

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

Product Name: Motorcycle DVR Dash Camera

Trade Mark: HFK

Test Model: HM201

FCC ID: 2BFHY-HM201

Environmental Conditions

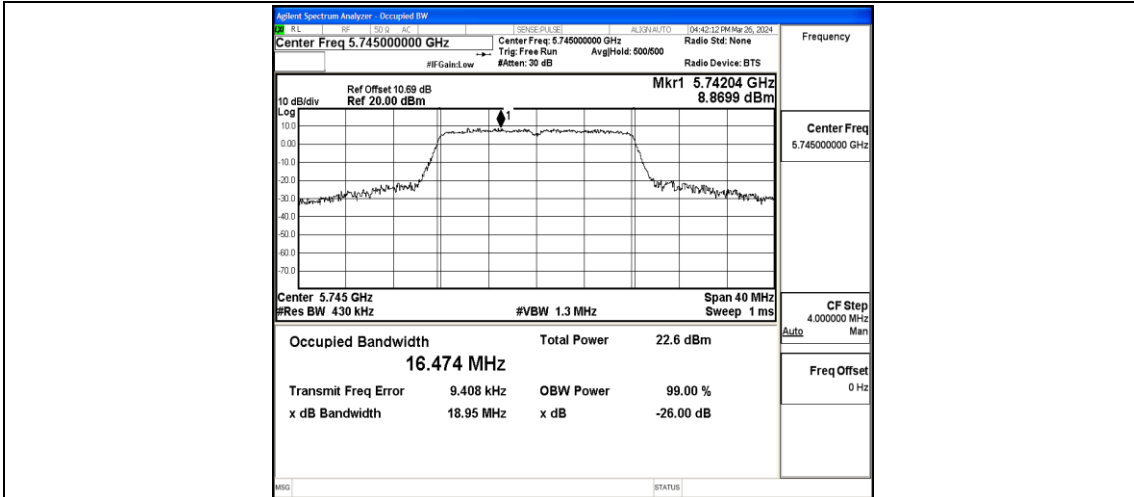
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A2: Occupied channel bandwidth

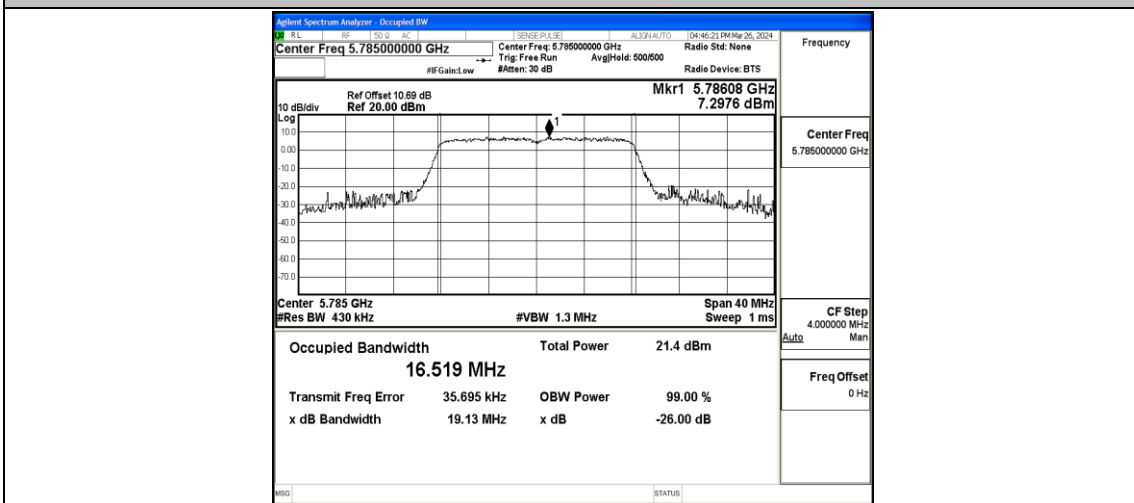
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.474	5736.7724	5753.2464	---	---
11A	Ant1	5785	16.519	5776.7762	5793.2952	---	---
11A	Ant1	5825	16.533	5816.7481	5833.2811	---	---
11N20SISO	Ant1	5745	17.587	5736.2216	5753.8086	---	---
11N20SISO	Ant1	5785	17.621	5776.2086	5793.8296	---	---
11N20SISO	Ant1	5825	17.644	5816.2052	5833.8492	---	---
11N40SISO	Ant1	5755	36.227	5736.8510	5773.0780	---	---
11N40SISO	Ant1	5795	36.219	5776.8503	5813.0693	---	---
11AC20SISO	Ant1	5745	17.684	5736.1926	5753.8766	---	---
11AC20SISO	Ant1	5785	17.701	5776.1564	5793.8574	---	---
11AC20SISO	Ant1	5825	17.673	5816.1912	5833.8642	---	---
11AC40SISO	Ant1	5755	36.435	5736.8981	5773.3331	---	---
11AC40SISO	Ant1	5795	36.165	5776.9537	5813.1187	---	---
11AC80SISO	Ant1	5775	75.375	5737.2767	5812.6517	---	---

