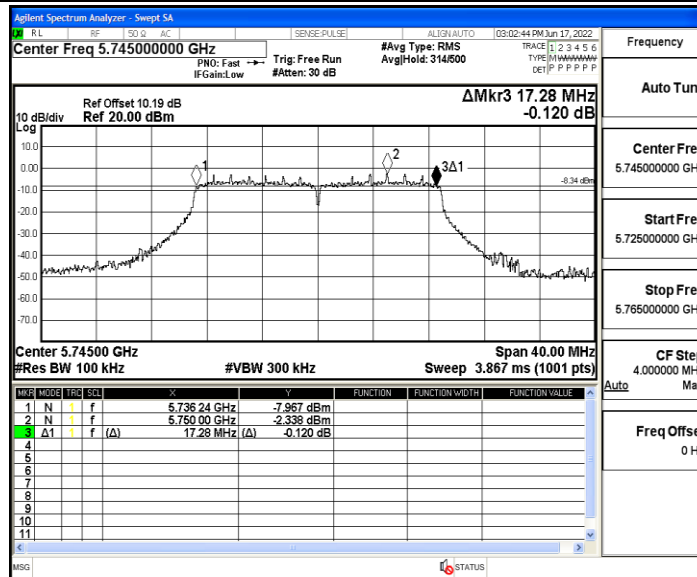
11A_Ant1_5785



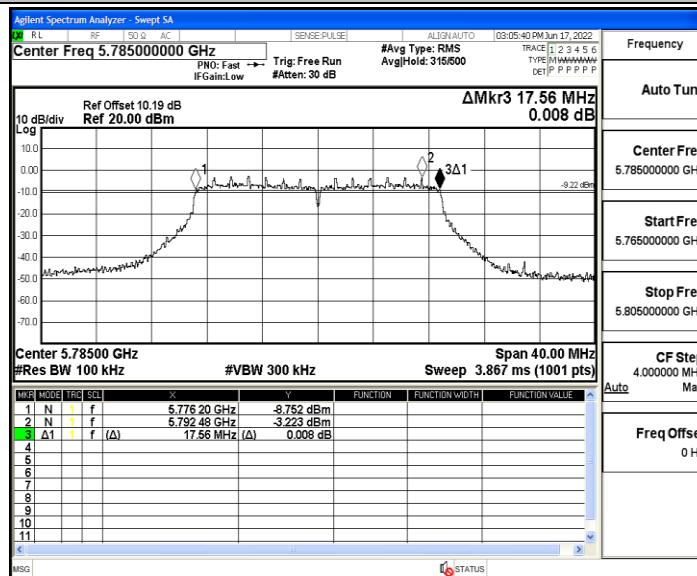
11A_Ant1_5825



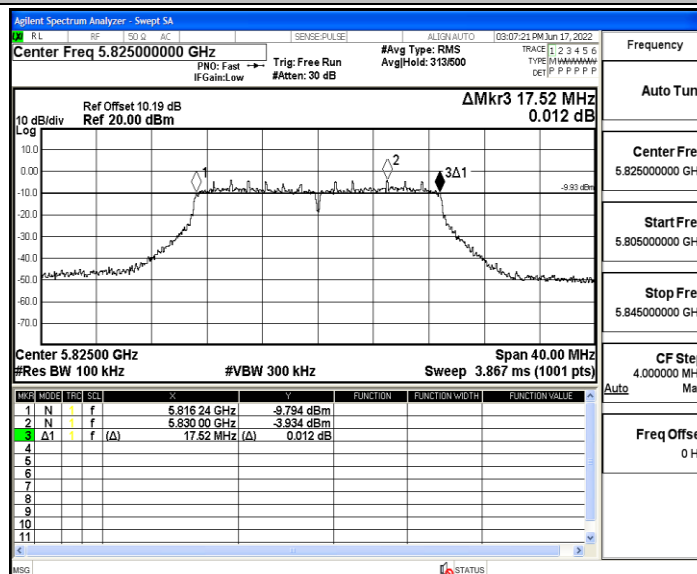
11N20MIMO_Ant1_5745



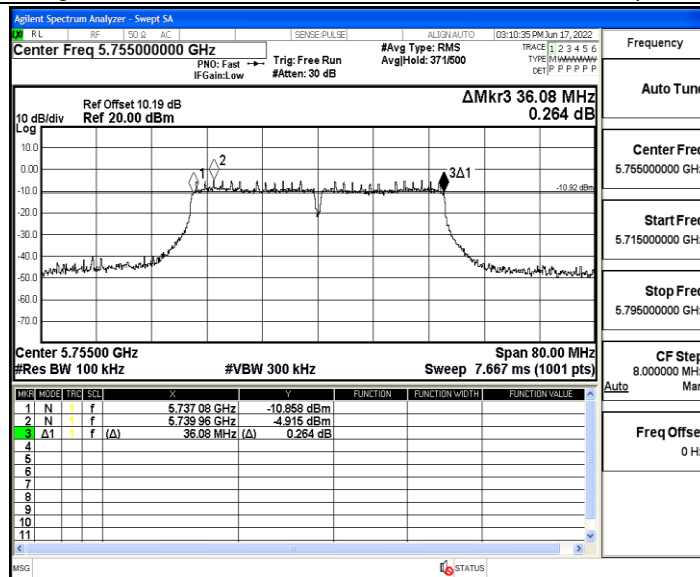
11N20MIMO_Ant1_5785



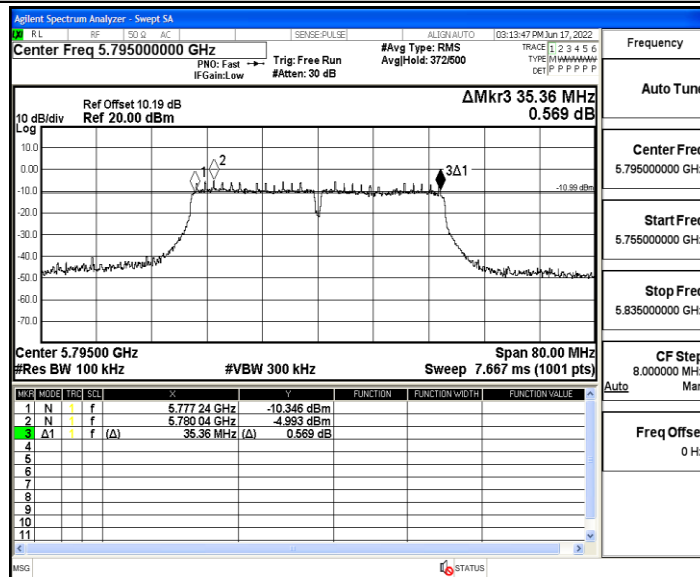
11N20MIMO_Ant1_5825



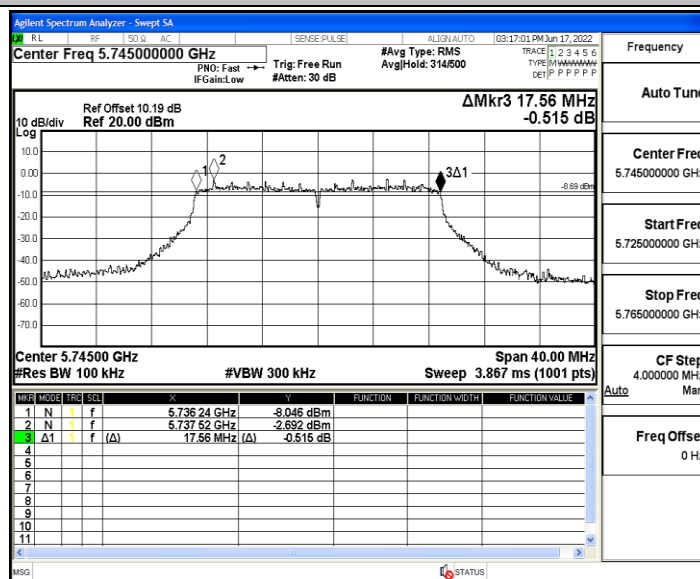
11N40MIMO_Ant1_5755



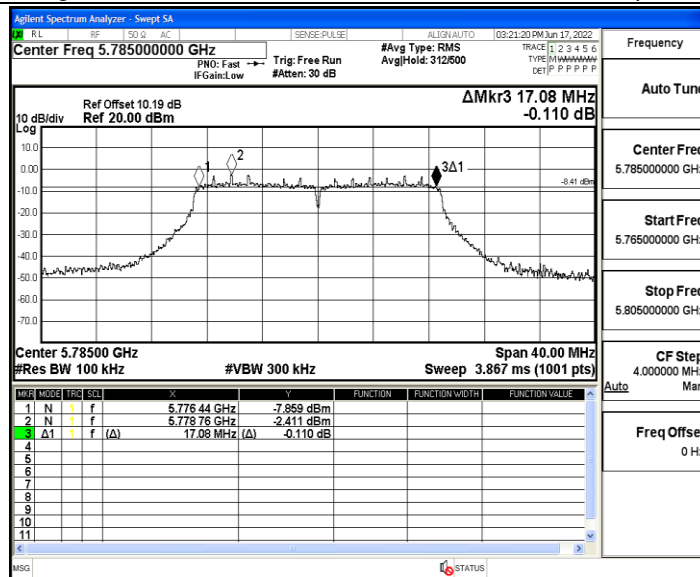
11N40MIMO_Ant1_5795



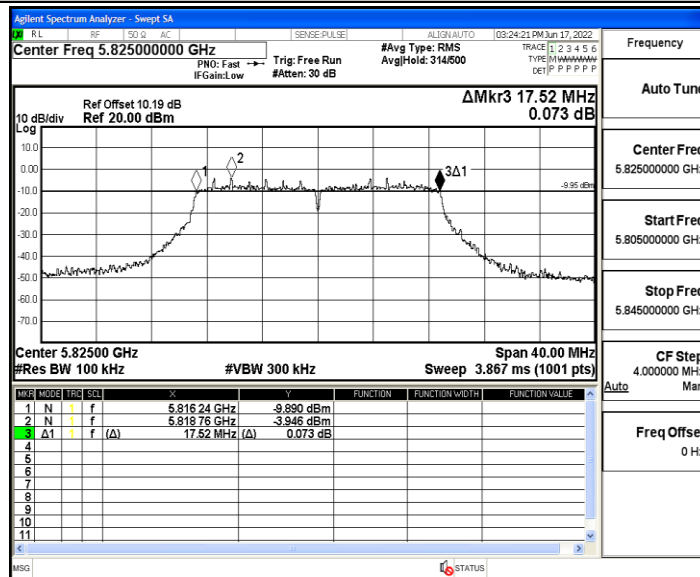
11AC20MIMO_Ant1_5745



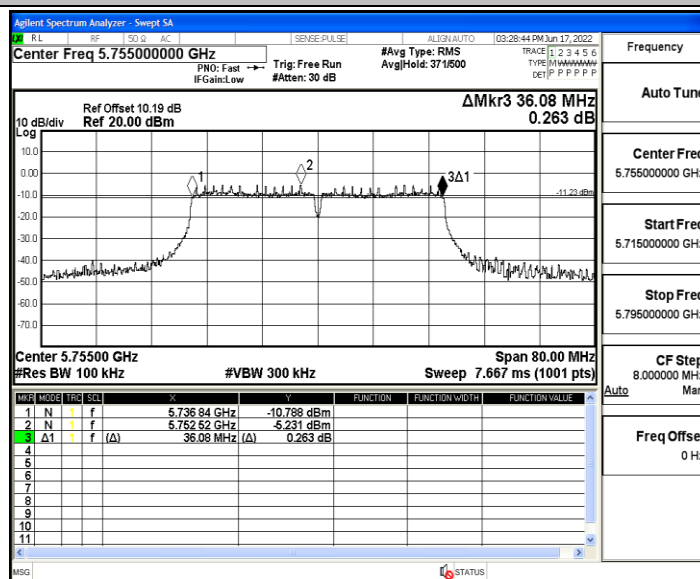
11AC20MIMO_Ant1_5785



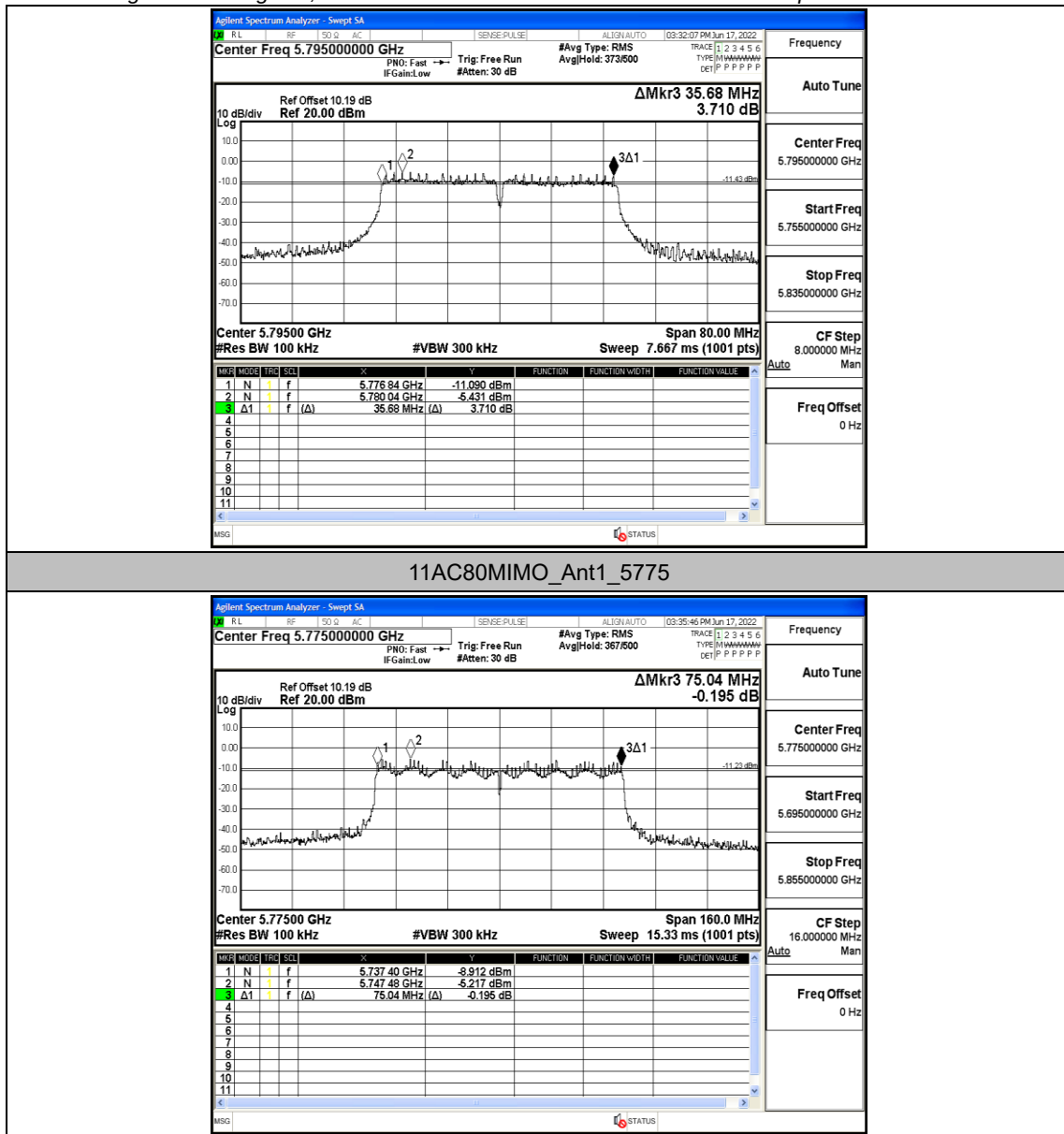
11AC20MIMO_Ant1_5825



11AC40MIMO_Ant1_5755



11AC40MIMO_Ant1_5795



Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5745	8.72	≤29.99	PASS
		5785	8.32	≤29.99	PASS
		5825	7.10	≤29.99	PASS
11N20MIMO	Ant1	5745	8.65	≤29.99	PASS
		5785	8.31	≤29.99	PASS
		5825	7.13	≤29.99	PASS
11N40MIMO	Ant1	5755	9.22	≤29.99	PASS
		5795	8.67	≤29.99	PASS
11AC20MIMO	Ant1	5745	8.58	≤29.99	PASS
		5785	8.47	≤29.99	PASS
		5825	7.19	≤29.99	PASS
11AC40MIMO	Ant1	5755	9.04	≤29.99	PASS
		5795	8.69	≤29.99	PASS
11AC80MIMO	Ant1	5775	10.12	≤29.99	PASS

Note: The Duty Cycle Factor is compensated in the test result.