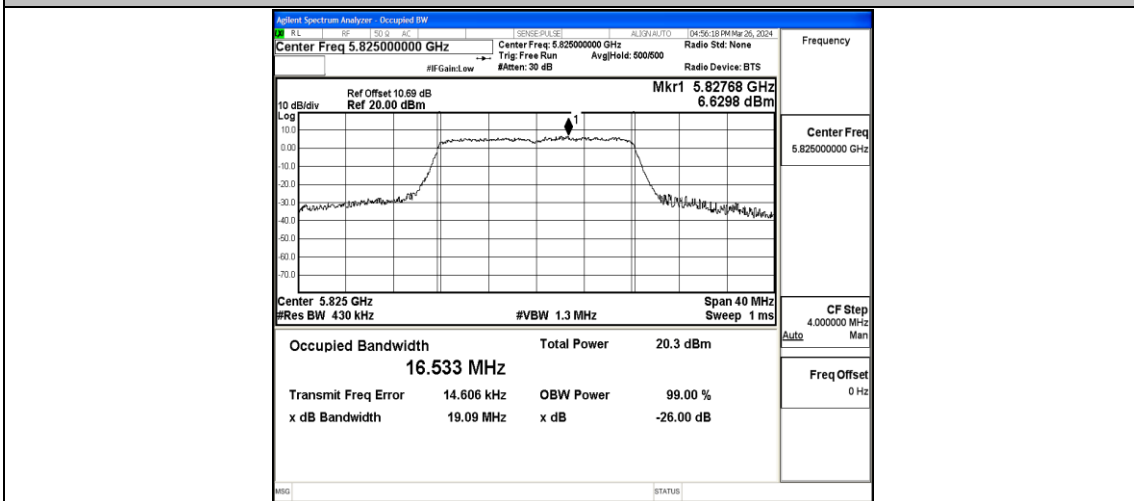
Test Graphs



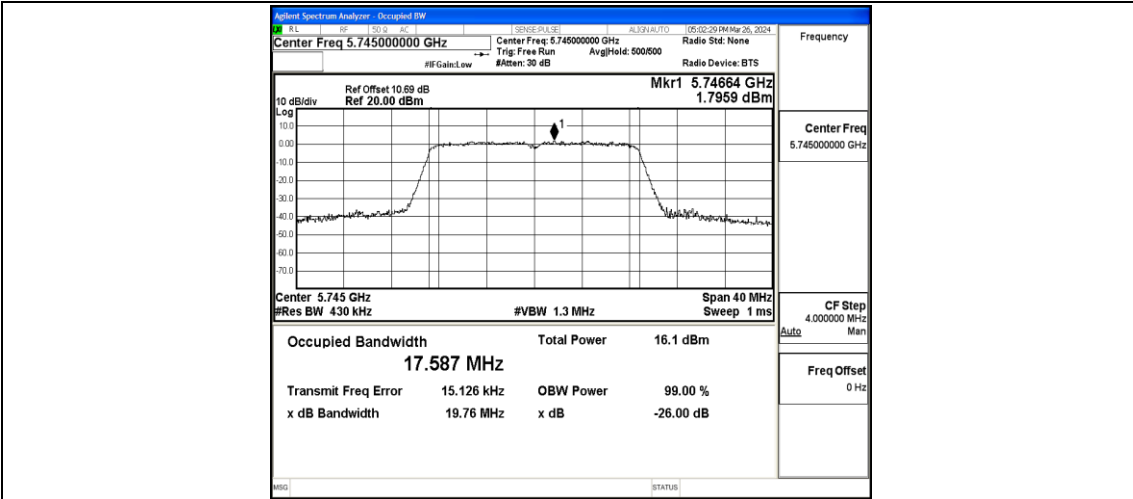
11A-Ant1-5745



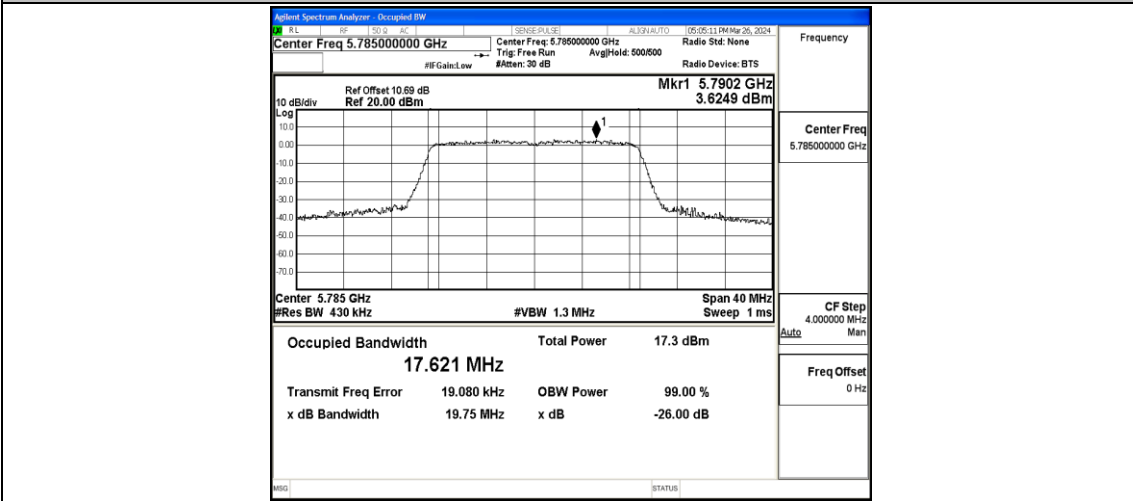
11A-Ant1-5785



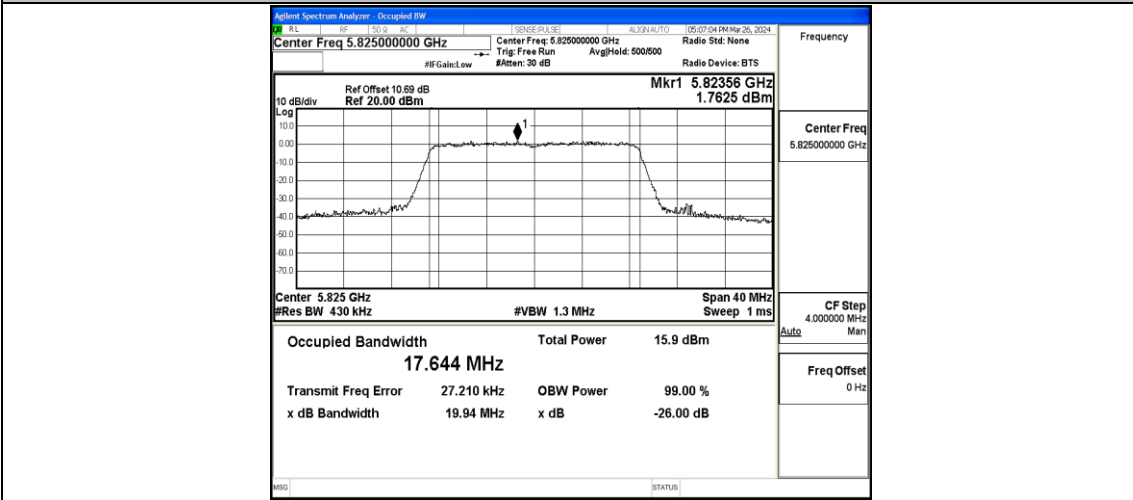
11A-Ant1-5825



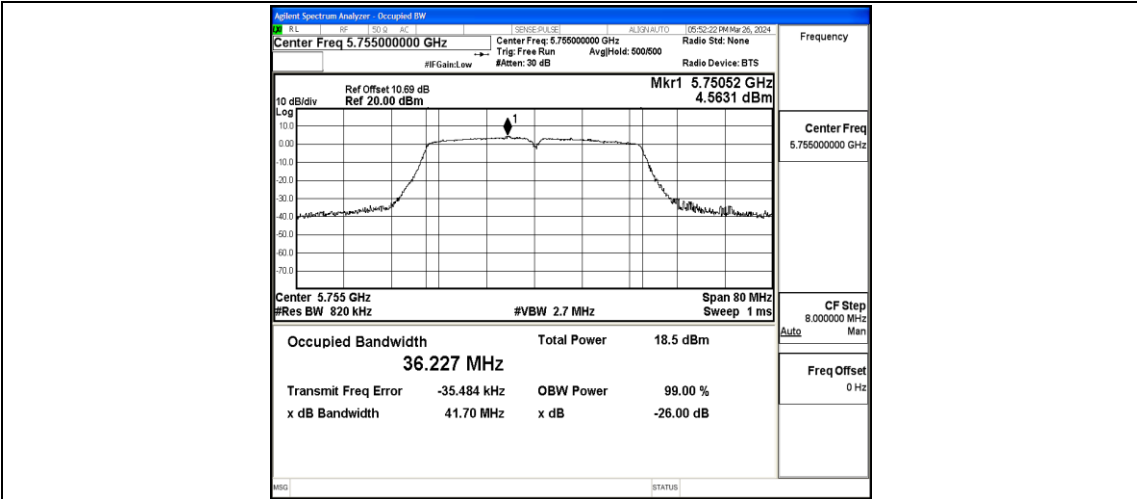
11N20MIMO-Ant1-5745



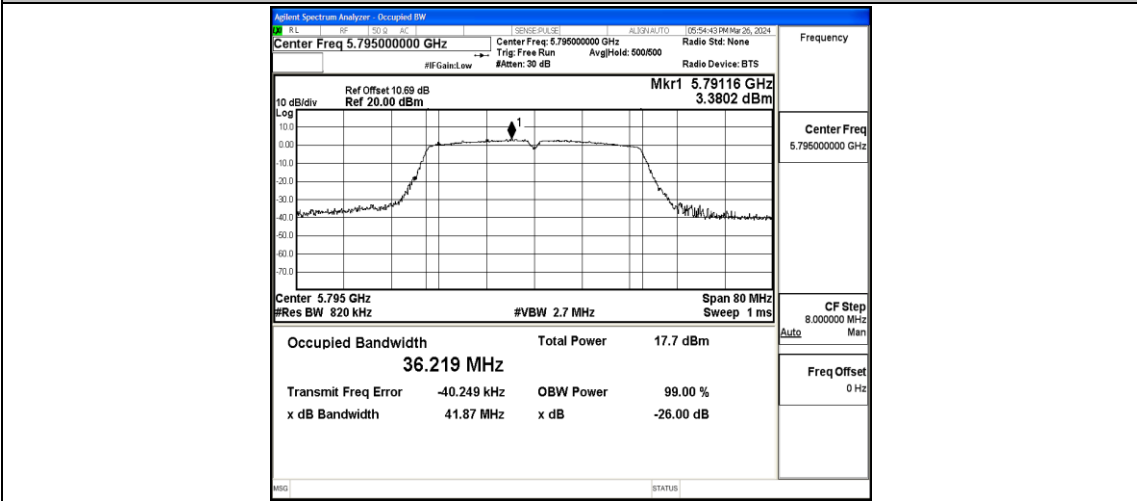
11N20MIMO-Ant1-5785



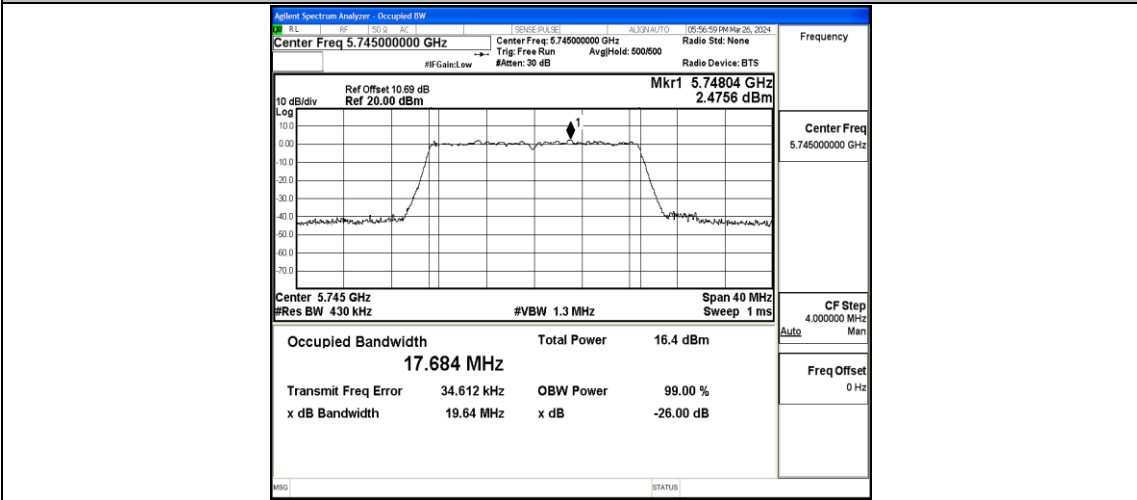
11N20MIMO-Ant1-5825



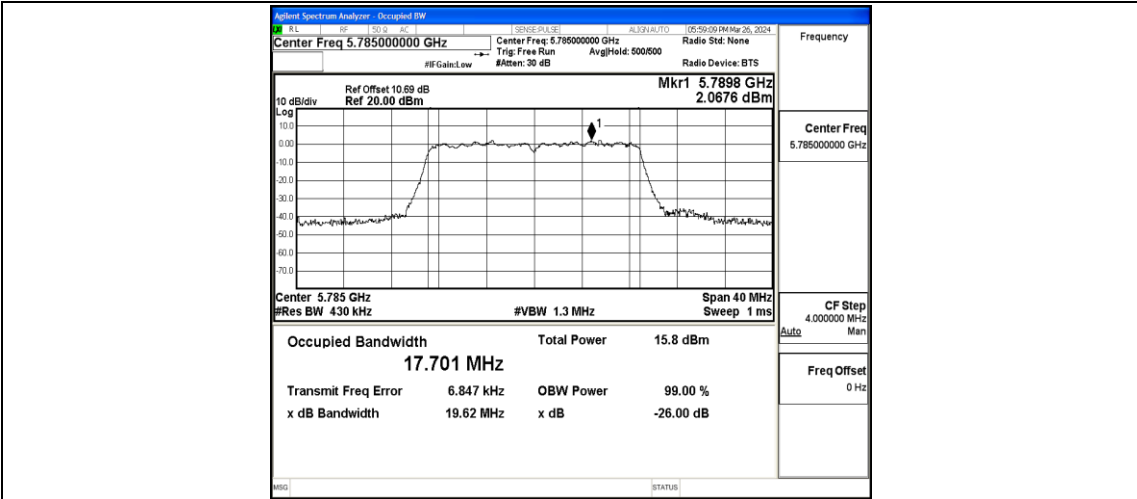
11N40MIMO-Ant1-5755



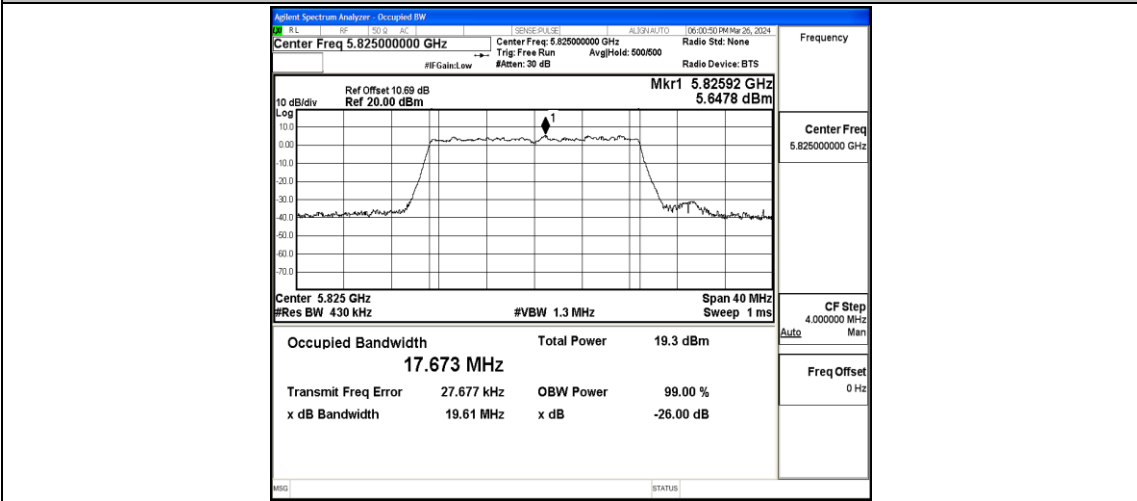
11N40MIMO-Ant1-5795



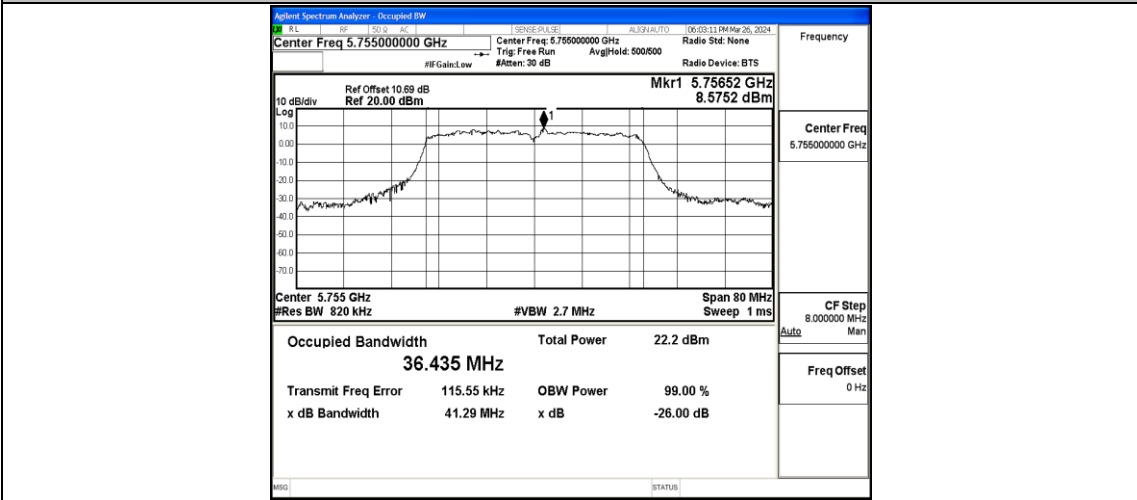
11AC20MIMO-Ant1-5745



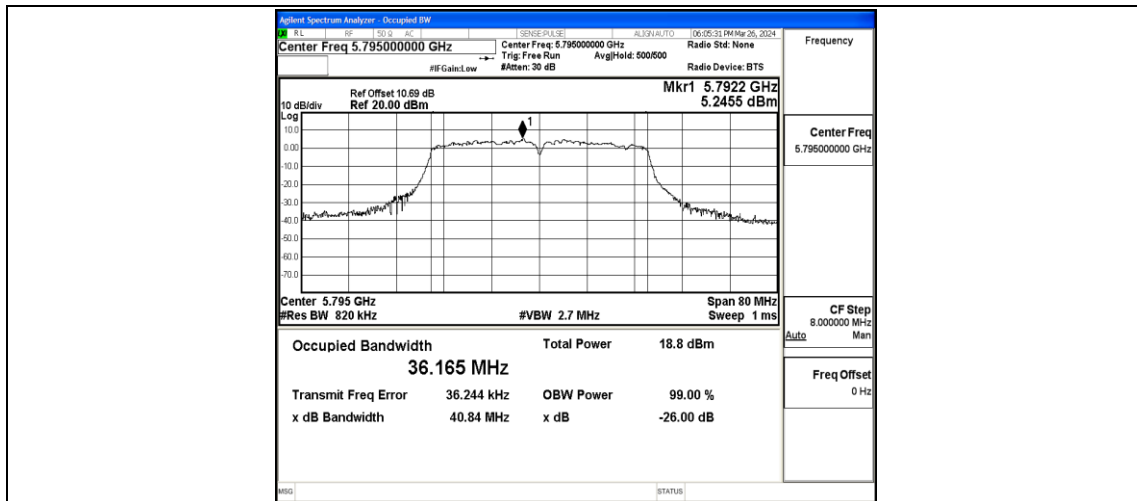
11AC20MIMO-Ant1-5785



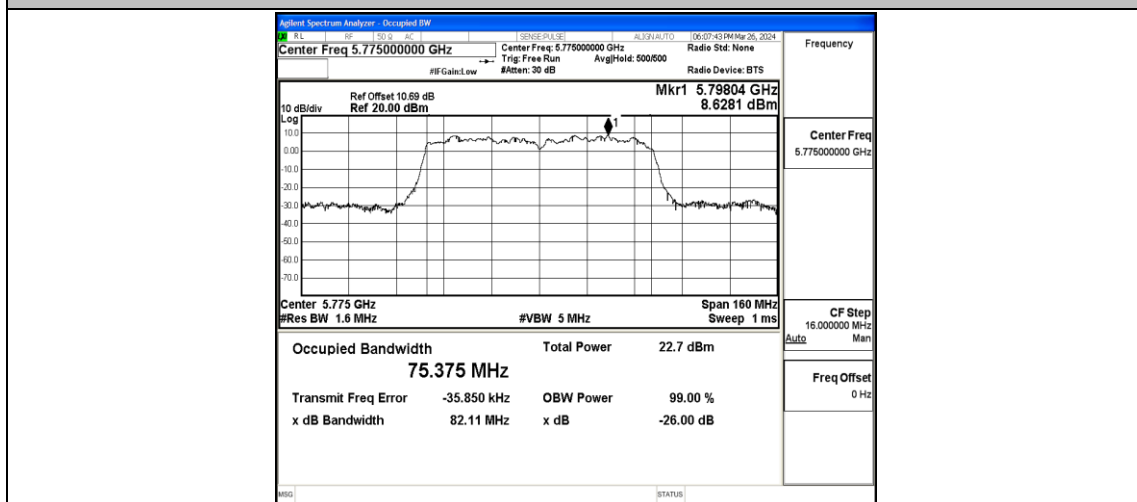
11AC20MIMO-Ant1-5825



11AC40MIMO-Ant1-5755



11AC40MIMO-Ant1-5795



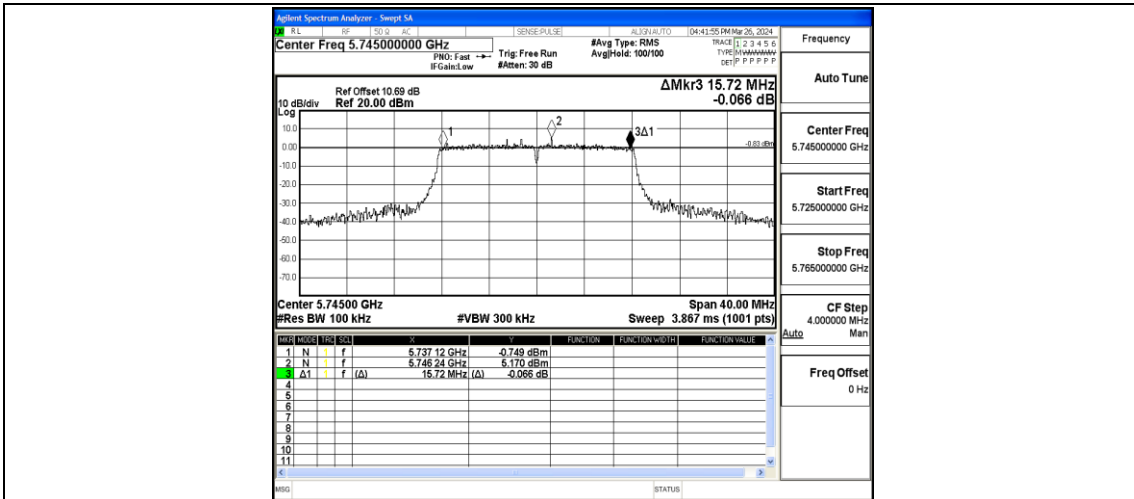
11AC80MIMO-Ant1-5775

Appendix A: Min emission bandwidth

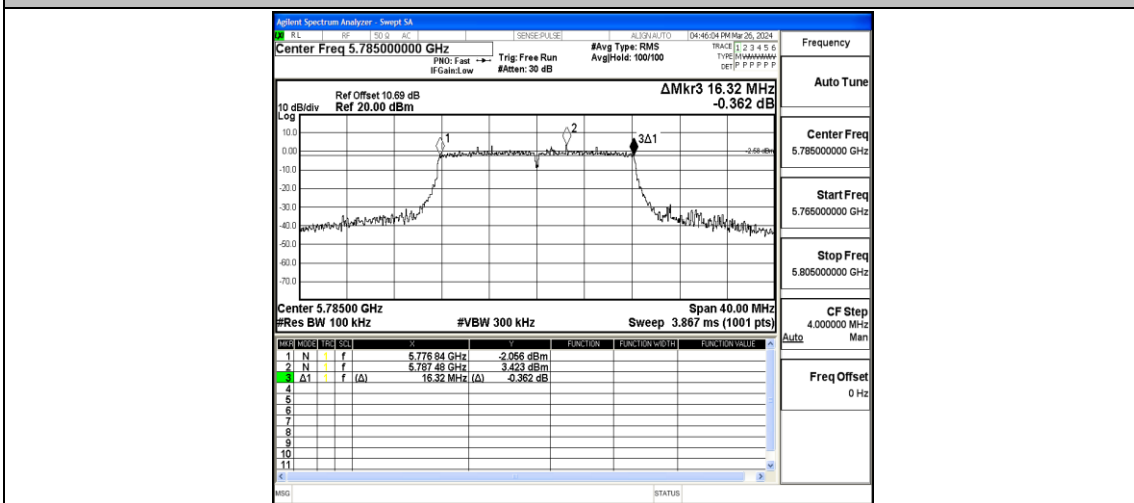
Test Result

TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.720	5737.120	5752.840	0.5	PASS
11A	Ant1	5785	16.320	5776.840	5793.160	0.5	PASS
11A	Ant1	5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.320	5736.440	5753.760	0.5	PASS
11N20SISO	Ant1	5785	17.560	5776.200	5793.760	0.5	PASS
11N20SISO	Ant1	5825	17.400	5816.360	5833.760	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
11N40SISO	Ant1	5795	35.040	5777.480	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	17.480	5736.240	5753.720	0.5	PASS
11AC20SISO	Ant1	5785	17.520	5776.240	5793.760	0.5	PASS
11AC20SISO	Ant1	5825	17.240	5816.520	5833.760	0.5	PASS
11AC40SISO	Ant1	5755	35.360	5737.160	5772.520	0.5	PASS
11AC40SISO	Ant1	5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.200	5737.400	5812.600	0.5	PASS

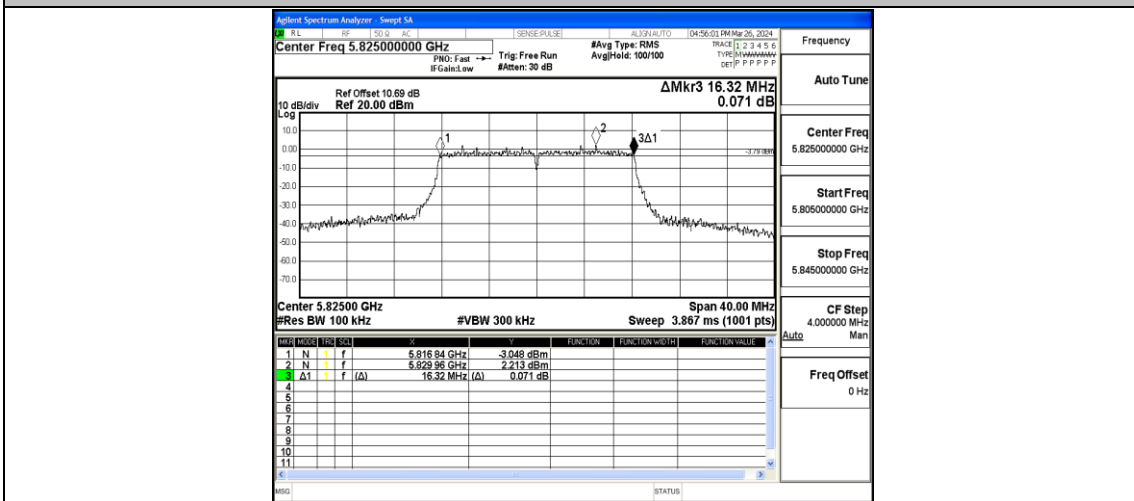
Test Graphs



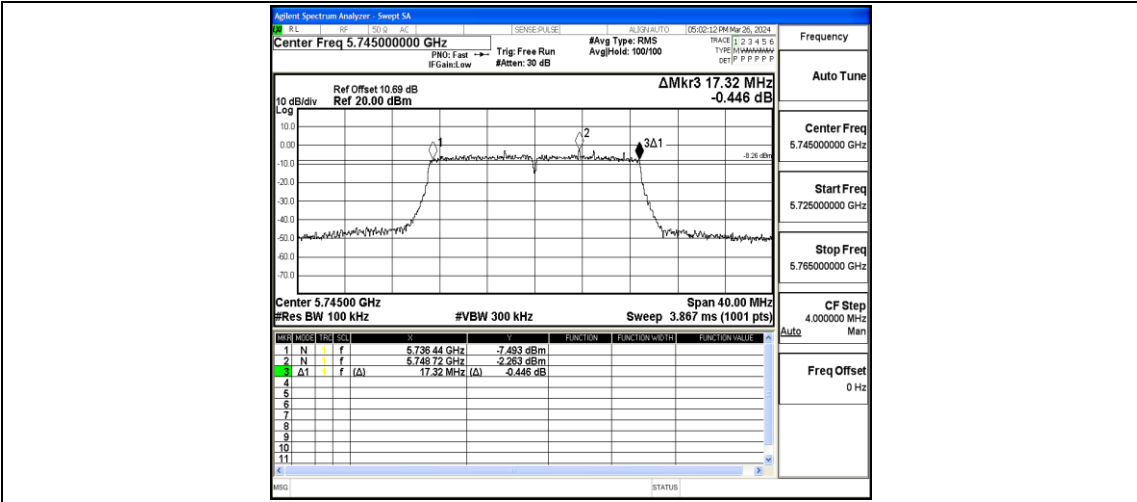
11A-Ant1-5745-PASS



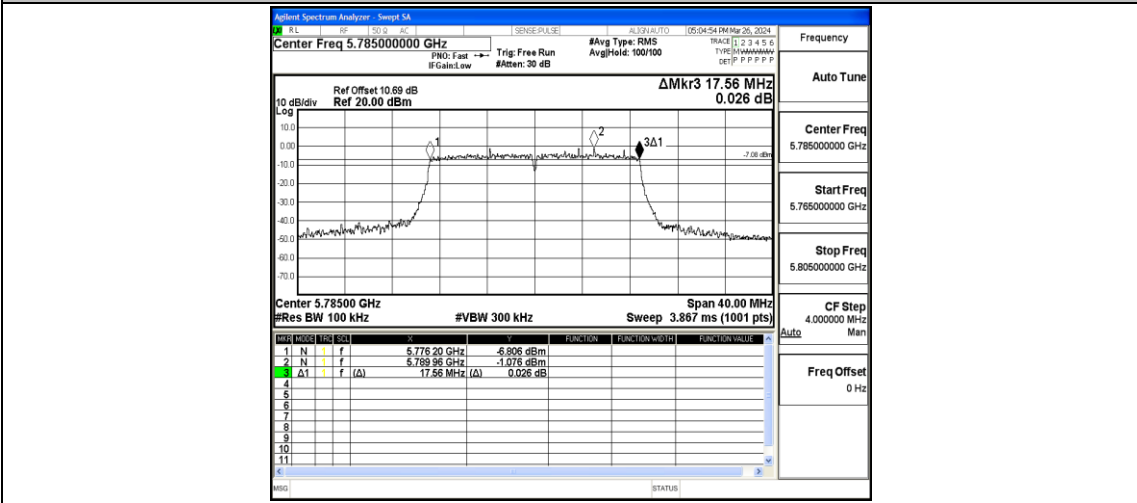
11A-Ant1-5785-PASS



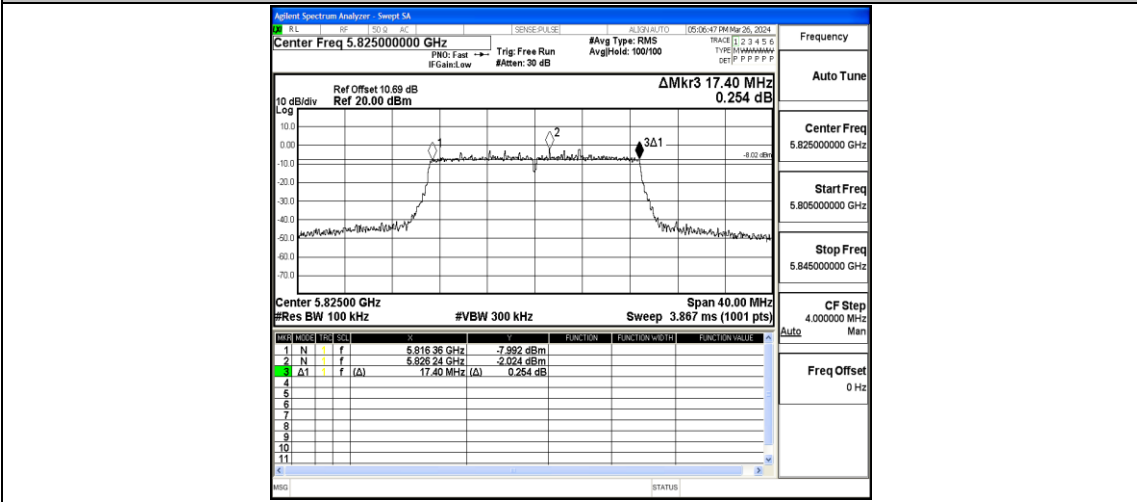
11A-Ant1-5825-PASS



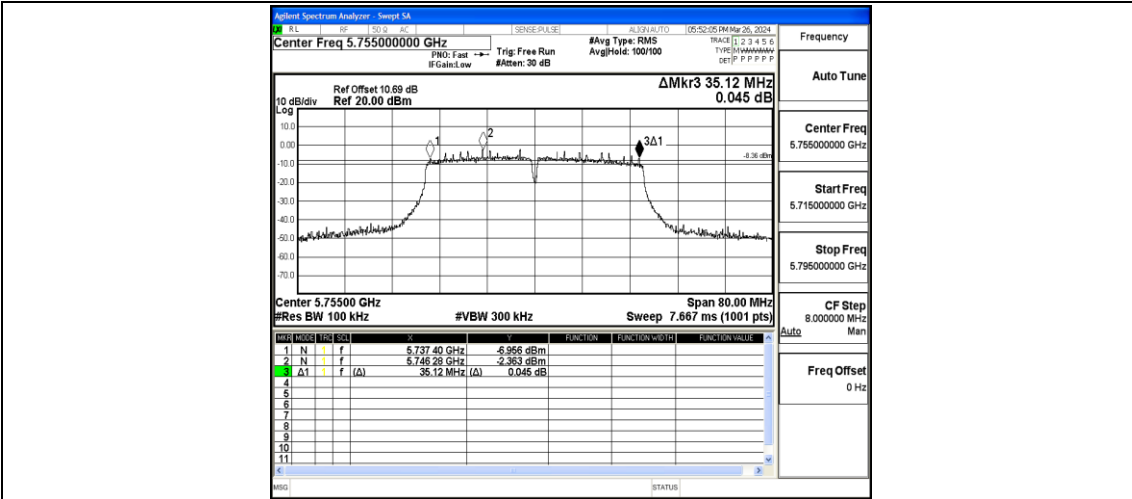
11N20MIMO-Ant1-5745-PASS



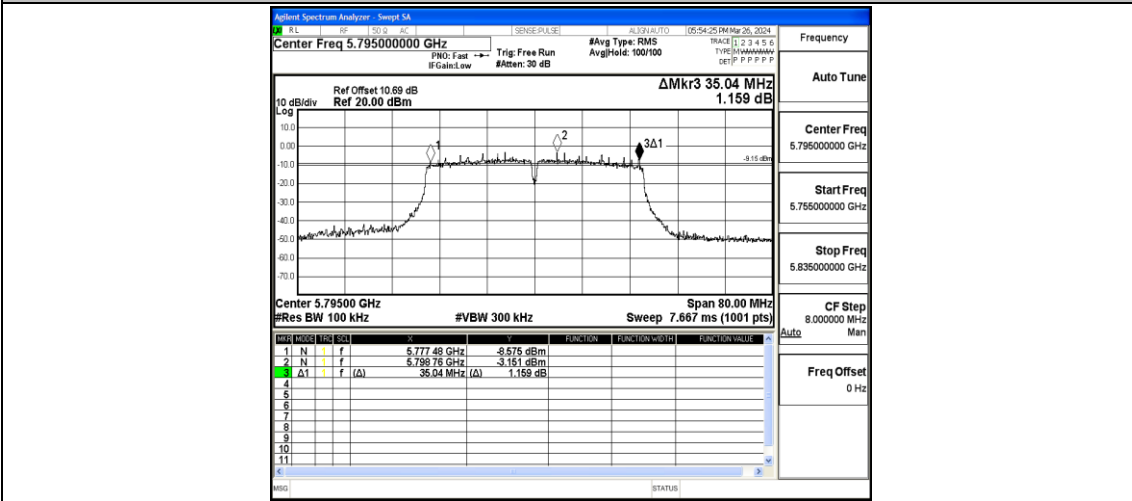
11N20MIMO-Ant1-5785-PASS



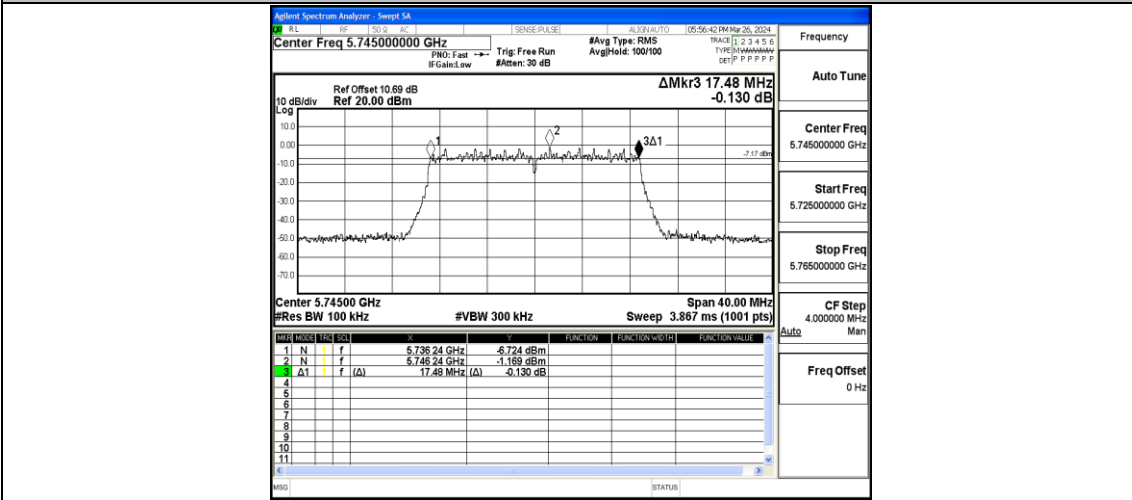
11N20MIMO-Ant1-5825-PASS



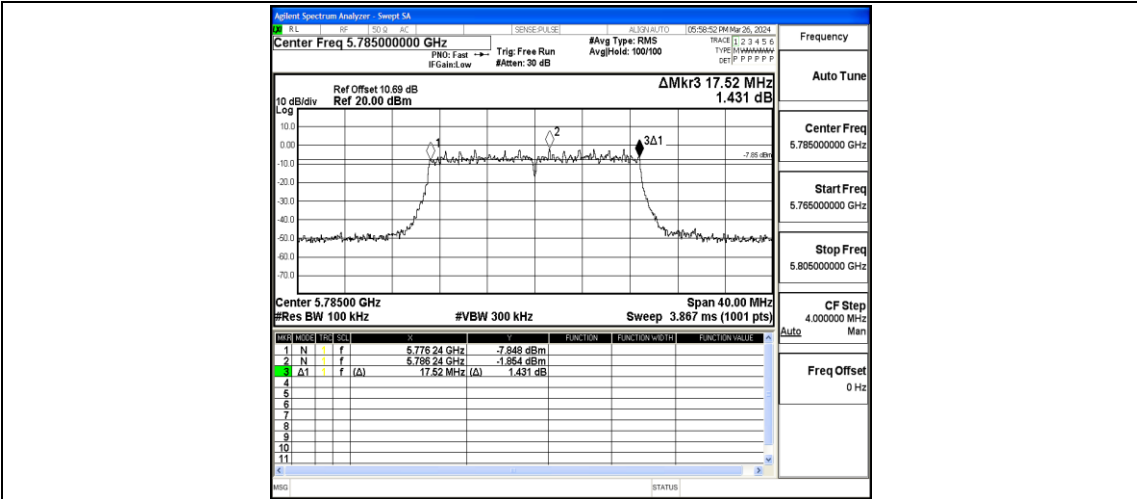
11N40MIMO-Ant1-5755-PASS



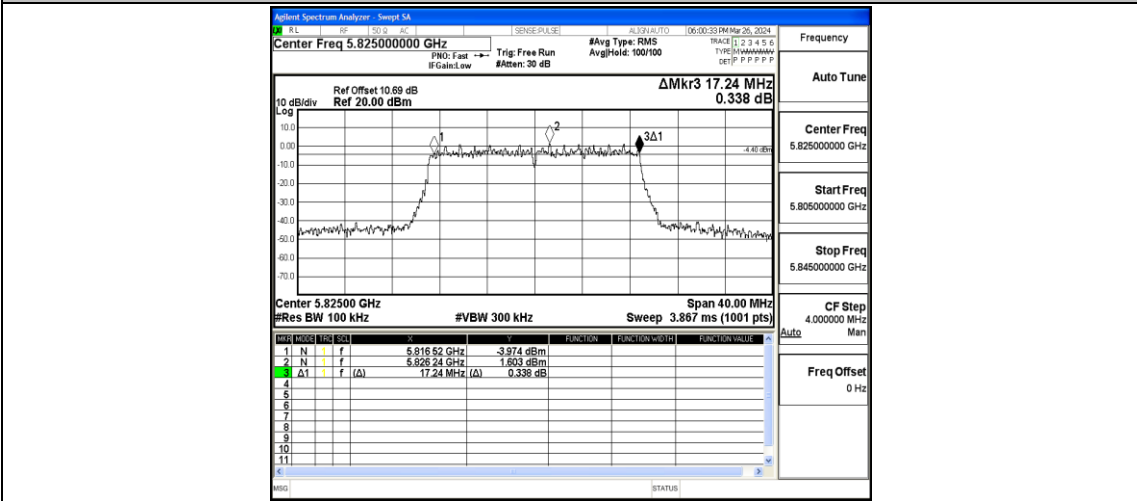
11N40MIMO-Ant1-5795-PASS



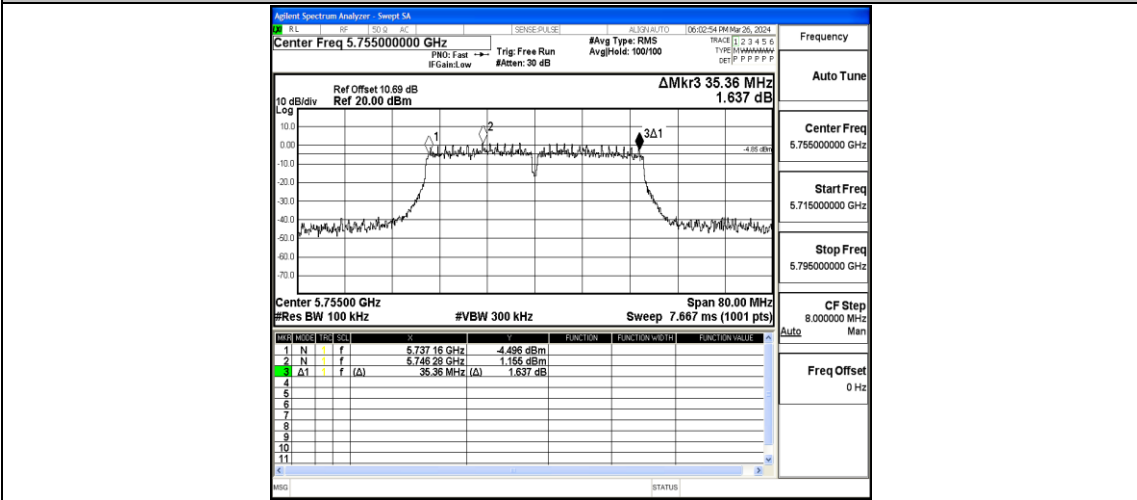
11A20MIMO-Ant1-5745-PASS



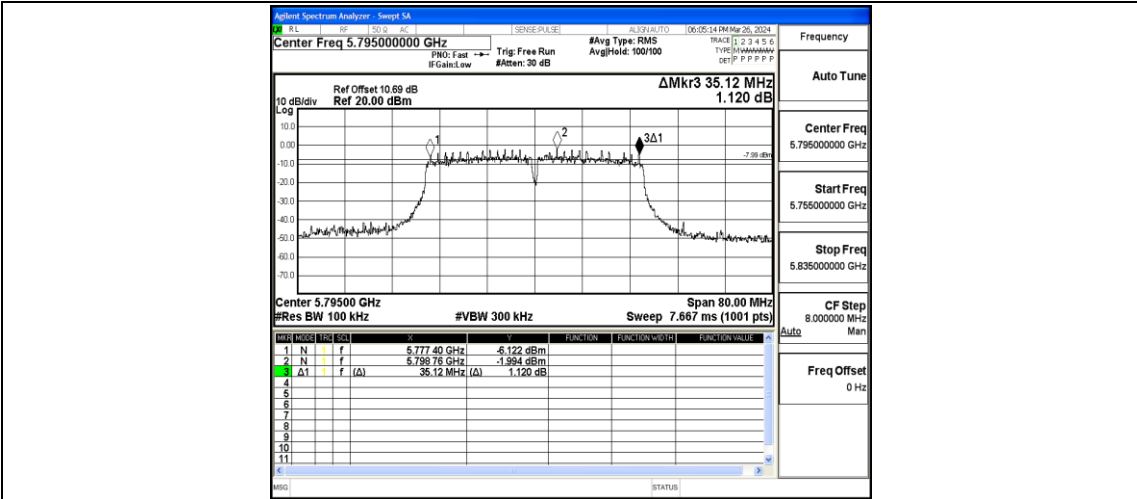
11AC20MIMO-Ant1-5785-PASS



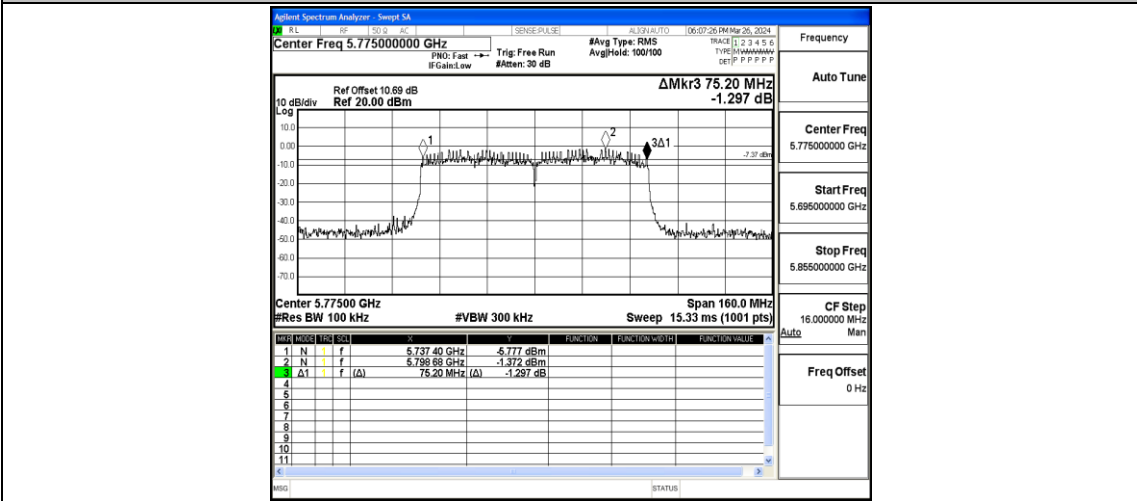
11AC20MIMO-Ant1-5825-PASS



11AC40MIMO-Ant1-5755-PASS



11AC40MIMO-Ant1-5795-PASS



11AC80MIMO-Ant1-5775-PASS

Appendix B: Maximum conducted output power

Test Result

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11A	Ant1	5745	16.07	≤30.00	PASS
11A	Ant1	5785	14.80	≤30.00	PASS
11A	Ant1	5825	13.77	≤30.00	PASS
11N20SISO	Ant1	5745	9.25	≤30.00	PASS
11N20SISO	Ant1	5785	10.50	≤30.00	PASS