Appendix C: Maximum power spectral density

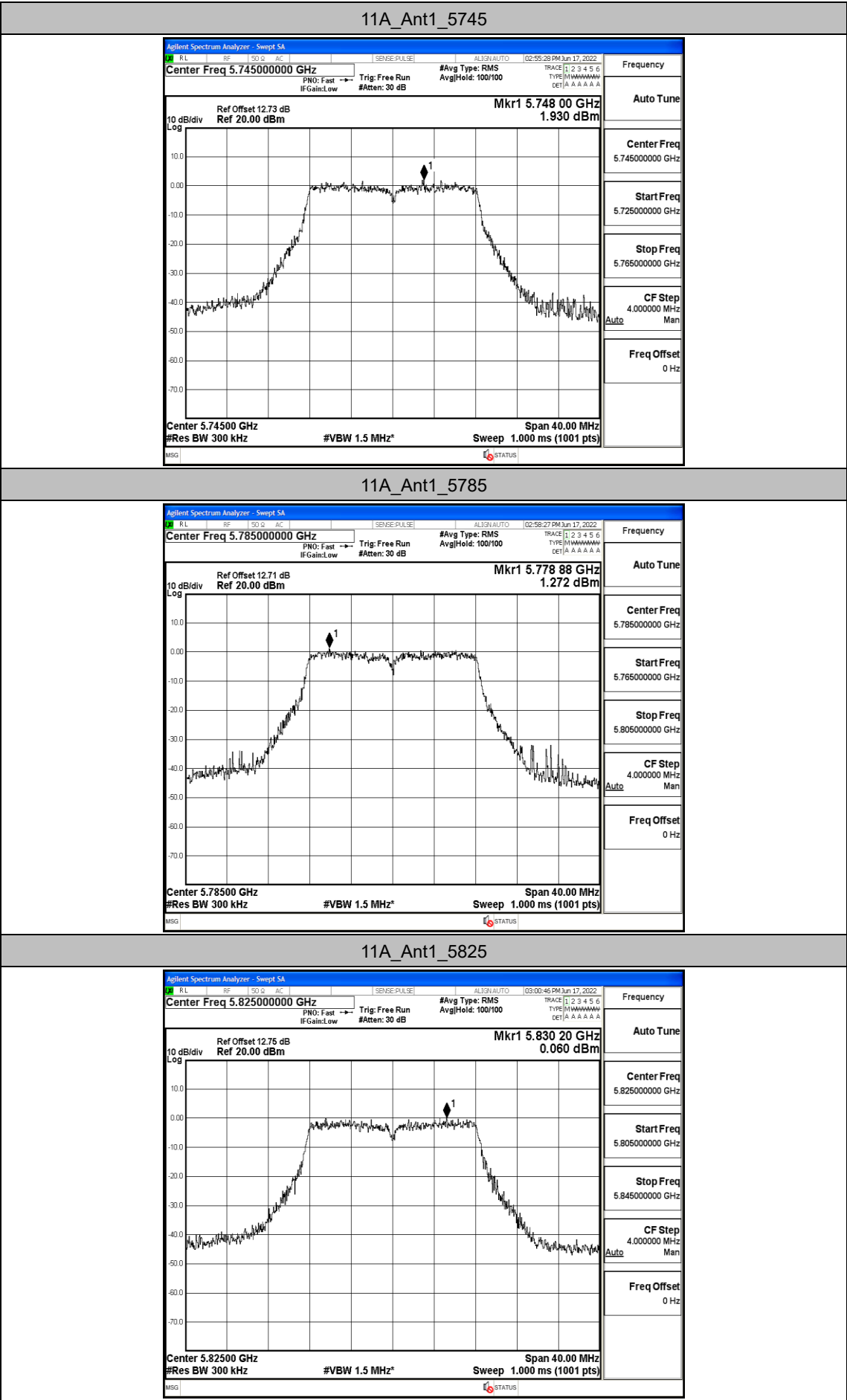
Test Result

TestMode	Antenna	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	1.93	≤29.99	PASS
		5785	1.27	≤29.99	PASS
		5825	0.06	≤29.99	PASS
11N20MIMO	Ant1	5745	1.46	≤29.99	PASS
		5785	0.69	≤29.99	PASS
		5825	-0.04	≤29.99	PASS
11N40MIMO	Ant1	5755	-1.12	≤29.99	PASS
		5795	-1.22	≤29.99	PASS
11AC20MIMO	Ant1	5745	1.03	≤29.99	PASS
		5785	1.34	≤29.99	PASS
		5825	-0.19	≤29.99	PASS
11AC40MIMO	Ant1	5755	-0.34	≤29.99	PASS
		5795	-1.08	≤29.99	PASS
11AC80MIMO	Ant1	5775	0.89	≤29.99	PASS

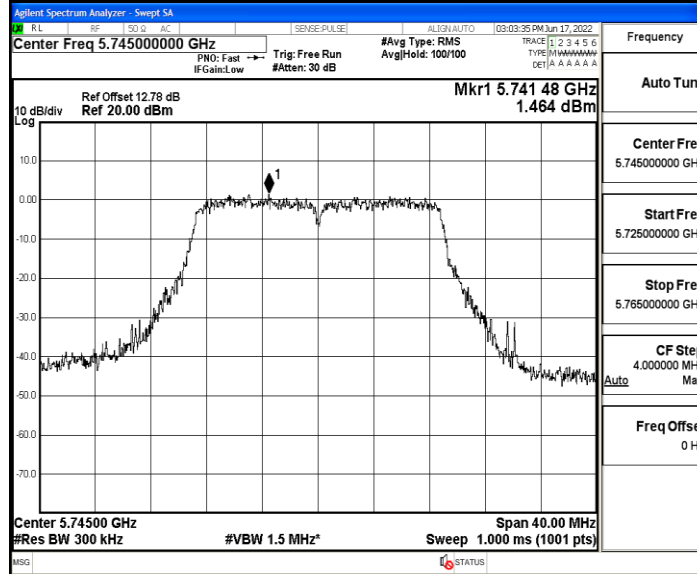
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