11N20SISO	Ant1	5825	9.24	≤30.00	PASS
11N40SISO	Ant1	5755	11.34	≤30.00	PASS
11N40SISO	Ant1	5795	10.61	≤30.00	PASS
11AC20SISO	Ant1	5745	9.87	≤30.00	PASS
11AC20SISO	Ant1	5785	9.36	≤30.00	PASS
11AC20SISO	Ant1	5825	13.09	≤30.00	PASS
11AC40SISO	Ant1	5755	15.74	≤30.00	PASS
11AC40SISO	Ant1	5795	12.37	≤30.00	PASS
11AC80SISO	Ant1	5775	15.27	≤30.00	PASS

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

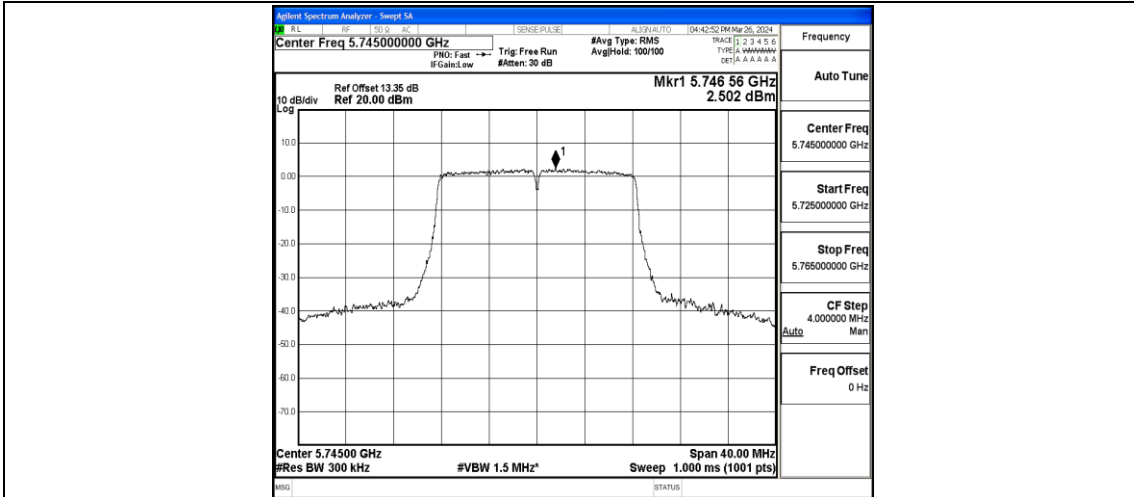
Appendix C: Maximum power spectral density

Test Result

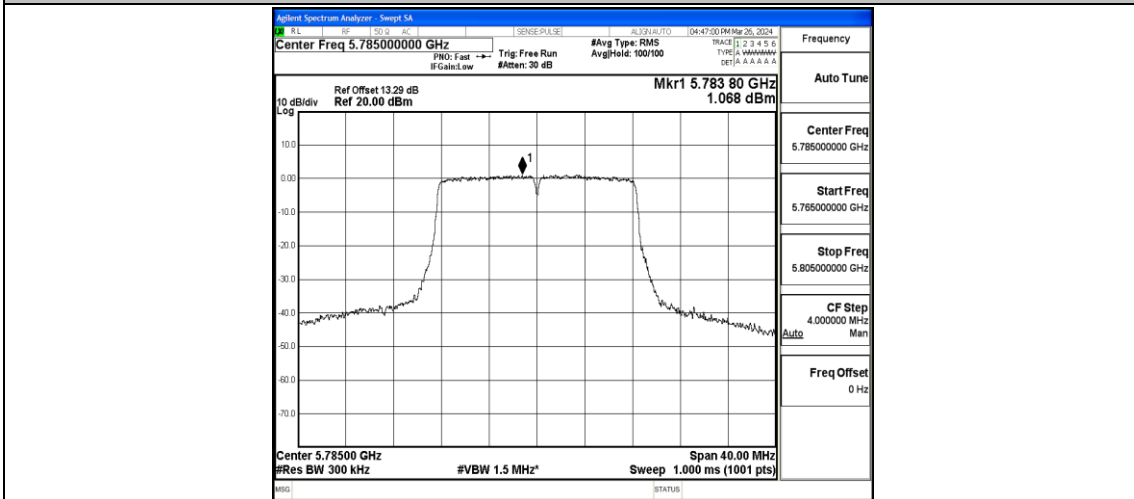
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5745	2.50	≤30.00	PASS
11A	Ant1	5785	1.07	≤30.00	PASS
11A	Ant1	5825	0.11	≤30.00	PASS
11N20SISO	Ant1	5745	-4.56	≤30.00	PASS
11N20SISO	Ant1	5785	-3.49	≤30.00	PASS
11N20SISO	Ant1	5825	-4.42	≤30.00	PASS
11N40SISO	Ant1	5755	-5.18	≤30.00	PASS
11N40SISO	Ant1	5795	-6.23	≤30.00	PASS
11AC20SISO	Ant1	5745	-2.35	≤30.00	PASS
11AC20SISO	Ant1	5785	-3.97	≤30.00	PASS
11AC20SISO	Ant1	5825	0.20	≤30.00	PASS
11AC40SISO	Ant1	5755	0.67	≤30.00	PASS
11AC40SISO	Ant1	5795	-3.05	≤30.00	PASS
11AC80SISO	Ant1	5775	-2.08	≤30.00	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.

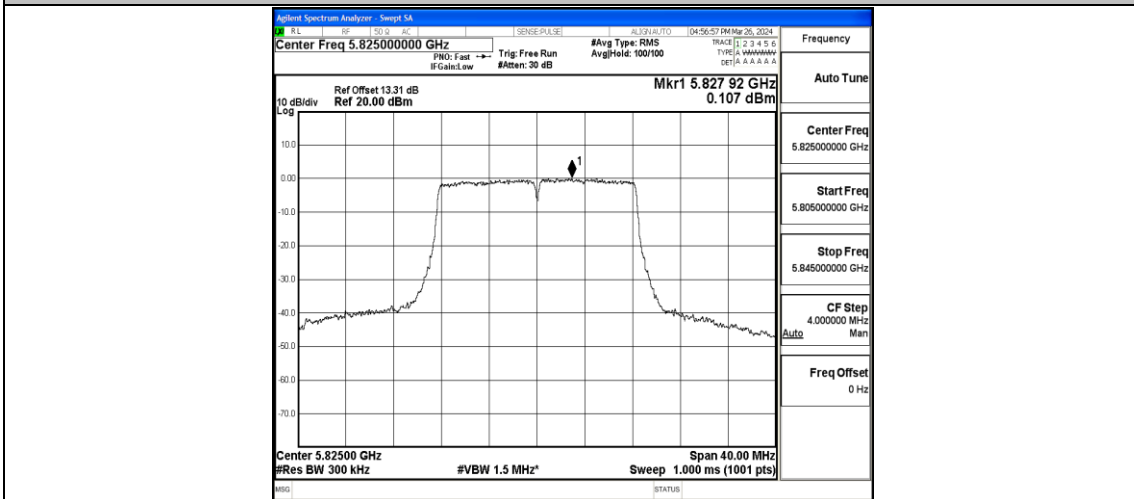
Test Graphs



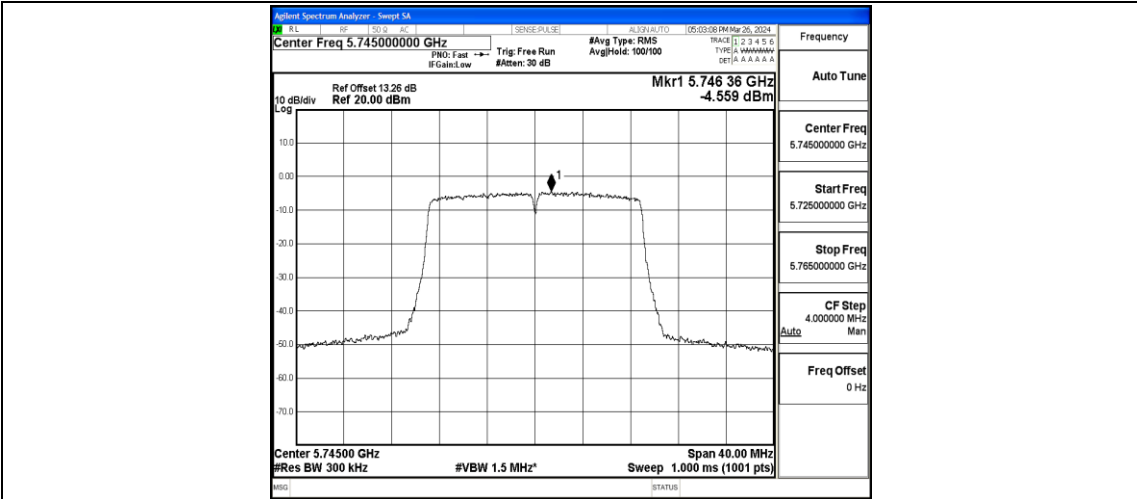
11A-Ant1-5745-PASS



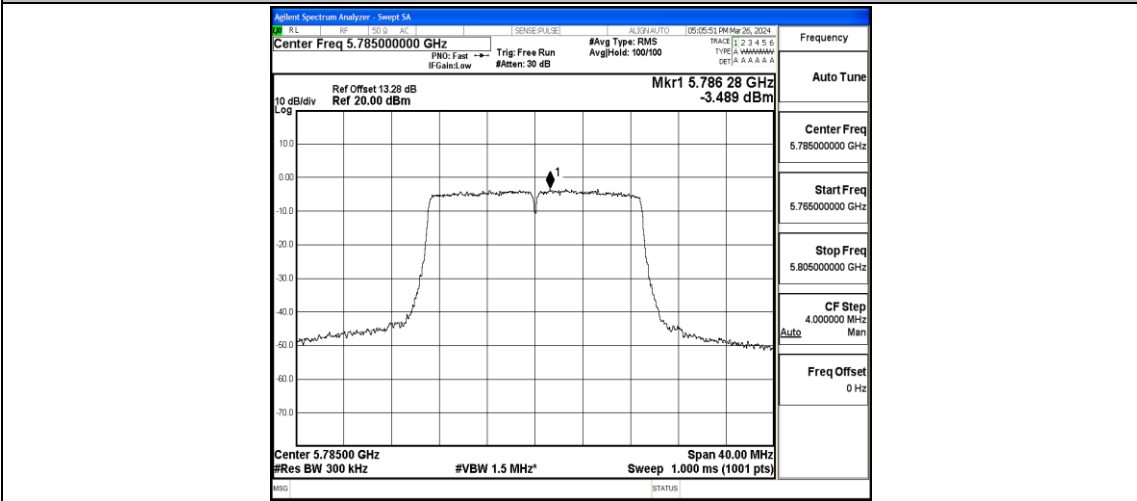
11A-Ant1-5785-PASS



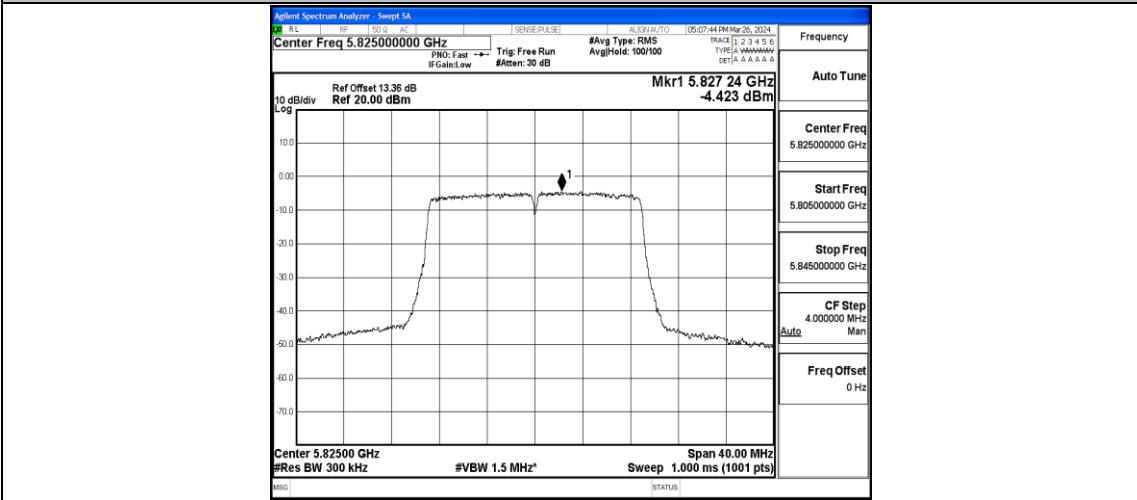
11A-Ant1-5825-PASS



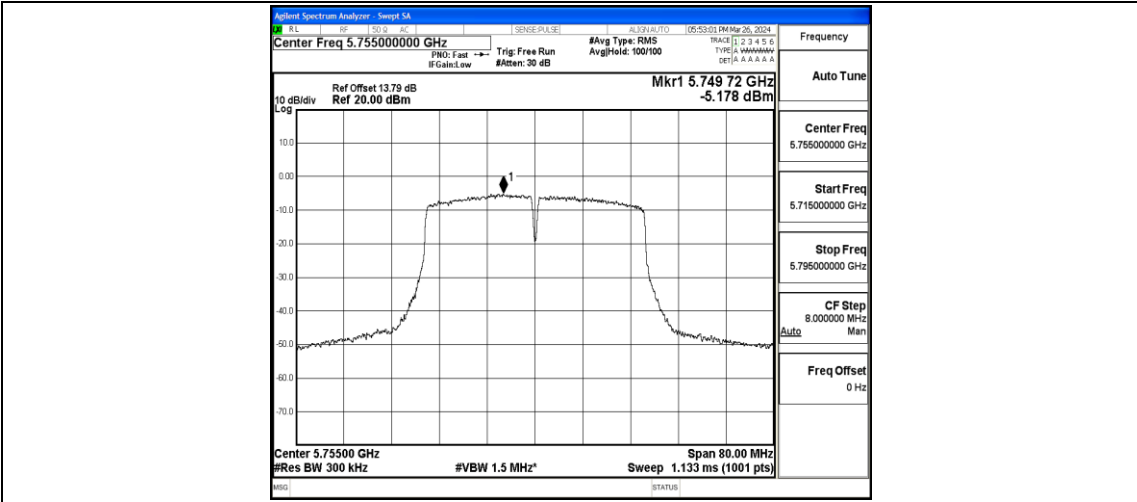
11N20MIMO-Ant1-5745-PASS



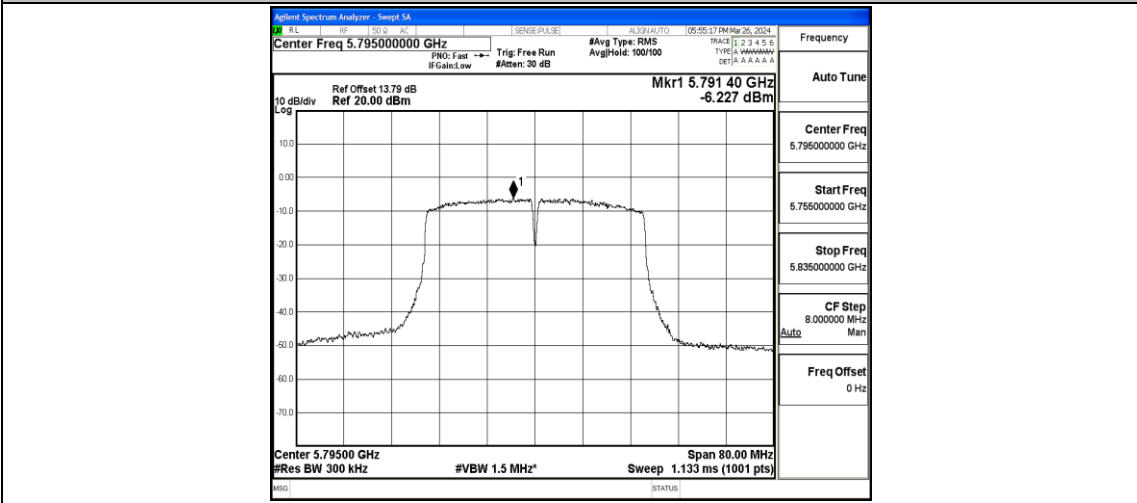
11N20MIMO-Ant1-5785-PASS



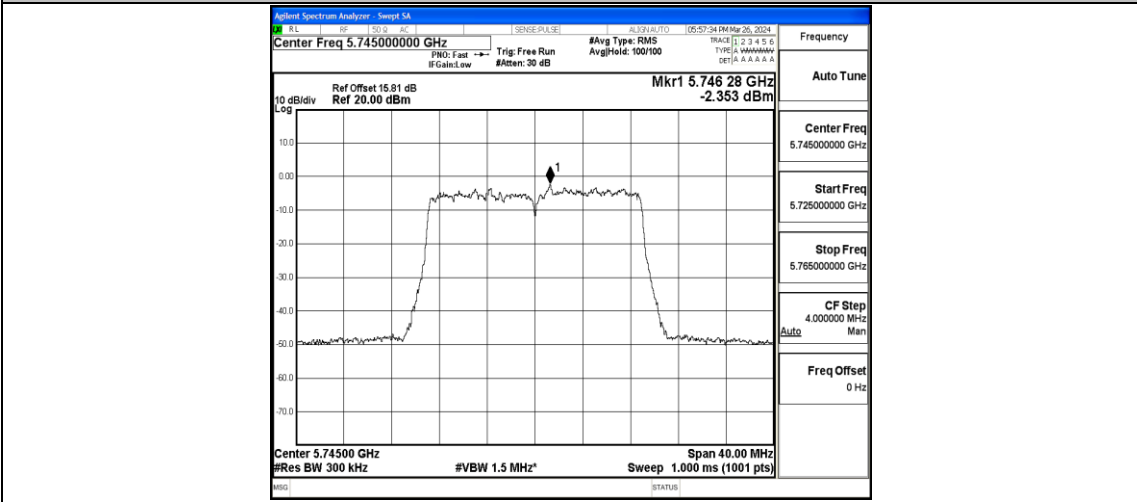
11N20MIMO-Ant1-5825-PASS



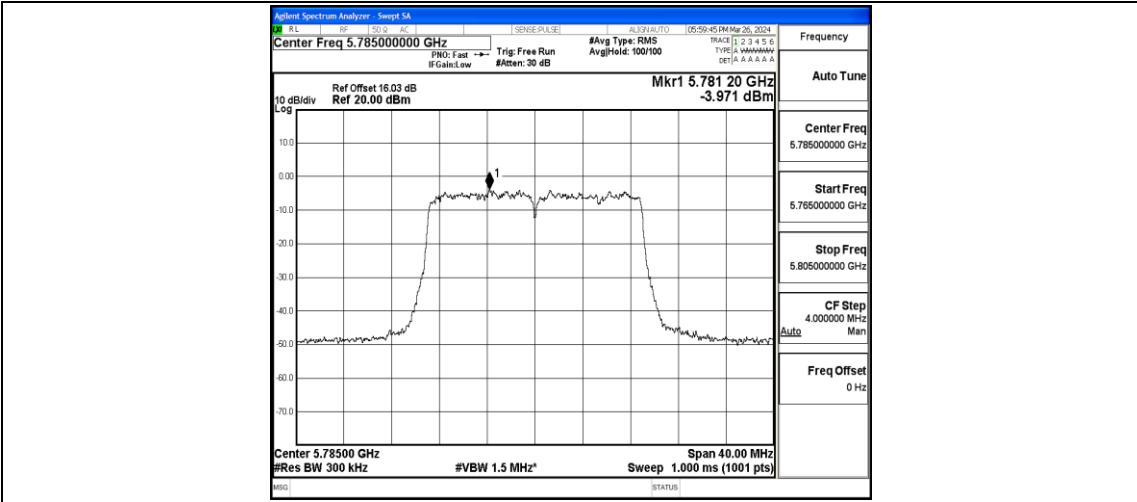
11N40MIMO-Ant1-5755-PASS



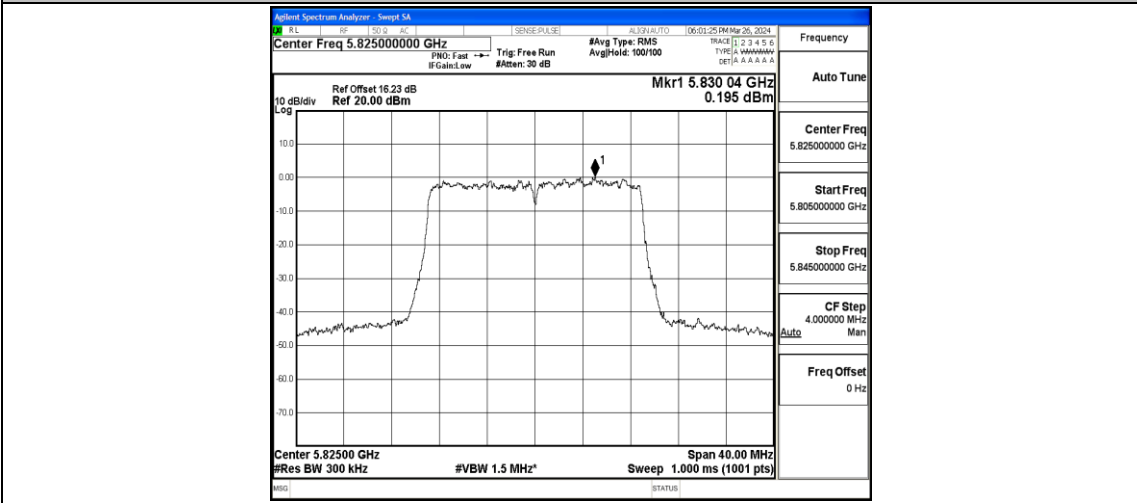
11N40MIMO-Ant1-5795-PASS



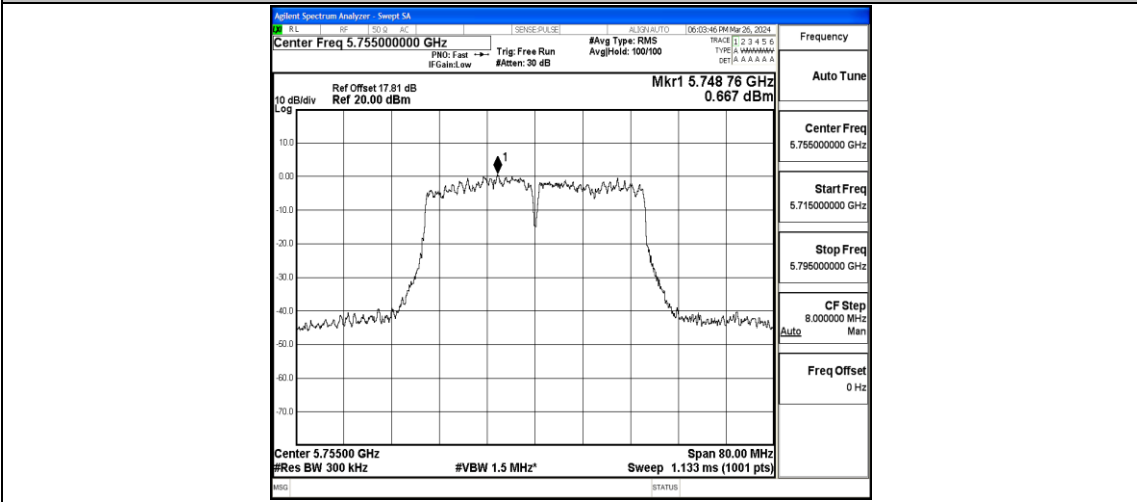
11AC20MIMO-Ant1-5745-PASS



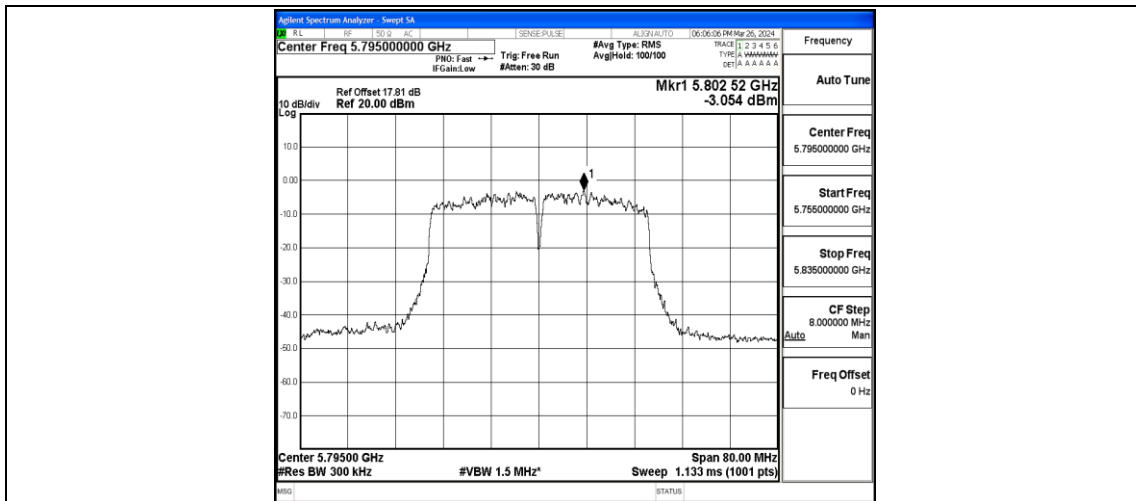
11AC20MIMO-Ant1-5785-PASS



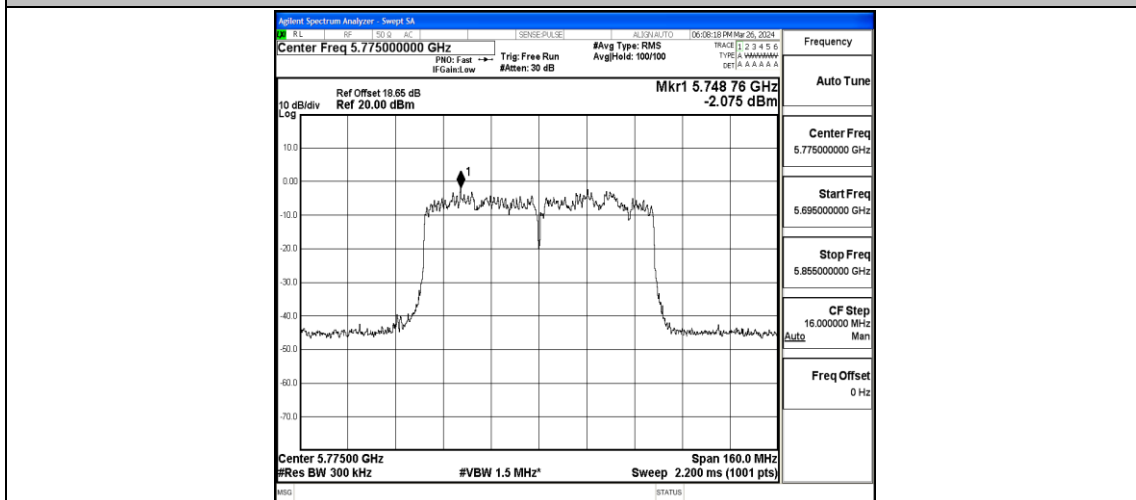
11AC20MIMO-Ant1-5825-PASS



11AC40MIMO-Ant1-5755-PASS



11AC40MIMO-Ant1-5795-PASS



11AC80MIMO-Ant1-5775-PASS

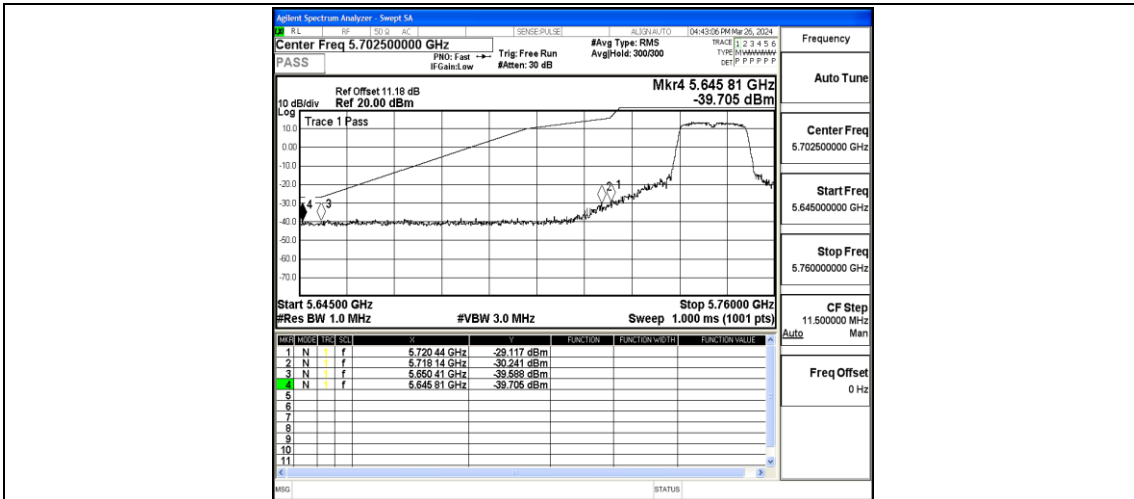
Appendix D: Band edge measurements

Test Result

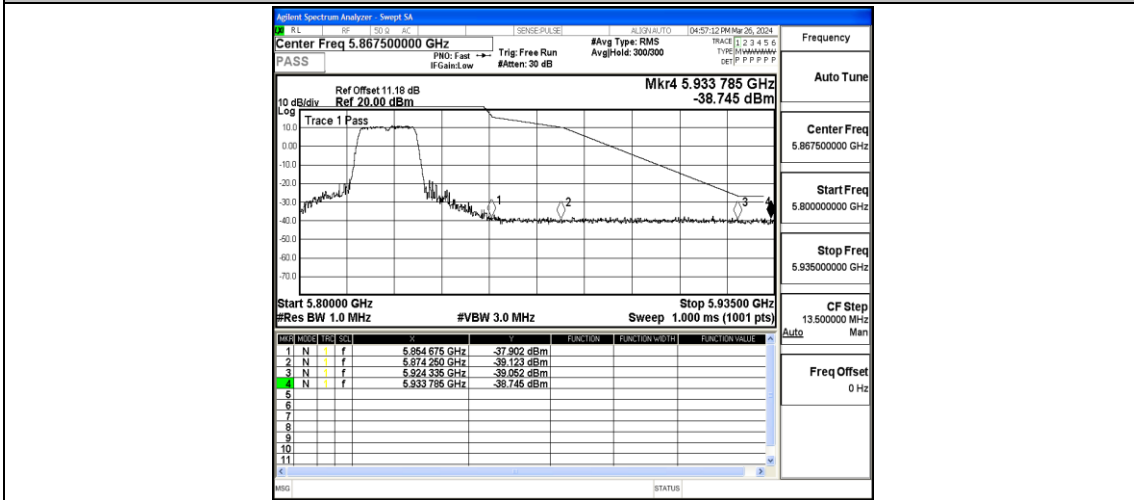
TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-29.12	≤16.60	PASS
11A	Ant1	Low	5745	5700~5720	-30.24	≤15.08	PASS
11A	Ant1	Low	5745	5650~5700	-39.59	≤-26.70	PASS
11A	Ant1	Low	5745	5760~5650	-39.71	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-37.9	≤16.34	PASS
11A	Ant1	High	5825	5855~5875	-39.12	≤10.21	PASS
11A	Ant1	High	5825	5875~5925	-39.05	≤-26.51	PASS
11A	Ant1	High	5825	5925~5935	-38.75	≤-27	PASS
11N20SIS O	Ant1	Low	5745	5720~5725	-39.78	≤16.34	PASS
11N20SIS O	Ant1	Low	5745	5700~5720	-38.32	≤11.18	PASS
11N20SIS O	Ant1	Low	5745	5650~5700	-39.78	≤-26.10	PASS
11N20SIS O	Ant1	Low	5745	5760~5650	-39.56	≤-27	PASS
11N20SIS O	Ant1	High	5825	5850~5855	-39.98	≤15.73	PASS
11N20SIS O	Ant1	High	5825	5855~5875	-39.64	≤10.02	PASS
11N20SIS O	Ant1	High	5825	5875~5925	-39.39	≤-26.71	PASS