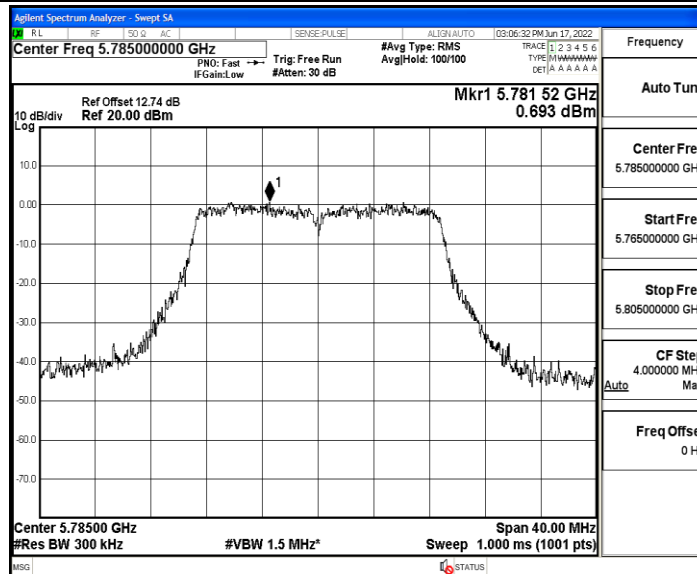
Test Graphs



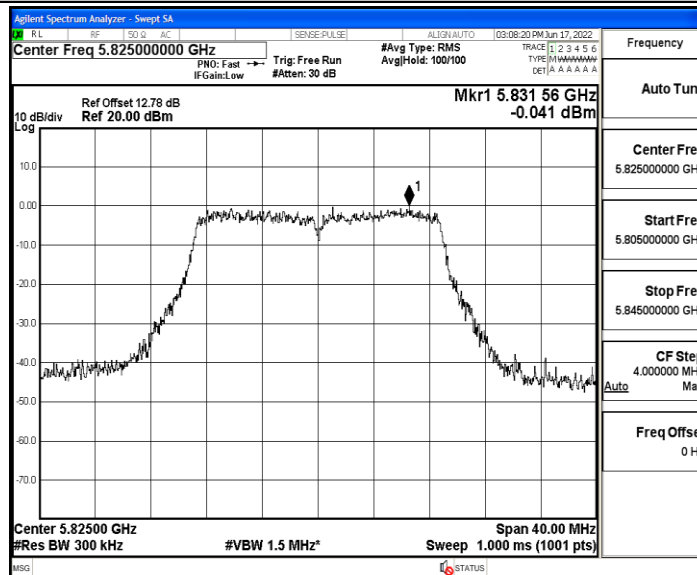
11N20MIMO_Ant1_5745



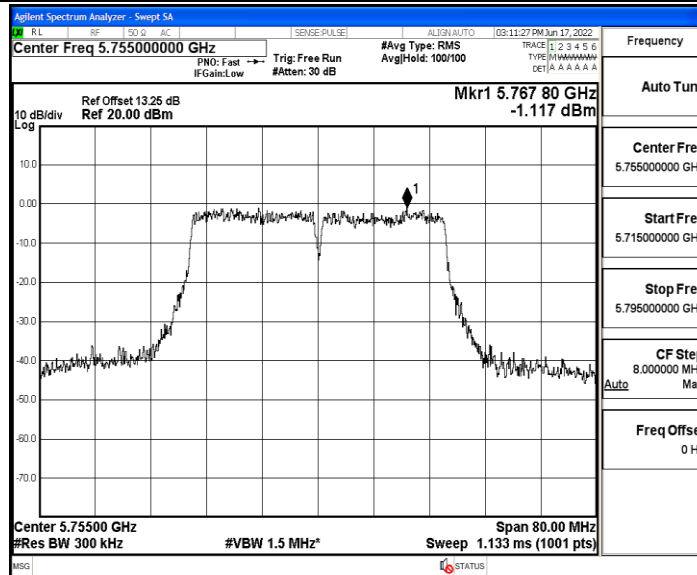
11N20MIMO_Ant1_5785



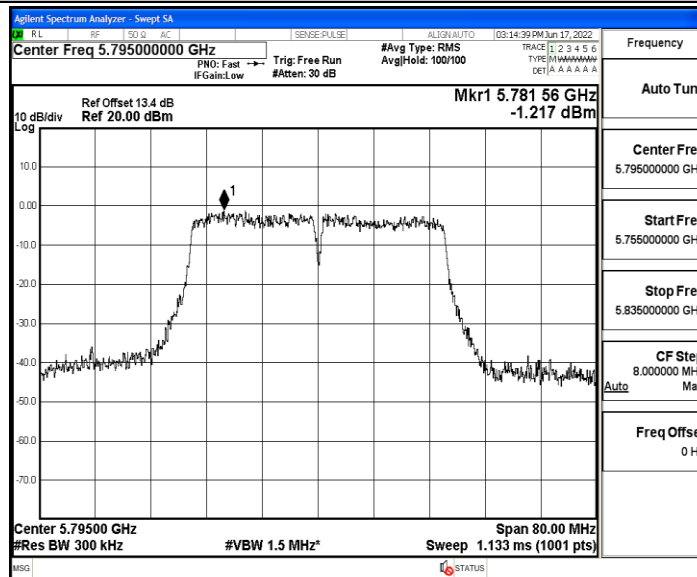
11N20MIMO_Ant1_5825



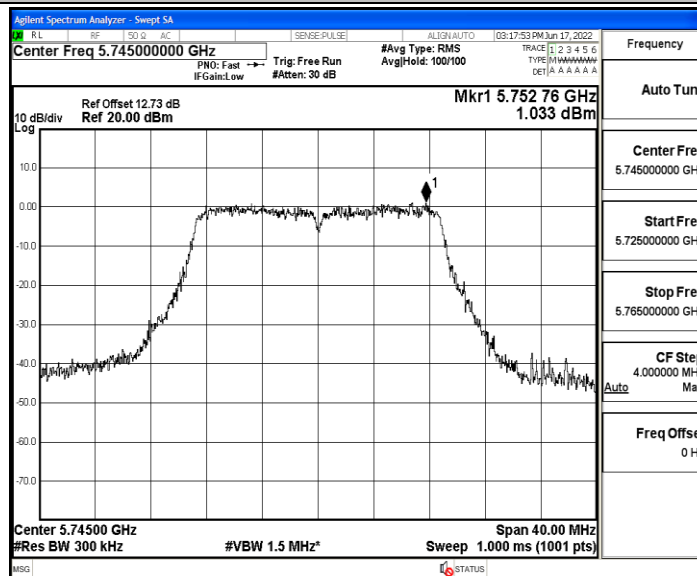
11N40MIMO_Ant1_5755



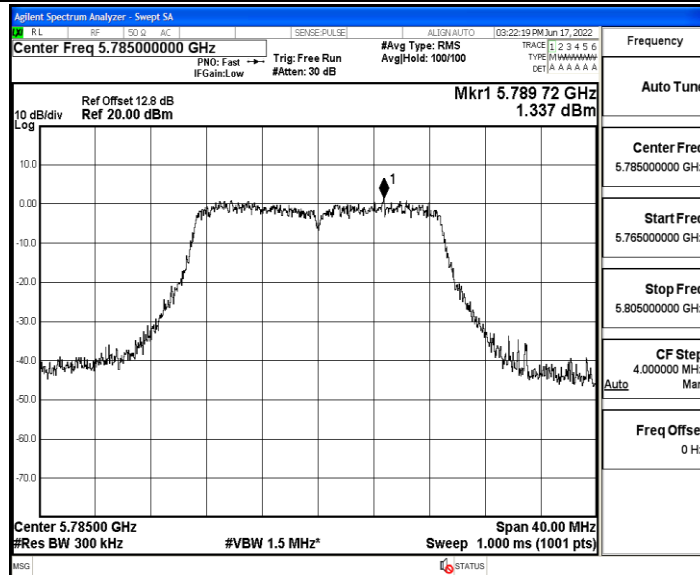
11N40MIMO_Ant1_5795



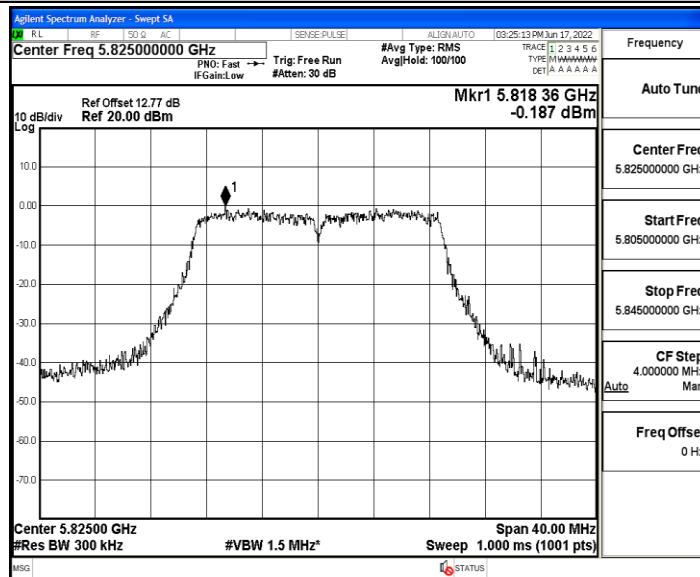
11AC20MIMO_Ant1_5745



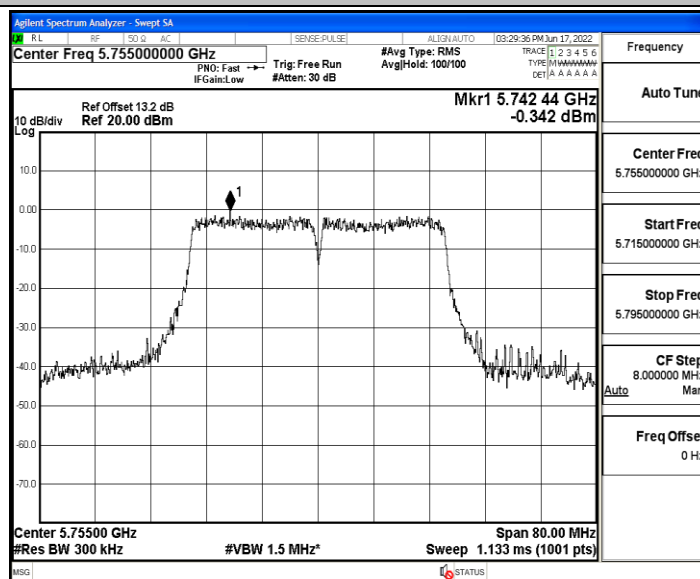
11AC20MIMO_Ant1_5785



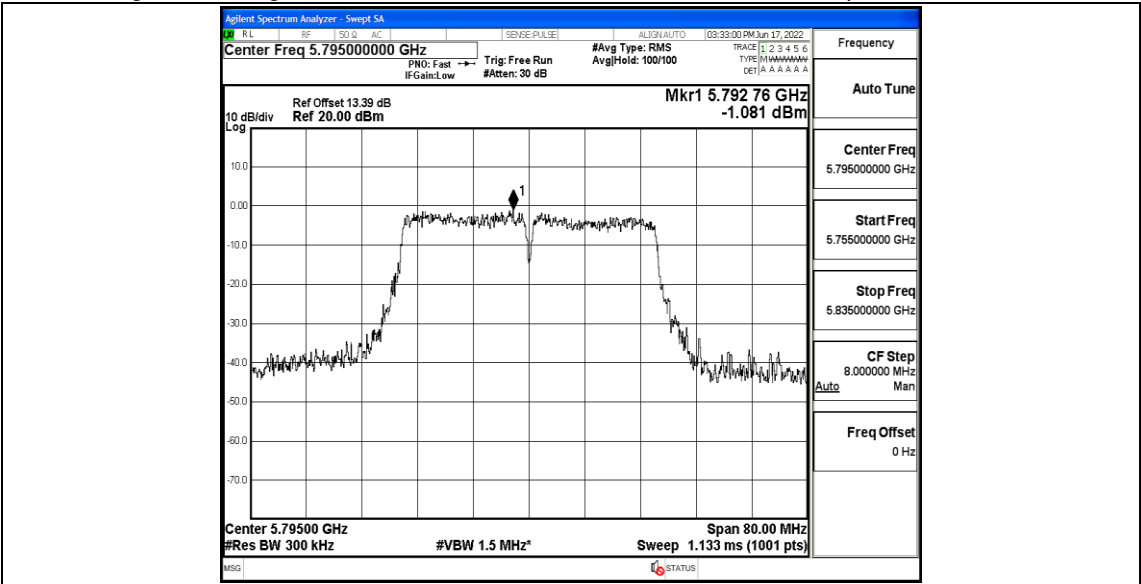
11AC20MIMO_Ant1_5825



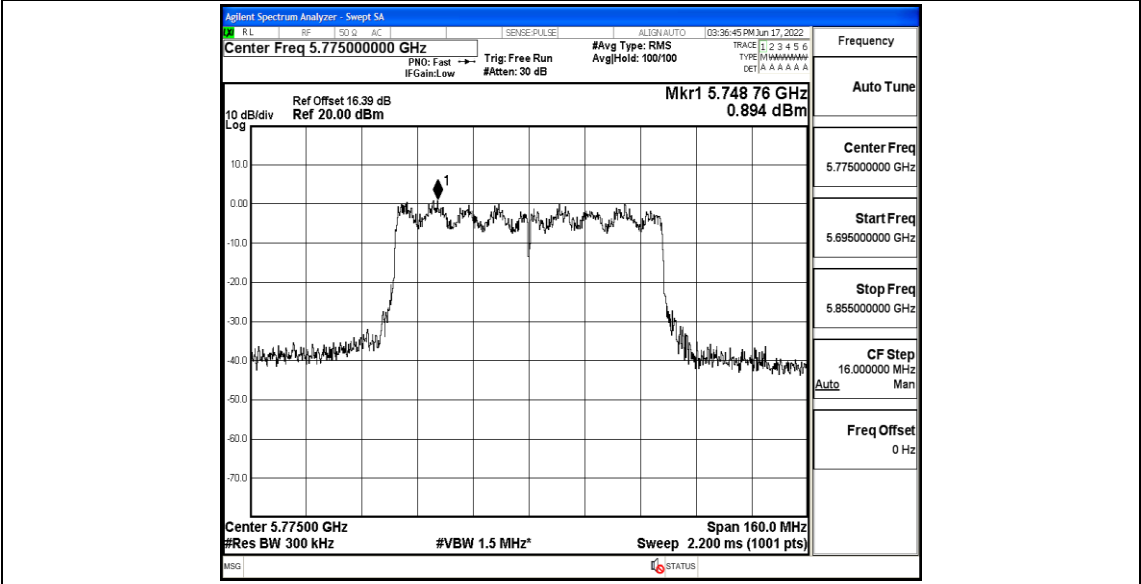
11AC40MIMO_Ant1_5755



11AC40MIMO_Ant1_5795



11AC80MIMO_Ant1_5775



Appendix D: Band edge measurements

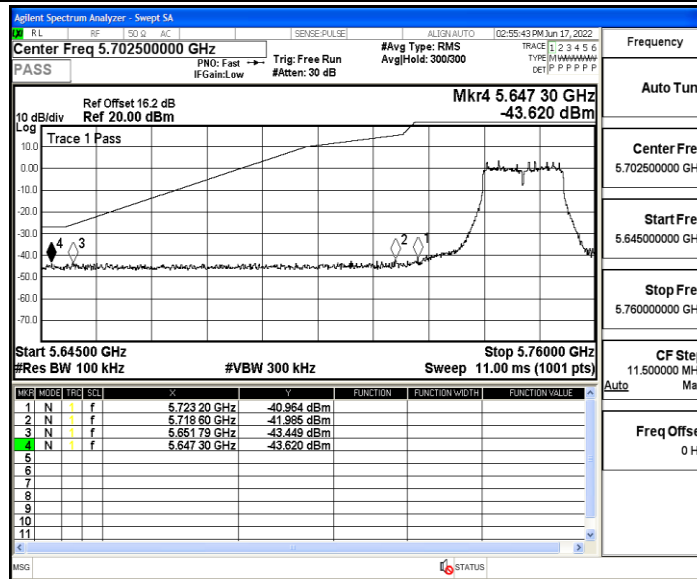
Test Result

TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5650~5700	-43.45	≤-25.68	PASS
				5700~5720	-41.99	≤15.21	PASS
				5720~5725	-40.96	≤22.90	PASS
				5760~5650	-43.62	≤-27	PASS
		High	5825	5850~5855	-42.98	≤15.79	PASS
				5855~5875	-41.93	≤12.44	PASS
				5875~5925	-41.62	≤-1.88	PASS
				5925~5935	-43.07	≤-27	PASS
11N20MI MO	Ant1	Low	5745	5650~5700	-43.13	≤-4.74	PASS
				5700~5720	-42.88	≤15.47	PASS
				5720~5725	-40	≤26.30	PASS
				5760~5650	-44.18	≤-27	PASS
		High	5825	5850~5855	-41.8	≤20.10	PASS
				5855~5875	-42.39	≤12.52	PASS
				5875~5925	-42.38	≤-0.98	PASS
				5925~5935	-42.13	≤-27	PASS
11N40MI MO	Ant1	Low	5755	5650~5700	-42.59	≤-25.01	PASS
				5700~5720	-37.61	≤15.24	PASS
				5720~5725	-36	≤18.51	PASS
				5780~5650	-43.65	≤-27	PASS
		High	5795	5850~5855	-43.22	≤19.04	PASS
				5855~5875	-43.01	≤10.78	PASS
				5875~5925	-41.5	≤3.36	PASS
				5925~5935	-43.4	≤-27	PASS
11AC20M IMO	Ant1	Low	5745	5650~5700	-42.95	≤-4.83	PASS
				5700~5720	-43.22	≤11.57	PASS
				5720~5725	-40.1	≤23.42	PASS
				5760~5650	-44.6	≤-27	PASS
		High	5825	5850~5855	-43.32	≤20.10	PASS
				5855~5875	-41.54	≤10.66	PASS
				5875~5925	-41.45	≤-10.67	PASS
				5925~5935	-43.06	≤-27	PASS
11AC40M IMO	Ant1	Low	5755	5650~5700	-43.39	≤-15.72	PASS
				5700~5720	-36.76	≤14.90	PASS
				5720~5725	-34.85	≤21.28	PASS
				5780~5650	-44.2	≤-27	PASS
		High	5795	5850~5855	-42.7	≤20.92	PASS
				5855~5875	-42.96	≤14.89	PASS
				5875~5925	-42.86	≤-14.59	PASS

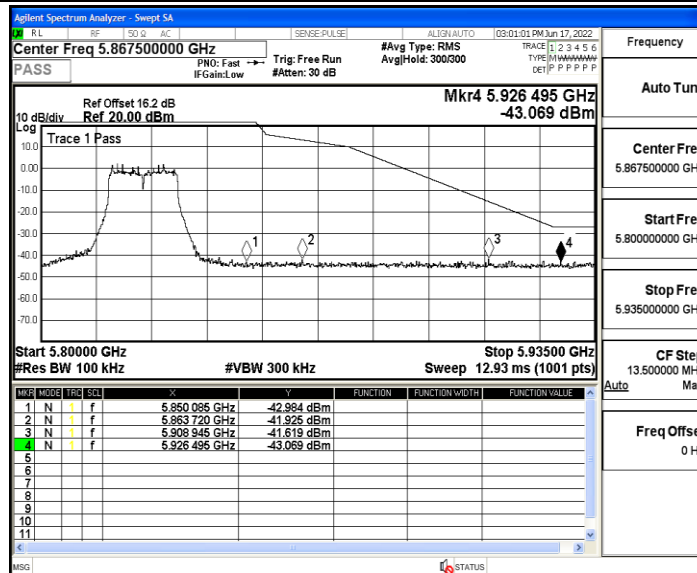
TestMode	Antenna	ChName	Channel	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
				5925~5935	-43.45	≤-27	PASS
11AC80M IMO	Ant1	Low	5775	5650~5700	-36.9	≤8.18	PASS
				5700~5720	-34.82	≤12.09	PASS
				5720~5725	-35.72	≤24.83	PASS
				5800~5650	-43.91	≤-27	PASS
		High	5775	5850~5855	-40.48	≤17.90	PASS
				5855~5875	-39.35	≤12.35	PASS
				5875~5925	-42.35	≤-19.29	PASS
				5925~5935	-43.21	≤-27	PASS