11N20SIS O	Ant1	High	5825	5925~5935	-39.06	≤-27	PASS
11N40SIS O	Ant1	Low	5755	5720~5725	-36.94	≤15.74	PASS
11N40SIS O	Ant1	Low	5755	5700~5720	-34.83	≤13.12	PASS
11N40SIS O	Ant1	Low	5755	5650~5700	-40	≤-26.60	PASS
11N40SIS O	Ant1	Low	5755	5780~5650	-39.28	≤-27	PASS
11N40SIS O	Ant1	High	5795	5850~5855	-38.83	≤15.66	PASS
11N40SIS O	Ant1	High	5795	5855~5875	-39.24	≤10.06	PASS
11N40SIS O	Ant1	High	5795	5875~5925	-38.83	≤-25.73	PASS
11N40SIS O	Ant1	High	5795	5925~5935	-37.86	≤-27	PASS
11AC20SI	Ant1	Low	5745	5720~5725	-39.72	≤15.82	PASS

SO							
11AC20SI SO	Ant1	Low	5745	5700~5720	-39.06	≤10.47	PASS
11AC20SI SO	Ant1	Low	5745	5650~5700	-39.95	≤-26.27	PASS
11AC20SI SO	Ant1	Low	5745	5760~5650	-40.5	≤-27	PASS
11AC20SI SO	Ant1	High	5825	5850~5855	-39.22	≤15.73	PASS
11AC20SI SO	Ant1	High	5825	5855~5875	-38.42	≤10.63	PASS
11AC20SI SO	Ant1	High	5825	5875~5925	-39.07	≤-26.91	PASS
11AC20SI SO	Ant1	High	5825	5925~5935	-38.73	≤-27	PASS
11AC40SI SO	Ant1	Low	5755	5720~5725	-31.49	≤15.74	PASS
11AC40SI SO	Ant1	Low	5755	5700~5720	-31.64	≤11.72	PASS
11AC40SI SO	Ant1	Low	5755	5650~5700	-38.29	≤-25.90	PASS
11AC40SI SO	Ant1	Low	5755	5780~5650	-39.36	≤-27	PASS
11AC40SI SO	Ant1	High	5795	5850~5855	-39.4	≤16.41	PASS
11AC40SI SO	Ant1	High	5795	5855~5875	-38.03	≤10.39	PASS
11AC40SI SO	Ant1	High	5795	5875~5925	-39.72	≤-26.83	PASS
11AC40SI SO	Ant1	High	5795	5925~5935	-38.78	≤-27	PASS
11AC80SI SO	Ant1	Low	5775	5720~5725	-32.44	≤16.71	PASS
11AC80SI SO	Ant1	Low	5775	5700~5720	-30.56	≤10.44	PASS
11AC80SI SO	Ant1	Low	5775	5650~5700	-40.07	≤-26.46	PASS
11AC80SI SO	Ant1	Low	5775	5800~5650	-39.78	≤-27	PASS
11AC80SI SO	Ant1	High	5775	5850~5855	-34.16	≤15.84	PASS
11AC80SI SO	Ant1	High	5775	5855~5875	-32.29	≤12.47	PASS
11AC80SI SO	Ant1	High	5775	5875~5925	-38.89	≤-26.32	PASS
11AC80SI SO	Ant1	High	5775	5925~5935	-39.14	≤-27	PASS