Test Graphs

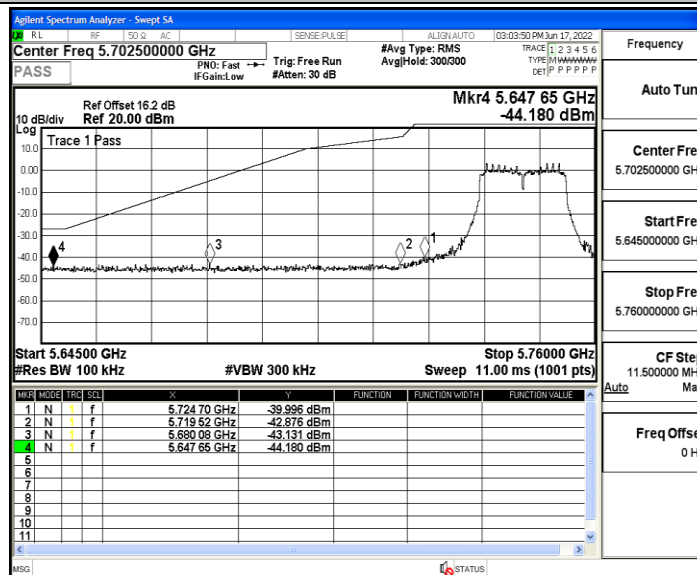
11A_Ant1_Low_5745



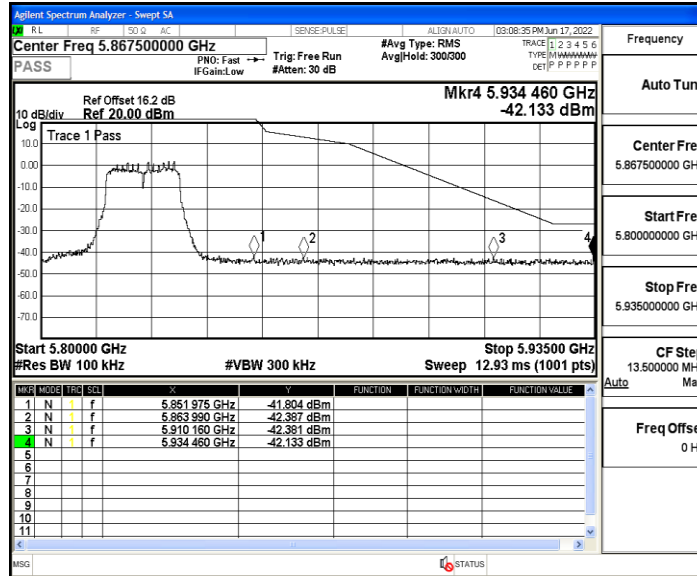
11A_Ant1_High_5825



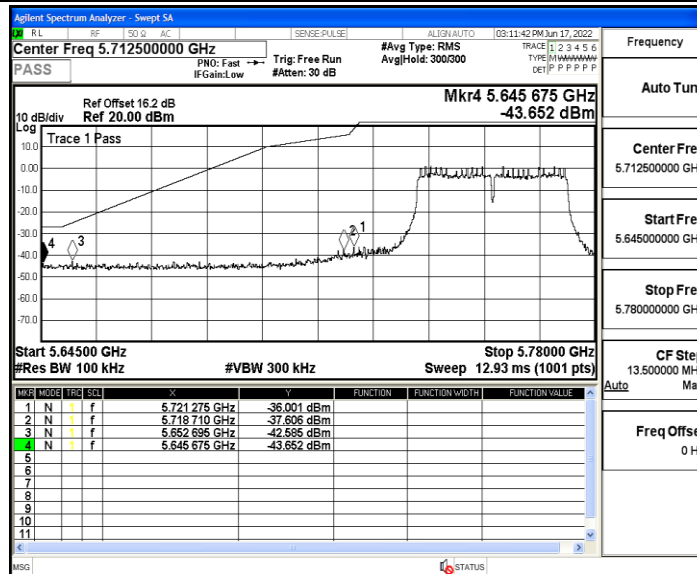
11N20MIMO_Ant1_Low_5745



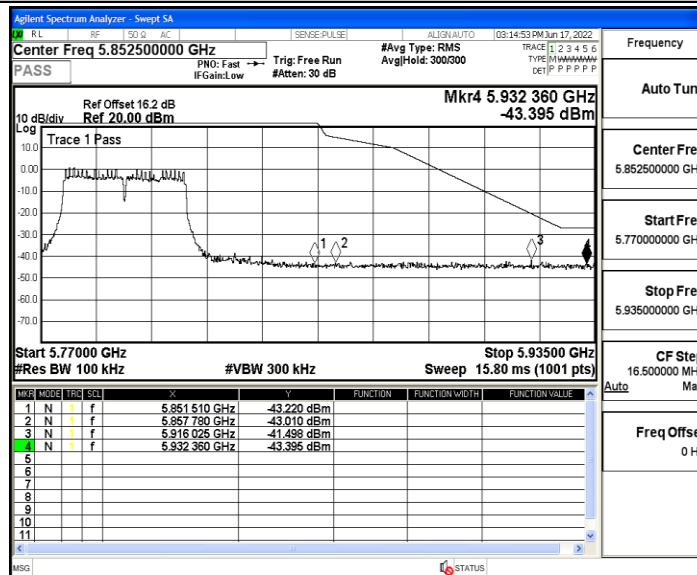
11N20MIMO_Ant1_High_5825



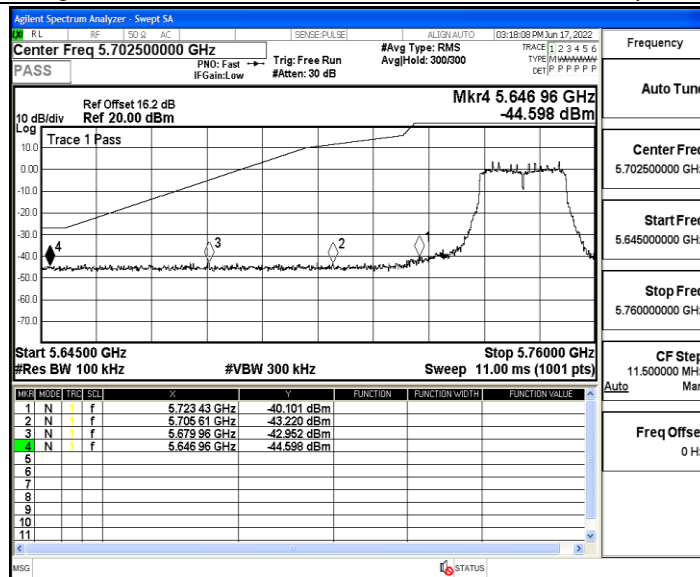
11N40MIMO_Ant1_Low_5755



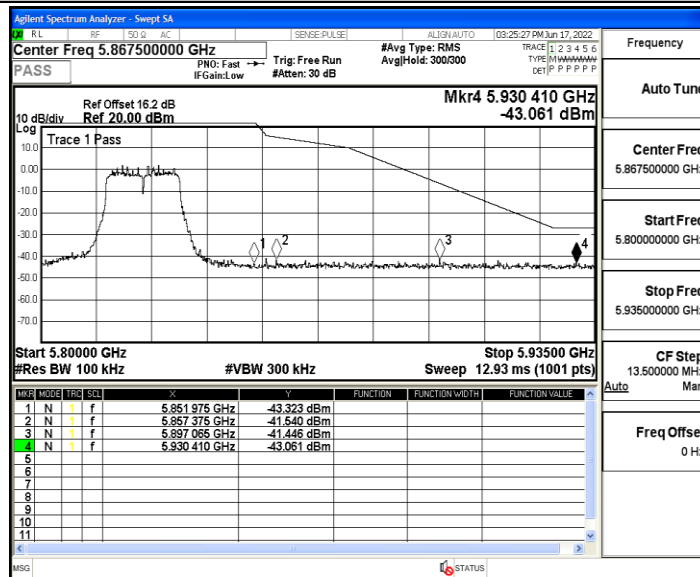
11N40MIMO_Ant1_High_5795



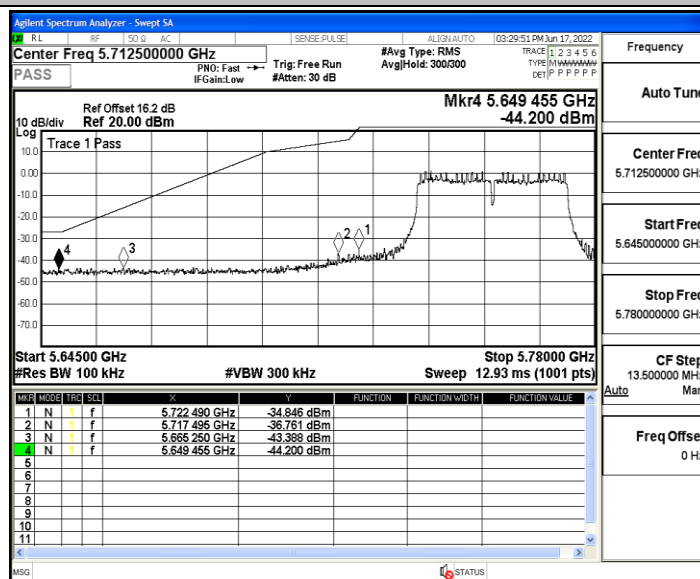
11AC20MIMO_Ant1_Low_5745



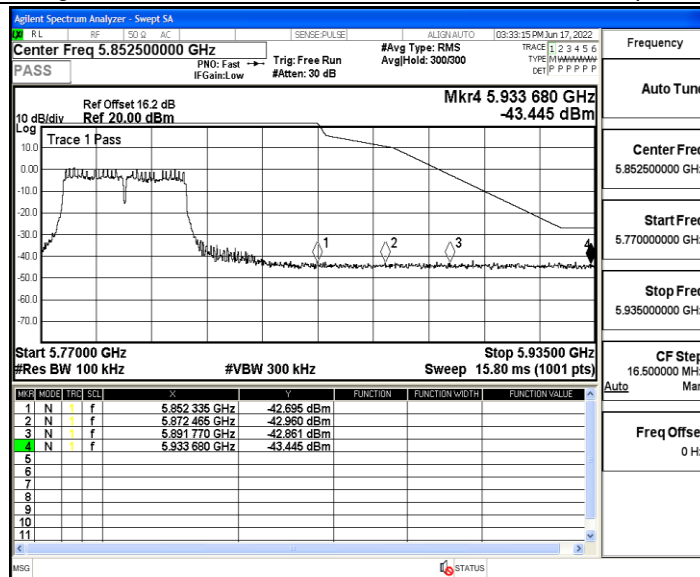
11AC20MIMO_Ant1_High_5825



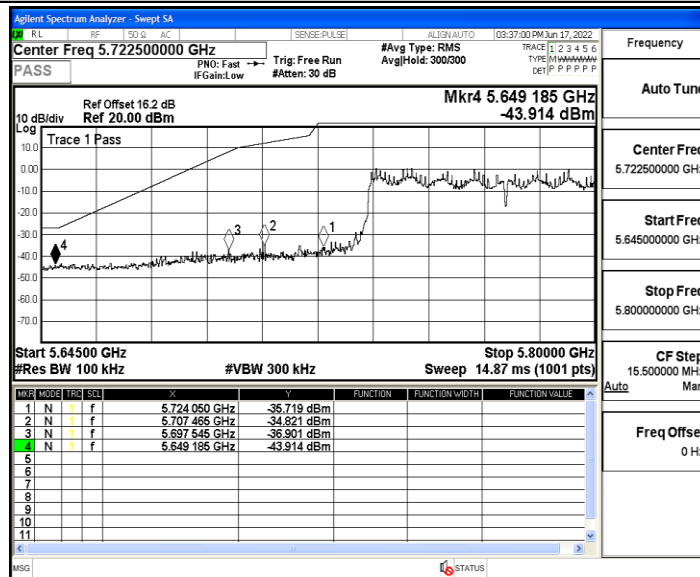
11AC40MIMO_Ant1_Low_5755



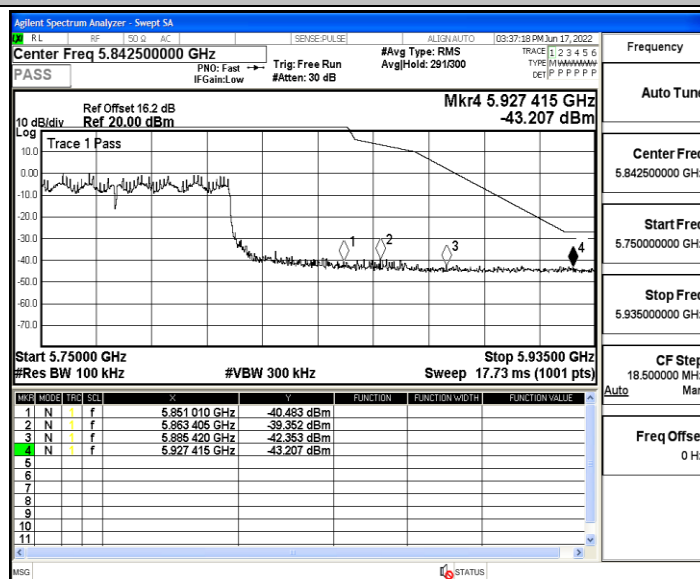
11AC40MIMO_Ant1_High_5795



11AC80MIMO_Ant1_Low_5775



11AC80MIMO_Ant1_High_5775



Appendix E: Frequency Stability

Test Result

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5745.083333	5745 – 5825	PASS
5745	20	108	5744.916099	5745 – 5825	PASS
5745	50	120	5745.027084	5745 – 5825	PASS
5745	40	120	5745.011588	5745 – 5825	PASS
5745	30	120	5744.970589	5745 – 5825	PASS
5745	20	120	5744.917553	5745 – 5825	PASS
5745	10	120	5745.082688	5745 – 5825	PASS
5745	0	120	5744.968167	5745 – 5825	PASS
5745	-10	120	5744.934158	5745 – 5825	PASS
5745	-20	120	5744.990090	5745 – 5825	PASS
5745	-30	120	5744.906089	5745 – 5825	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5785.099872	5745 – 5825	PASS
5785	20	108	5784.983951	5745 – 5825	PASS
5785	50	120	5784.914218	5745 – 5825	PASS
5785	40	120	5784.922327	5745 – 5825	PASS
5785	30	120	5784.984306	5745 – 5825	PASS
5785	20	120	5784.997720	5745 – 5825	PASS
5785	10	120	5785.068192	5745 – 5825	PASS
5785	0	120	5784.925533	5745 – 5825	PASS
5785	-10	120	5784.964824	5745 – 5825	PASS
5785	-20	120	5784.932070	5745 – 5825	PASS
5785	-30	120	5784.917883	5745 – 5825	PASS

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5825.025542	5745 – 5825	PASS
5825	20	108	5825.027564	5745 – 5825	PASS
5825	50	120	5824.942632	5745 – 5825	PASS
5825	40	120	5824.952793	5745 – 5825	PASS
5825	30	120	5825.012069	5745 – 5825	PASS
5825	20	120	5824.978369	5745 – 5825	PASS
5825	10	120	5825.059024	5745 – 5825	PASS
5825	0	120	5824.955704	5745 – 5825	PASS
5825	-10	120	5825.019245	5745 – 5825	PASS
5825	-20	120	5824.911661	5745 – 5825	PASS
5825	-30	120	5825.033294	5745 – 5825	PASS

Frequency (MHz)	Enviroment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5755.045334	5745 – 5825	PASS
5755	20	108	5755.029519	5745 – 5825	PASS
5755	50	120	5755.099351	5745 – 5825	PASS
5755	40	120	5755.032714	5745 – 5825	PASS
5755	30	120	5755.058025	5745 – 5825	PASS
5755	20	120	5755.084016	5745 – 5825	PASS
5755	10	120	5754.928058	5745 – 5825	PASS
5755	0	120	5755.029063	5745 – 5825	PASS
5755	-10	120	5754.930893	5745 – 5825	PASS
5755	-20	120	5754.902260	5745 – 5825	PASS
5755	-30	120	5755.097189	5745 – 5825	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5794.965370	5745 – 5825	PASS
5795	20	108	5794.967191	5745 – 5825	PASS
5795	50	120	5795.044822	5745 – 5825	PASS
5795	40	120	5795.040405	5745 – 5825	PASS
5795	30	120	5794.905842	5745 – 5825	PASS
5795	20	120	5794.972799	5745 – 5825	PASS
5795	10	120	5795.011292	5745 – 5825	PASS
5795	0	120	5795.036900	5745 – 5825	PASS
5795	-10	120	5794.912416	5745 – 5825	PASS
5795	-20	120	5795.095036	5745 – 5825	PASS
5795	-30	120	5795.088112	5745 – 5825	PASS