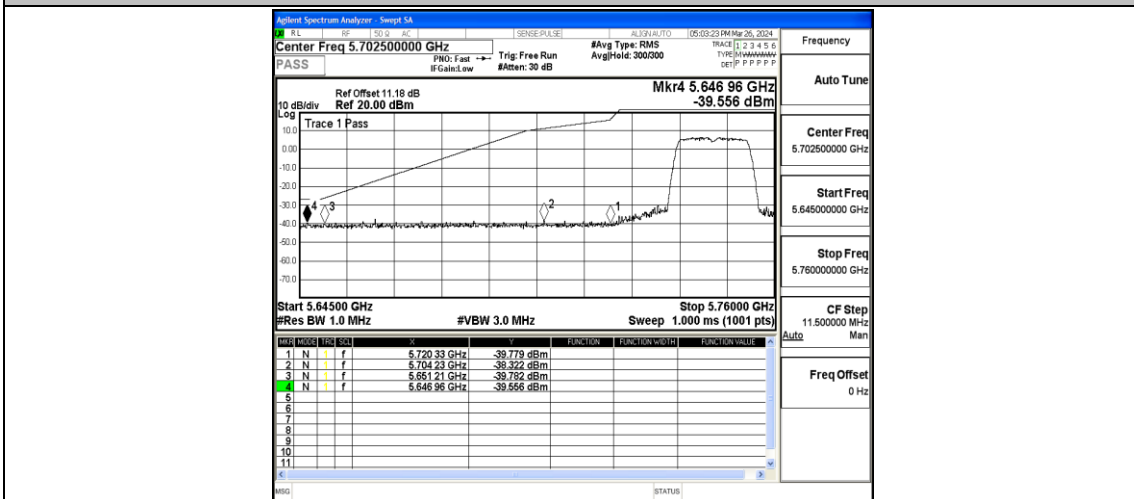
Test Graphs



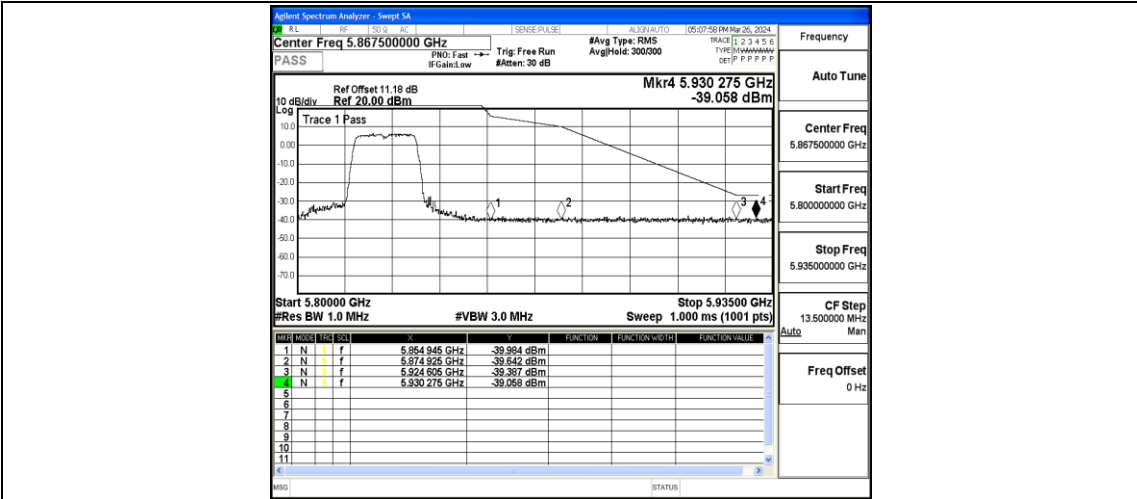
11A-Ant1-5745-PASS



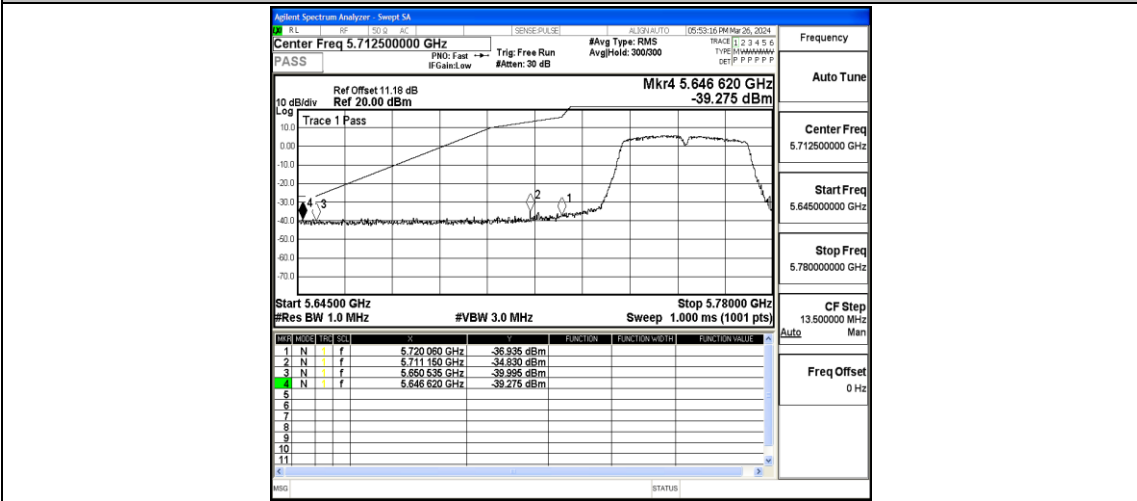
11A-Ant1-5825-PASS



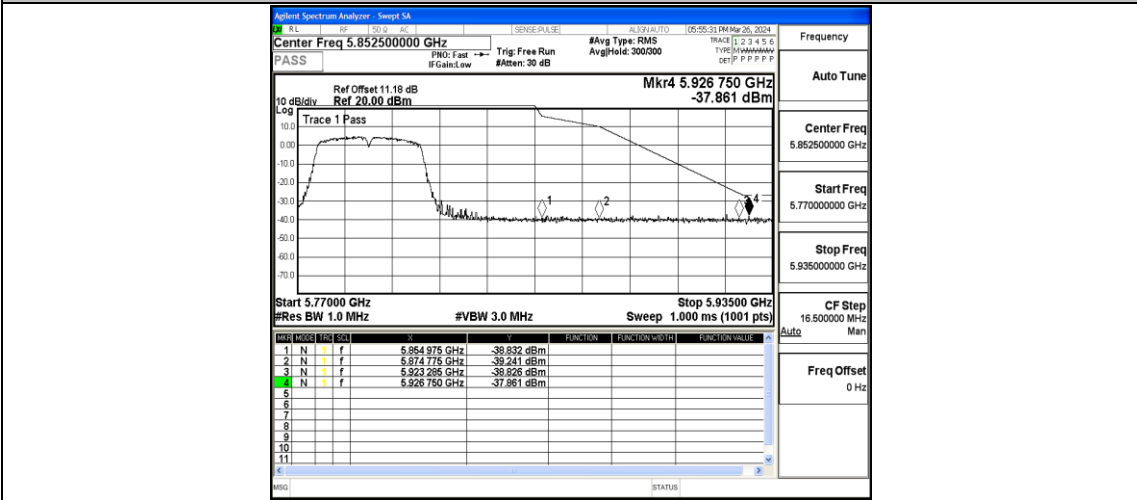
11N20MIMO-Ant1-5745-PASS



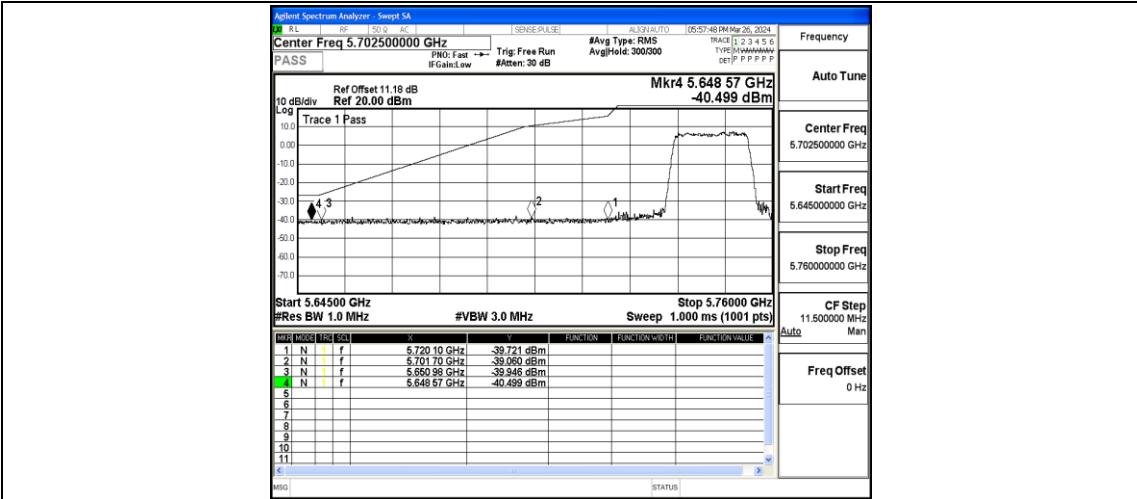
11N20MIMO-Ant1-5825-PASS



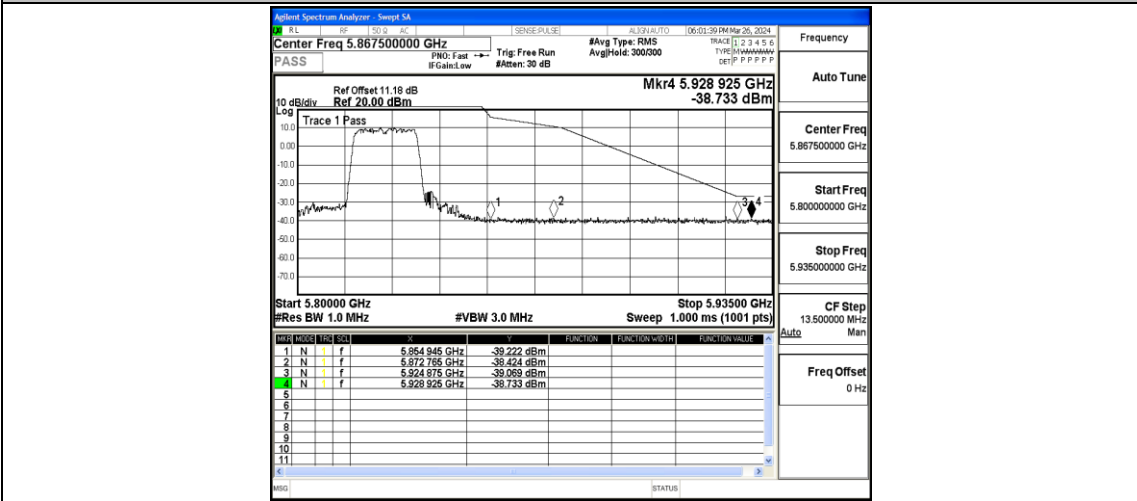
11N40MIMO-Ant1-5755-PASS



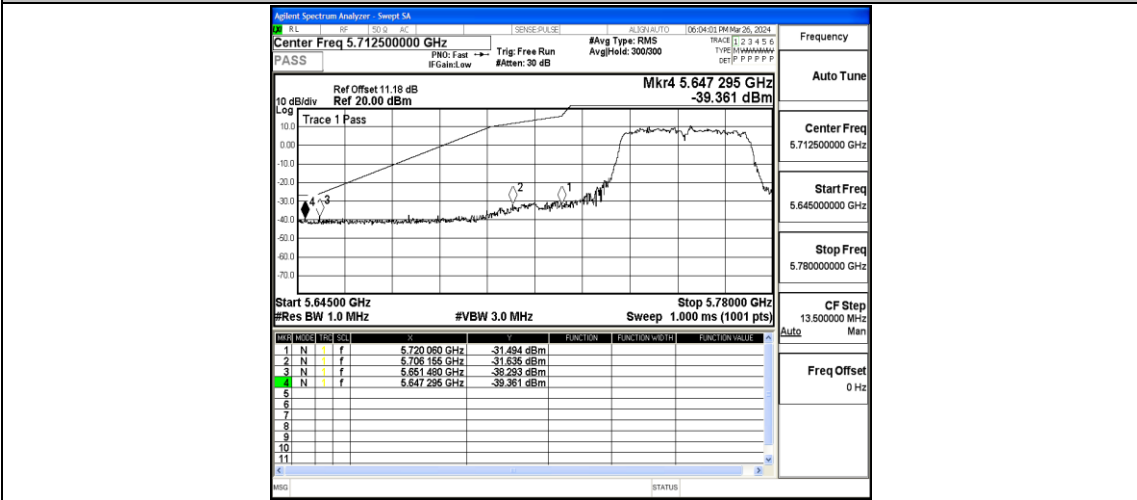
11N40MIMO-Ant1-5795-PASS



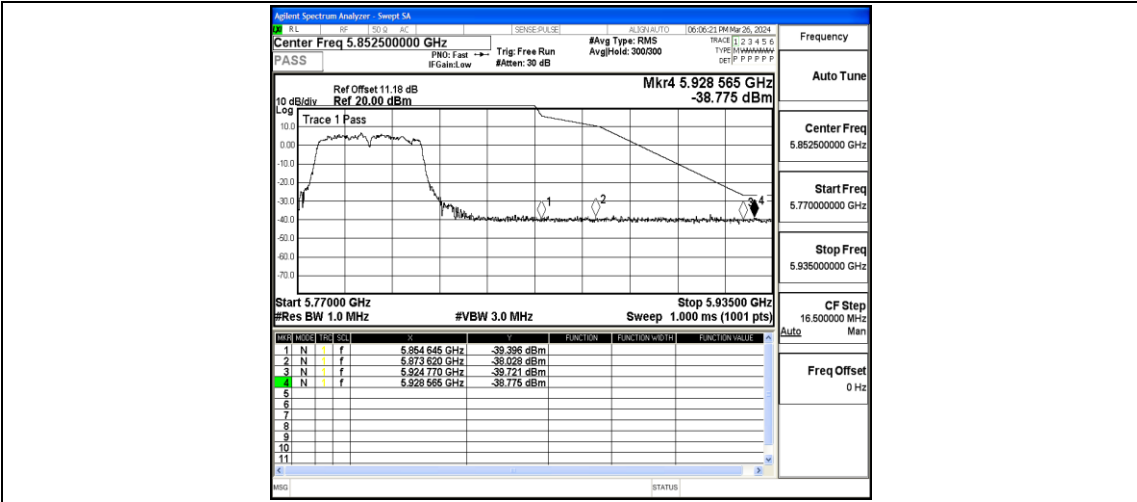
11AC20MIMO-Ant1-5745-PASS



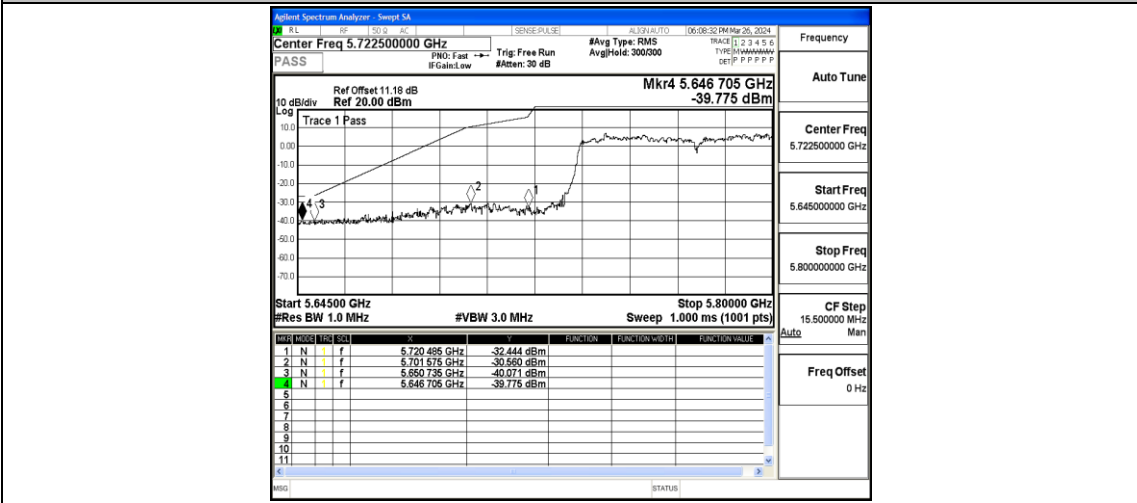
11AC20MIMO-Ant1-5825-PASS



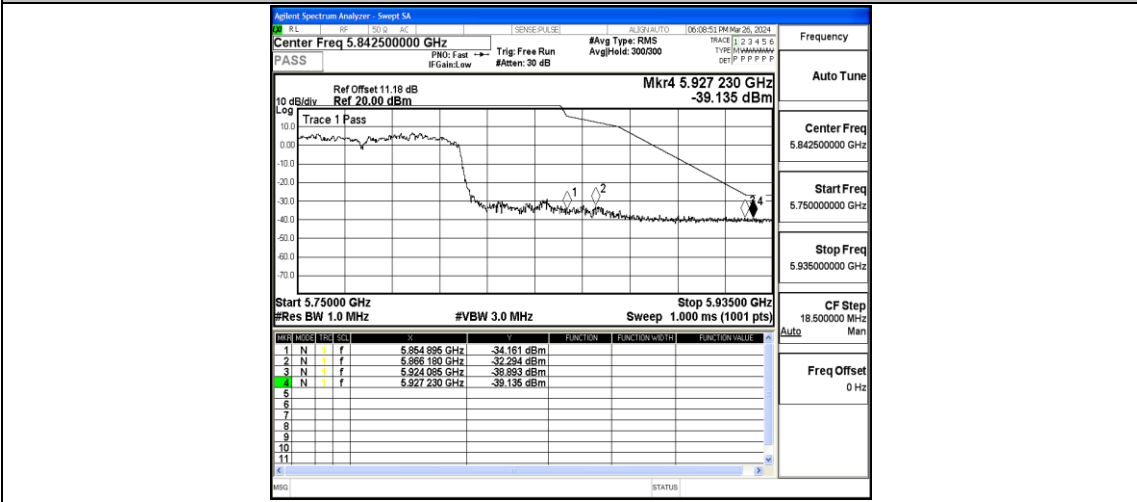
11AC40MIMO-Ant1-5755-PASS



11AC40MIMO-Ant1-5795-PASS



11AC80MIMO-Ant1-5775-PASS



11AC80MIMO-Ant1-5775-PASS

Appendix E: Frequency Stability

Test Result

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5745	20	132	5744.900978	5745 – 5825	PASS
5745	20	108	5745.041039	5745 – 5825	PASS
5745	50	120	5744.933548	5745 – 5825	PASS
5745	40	120	5745.050945	5745 – 5825	PASS
5745	30	120	5745.009926	5745 – 5825	PASS
5745	20	120	5744.907202	5745 – 5825	PASS
5745	10	120	5745.076732	5745 – 5825	PASS
5745	0	120	5745.084333	5745 – 5825	PASS
5745	-10	120	5744.903159	5745 – 5825	PASS
5745	-20	120	5745.033055	5745 – 5825	PASS
5745	-30	120	5745.059729	5745 – 5825	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5785	20	132	5784.918658	5745 – 5825	PASS
5785	20	108	5784.976167	5745 – 5825	PASS
5785	50	120	5785.027551	5745 – 5825	PASS
5785	40	120	5784.962090	5745 – 5825	PASS
5785	30	120	5784.990629	5745 – 5825	PASS
5785	20	120	5784.998354	5745 – 5825	PASS
5785	10	120	5785.012681	5745 – 5825	PASS
5785	0	120	5785.059765	5745 – 5825	PASS
5785	-10	120	5784.912339	5745 – 5825	PASS
5785	-20	120	5785.074352	5745 – 5825	PASS
5785	-30	120	5784.912952	5745 – 5825	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5825	20	132	5824.902968	5745 – 5825	PASS
5825	20	108	5824.910994	5745 – 5825	PASS
5825	50	120	5824.955446	5745 – 5825	PASS
5825	40	120	5824.950636	5745 – 5825	PASS
5825	30	120	5824.982370	5745 – 5825	PASS
5825	20	120	5825.085909	5745 – 5825	PASS
5825	10	120	5824.906989	5745 – 5825	PASS
5825	0	120	5825.008848	5745 – 5825	PASS
5825	-10	120	5824.975844	5745 – 5825	PASS
5825	-20	120	5824.953194	5745 – 5825	PASS
5825	-30	120	5825.032182	5745 – 5825	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5755	20	132	5755.085781	5745 – 5825	PASS
5755	20	108	5755.018576	5745 – 5825	PASS
5755	50	120	5754.997551	5745 – 5825	PASS
5755	40	120	5755.045244	5745 – 5825	PASS
5755	30	120	5755.005085	5745 – 5825	PASS
5755	20	120	5754.993754	5745 – 5825	PASS
5755	10	120	5755.045784	5745 – 5825	PASS
5755	0	120	5754.938192	5745 – 5825	PASS
5755	-10	120	5755.050014	5745 – 5825	PASS
5755	-20	120	5754.939851	5745 – 5825	PASS
5755	-30	120	5755.084397	5745 – 5825	PASS

Ant1

Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5795	20	132	5794.976560	5745 – 5825	PASS
5795	20	108	5794.980464	5745 – 5825	PASS
5795	50	120	5795.053547	5745 – 5825	PASS
5795	40	120	5795.071755	5745 – 5825	PASS
5795	30	120	5794.989789	5745 – 5825	PASS
5795	20	120	5794.909062	5745 – 5825	PASS
5795	10	120	5795.070606	5745 – 5825	PASS
5795	0	120	5794.943231	5745 – 5825	PASS
5795	-10	120	5794.943866	5745 – 5825	PASS
5795	-20	120	5795.024793	5745 – 5825	PASS
5795	-30	120	5795.006434	5745 – 5825	PASS

Ant1

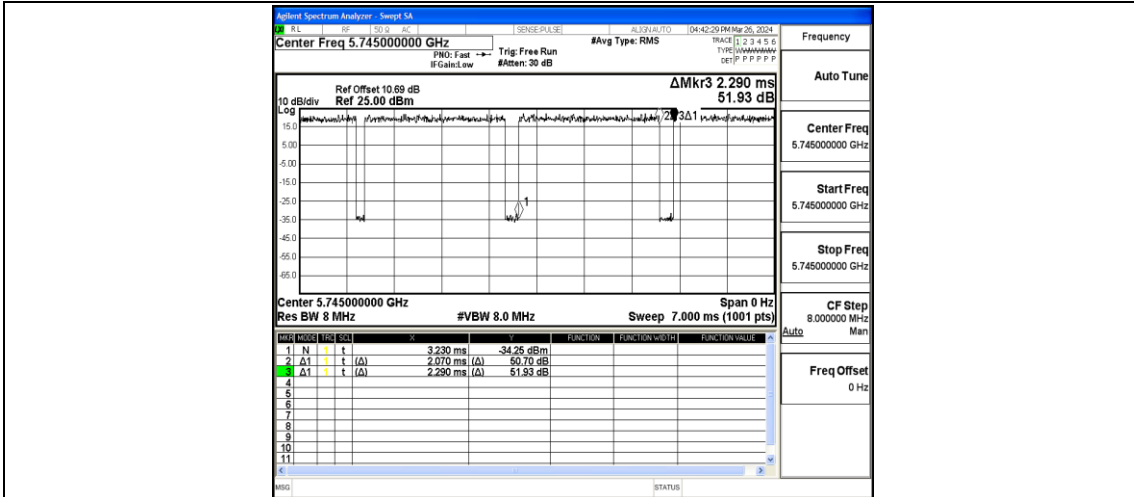
Frequency (MHz)	Environment Temperature (Degree)	Voltage (VAC)	Measured Frequency (MHz)	Limit Range (MHz)	Test Results
5775	20	132	5775.069852	5745 – 5825	PASS
5775	20	108	5774.910218	5745 – 5825	PASS
5775	50	120	5775.038829	5745 – 5825	PASS
5775	40	120	5774.992270	5745 – 5825	PASS
5775	30	120	5774.948452	5745 – 5825	PASS
5775	20	120	5774.953492	5745 – 5825	PASS
5775	10	120	5774.903603	5745 – 5825	PASS
5775	0	120	5774.973904	5745 – 5825	PASS
5775	-10	120	5775.010758	5745 – 5825	PASS
5775	-20	120	5774.908281	5745 – 5825	PASS
5775	-30	120	5775.090681	5745 – 5825	PASS