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5775	20	132	5775.094688	5745 – 5825	PASS
5775	20	108	5774.934600	5745 – 5825	PASS
5775	50	120	5774.976208	5745 – 5825	PASS
5775	40	120	5775.087768	5745 – 5825	PASS
5775	30	120	5775.067256	5745 – 5825	PASS
5775	20	120	5775.020448	5745 – 5825	PASS
5775	10	120	5775.042495	5745 – 5825	PASS
5775	0	120	5775.051435	5745 – 5825	PASS
5775	-10	120	5775.056345	5745 – 5825	PASS
5775	-20	120	5774.917764	5745 – 5825	PASS
5775	-30	120	5774.909505	5745 – 5825	PASS

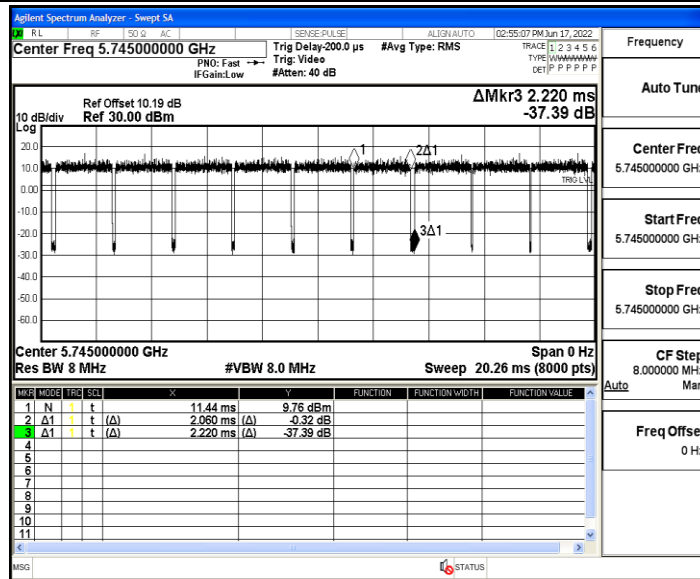
Appendix F: Duty Cycle

Test Result

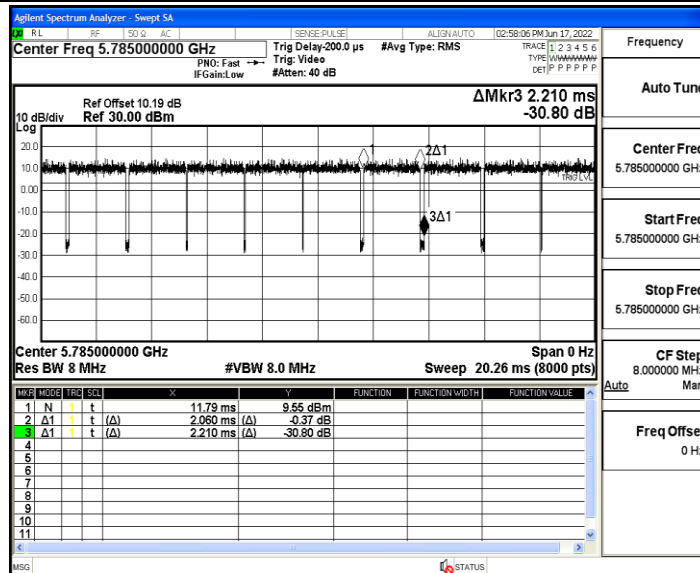
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
11A	Ant1	5745	2.06	2.22	92.79	0.49
		5785	2.06	2.21	93.21	0.49
		5825	2.06	2.23	92.38	0.49
11N20MIMO	Ant1	5745	1.92	2.09	91.87	0.52
		5785	1.92	2.07	92.75	0.52
		5825	1.93	2.10	91.90	0.52
11N40MIMO	Ant1	5755	0.94	1.14	82.46	1.06
		5795	0.94	1.18	79.66	1.06
11AC20MIMO	Ant1	5745	1.93	2.08	92.79	0.52
		5785	1.93	2.11	91.47	0.52
		5825	1.94	2.11	91.94	0.52
11AC40MIMO	Ant1	5755	0.95	1.14	83.33	1.05
		5795	0.95	1.19	79.83	1.05
11AC80MIMO	Ant1	5775	0.46	1.15	40.00	2.17

Test Graphs

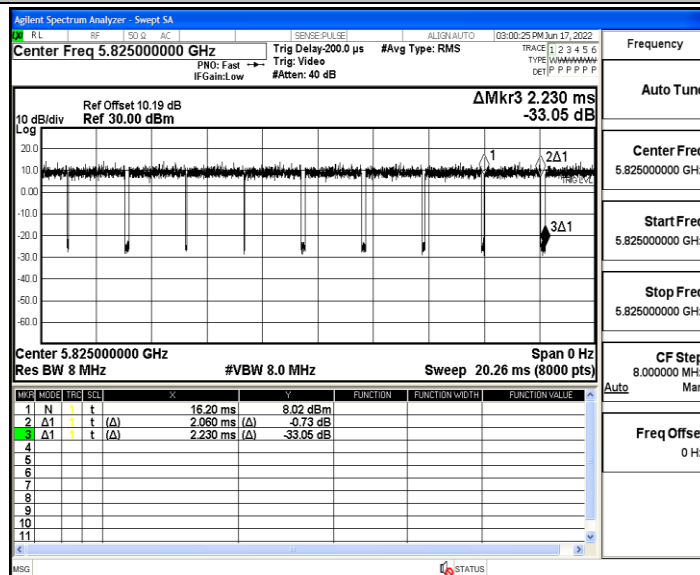
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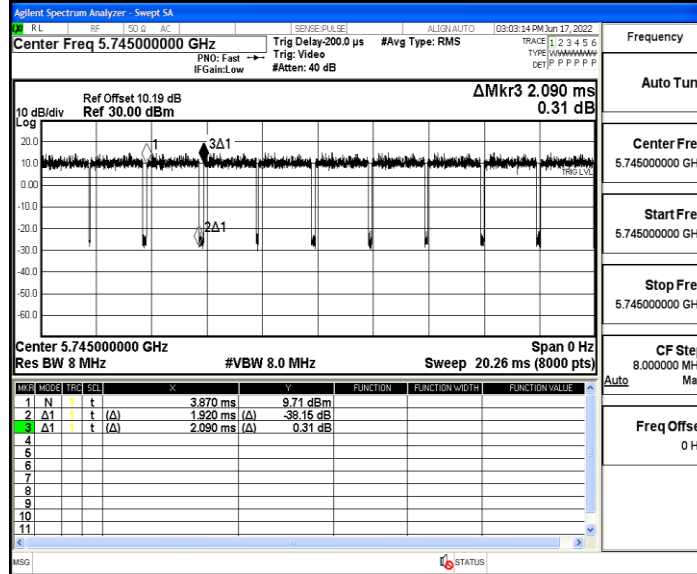
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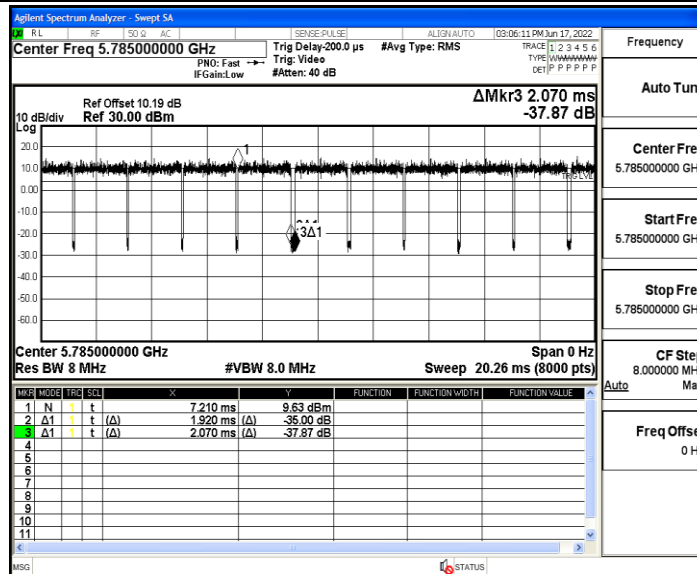
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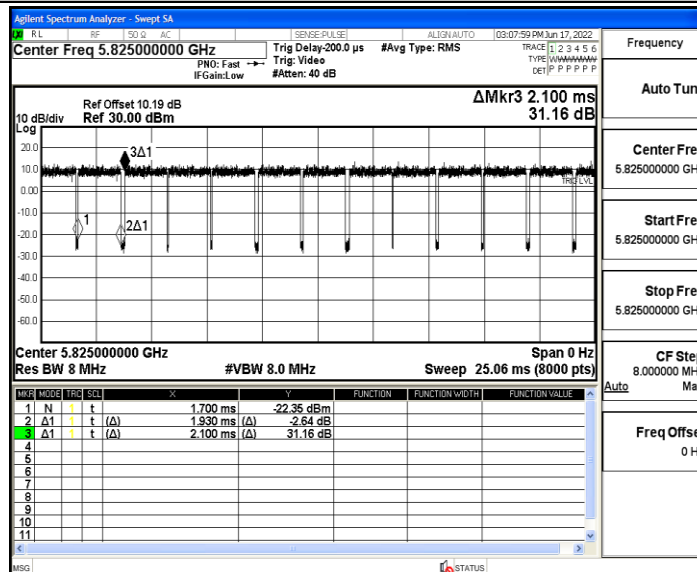
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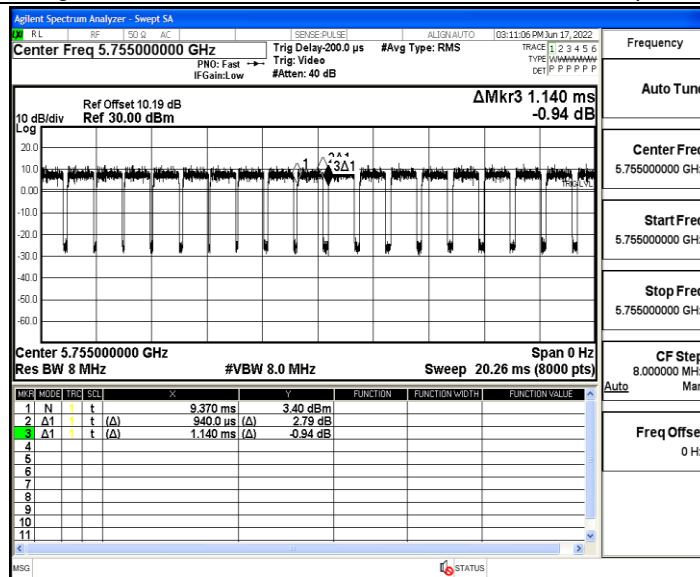
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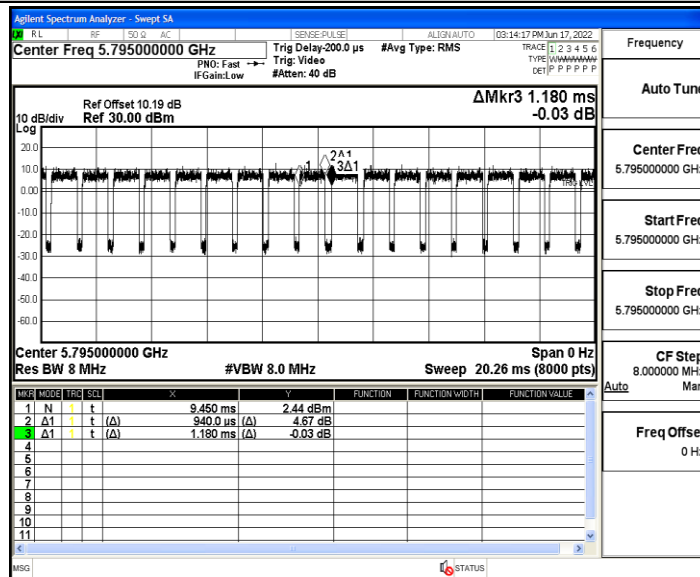
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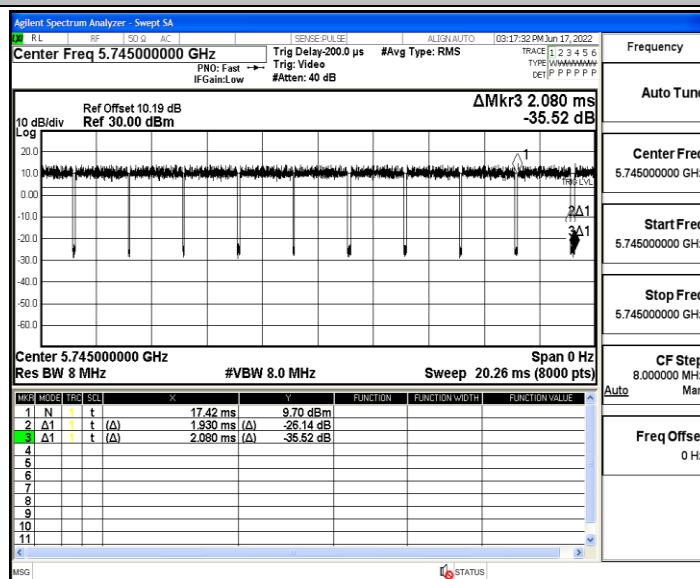
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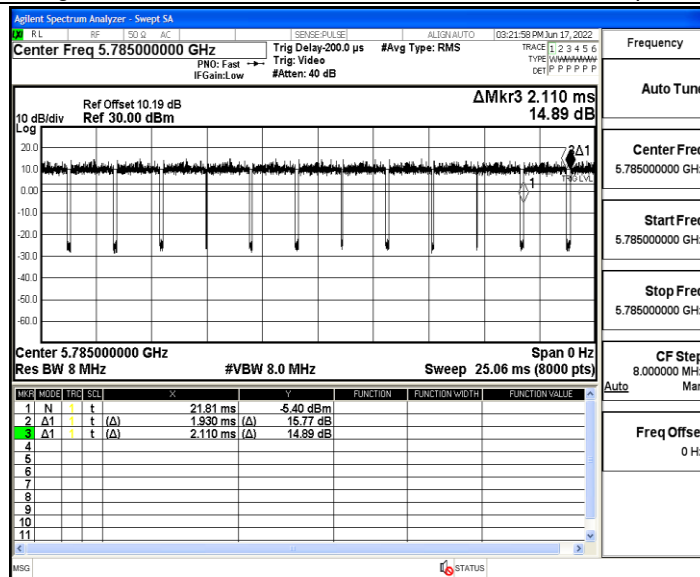
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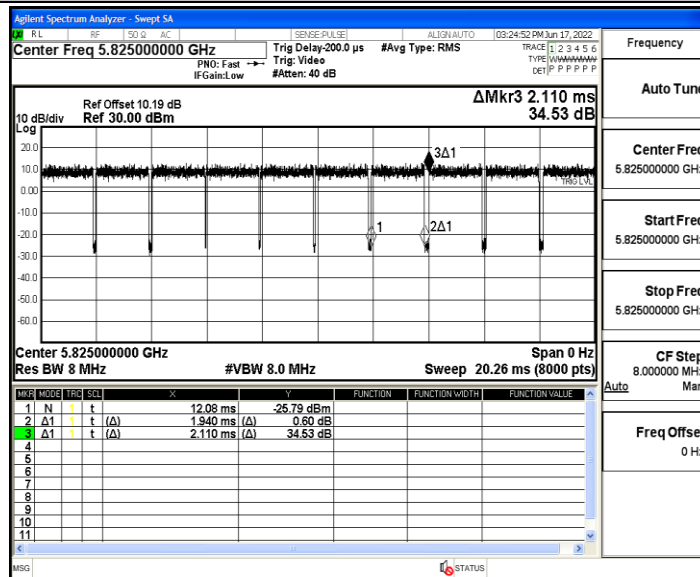
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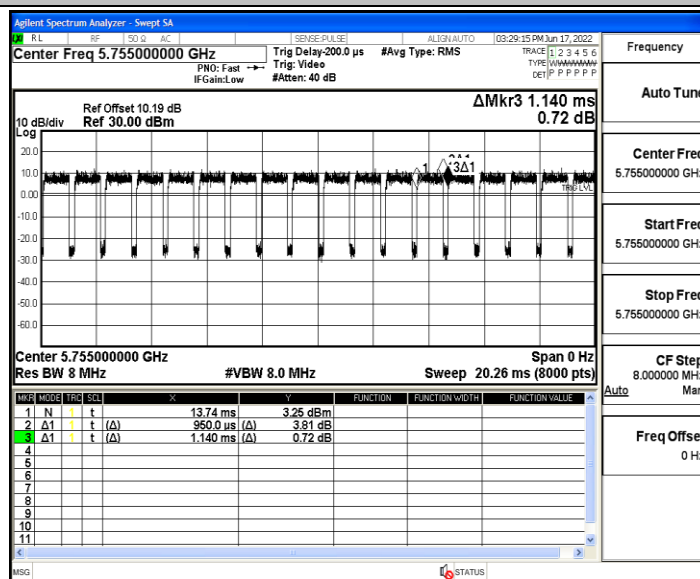
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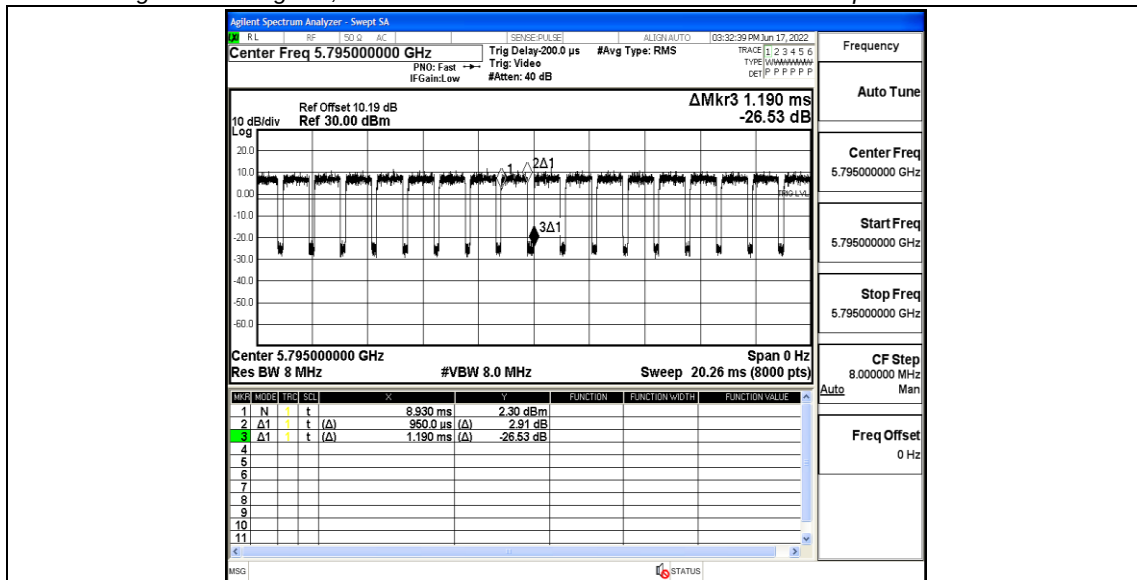
11AC20MIMO_Ant1_5825



11AC40MIMO_Ant1_5755



11AC40MIMO_Ant1_5795



11AC80MIMO_Ant1_5775