Appendix F: Duty Cycle

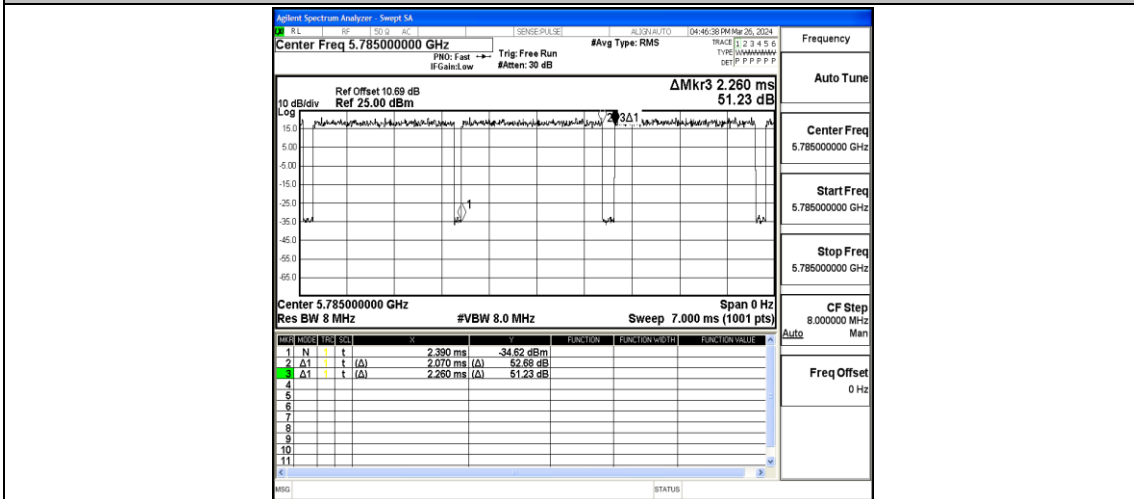
Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Dc Factor [%]	1/T
11A	Ant1	5745	2.07	2.29	90.39	0.44	0.48
11A	Ant1	5785	2.07	2.26	91.59	0.38	0.48
11A	Ant1	5825	2.07	2.27	91.19	0.40	0.48
11N20SISO	Ant1	5745	1.92	2.08	92.31	0.35	0.52
11N20SISO	Ant1	5785	1.91	2.08	91.83	0.37	0.52
11N20SISO	Ant1	5825	1.92	2.13	90.14	0.45	0.52
11N40SISO	Ant1	5755	0.94	1.15	81.74	0.88	1.06
11N40SISO	Ant1	5795	0.94	1.15	81.74	0.88	1.06
11AC20SISO	Ant1	5745	0.20	0.39	51.28	2.90	5.00
11AC20SISO	Ant1	5785	0.20	0.41	48.78	3.12	5.00
11AC20SISO	Ant1	5825	0.20	0.43	46.51	3.32	5.00
11AC40SISO	Ant1	5755	0.11	0.34	32.35	4.90	9.09
11AC40SISO	Ant1	5795	0.11	0.34	32.35	4.90	9.09
11AC80SISO	Ant1	5775	0.08	0.30	26.67	5.74	12.50

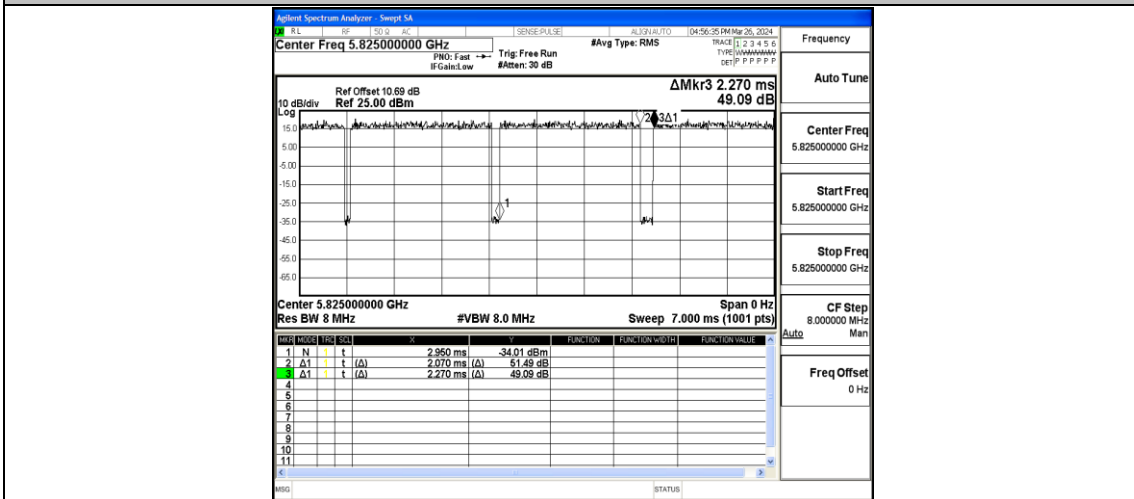
Test Graphs



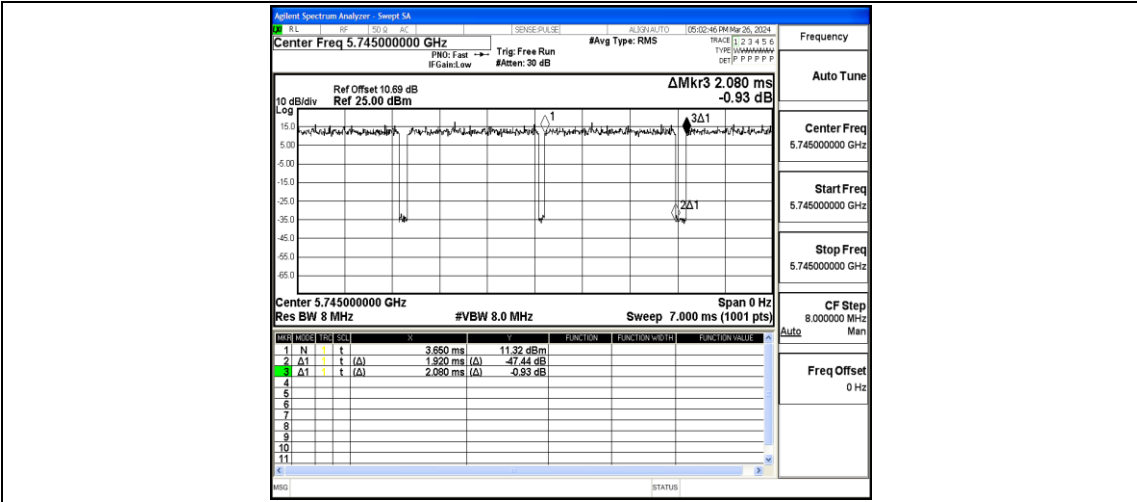
NTNV-11A-Ant1-5745



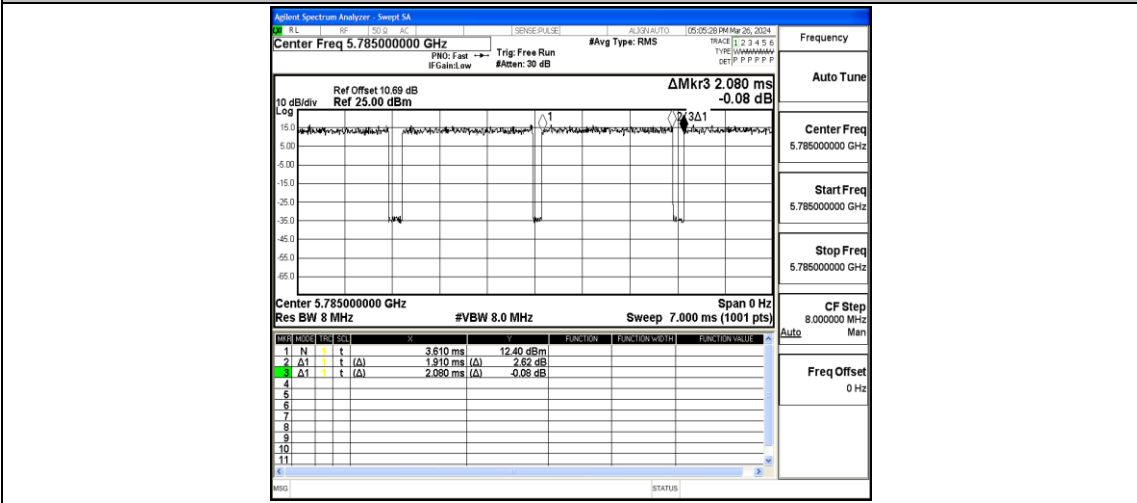
NTNV-11A-Ant1-5785



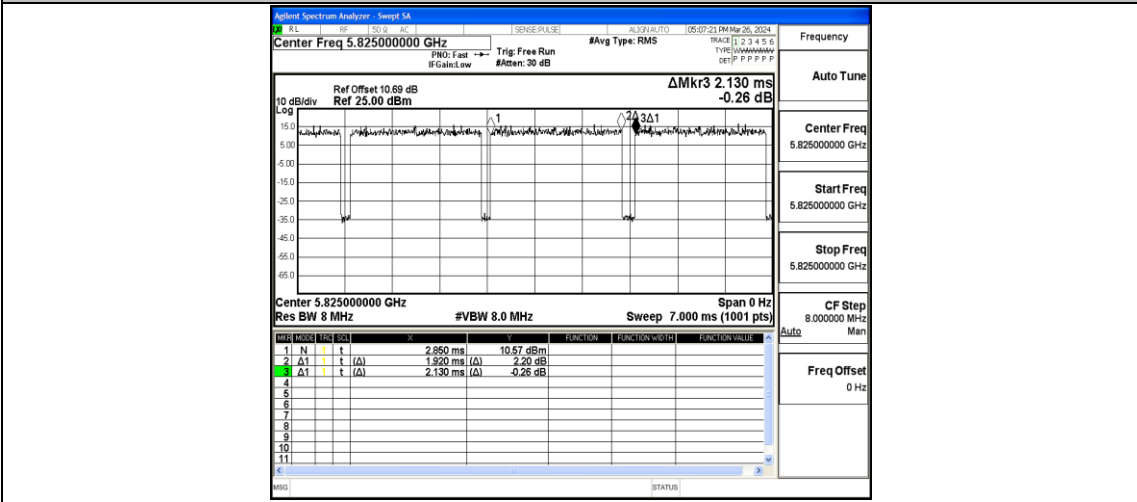
NTNV-11A-Ant1-5825



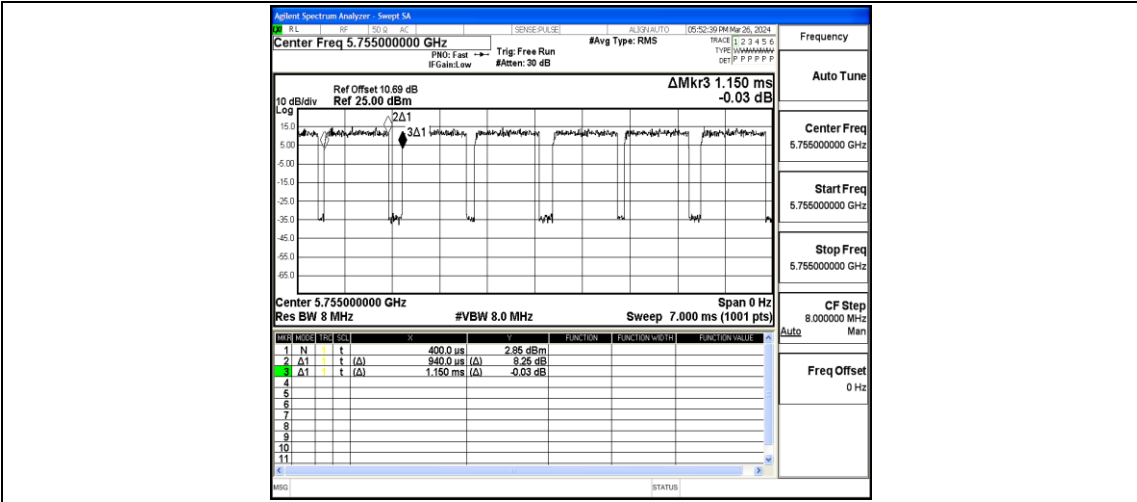
NTNV-11N20MIMO-Ant1-5745



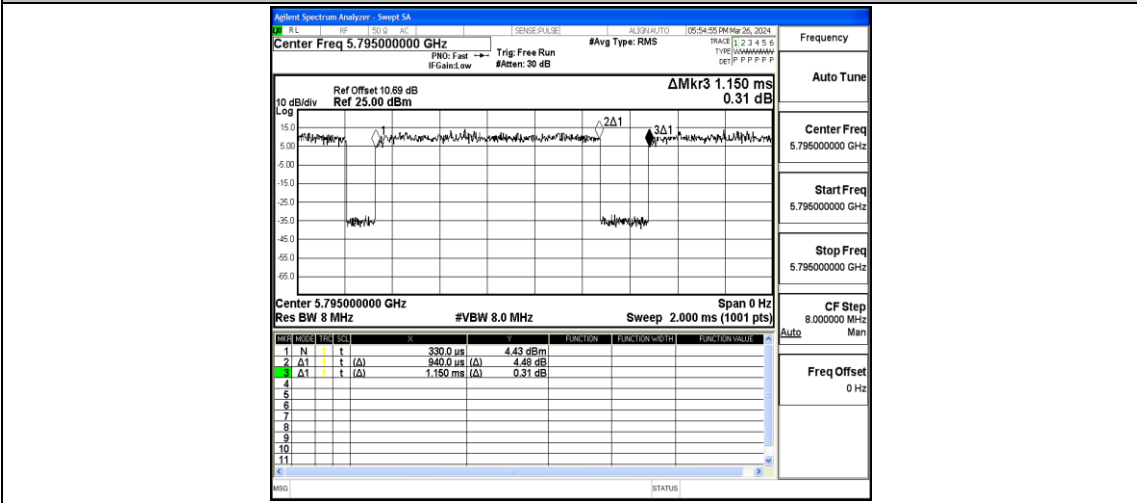
NTNV-11N20MIMO-Ant1-5785



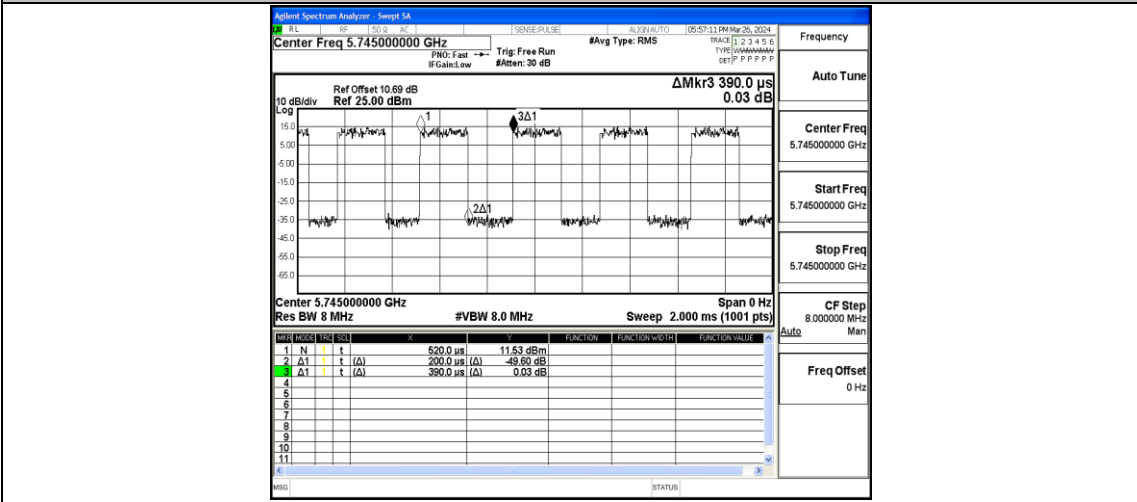
NTNV-11N20MIMO-Ant1-5825



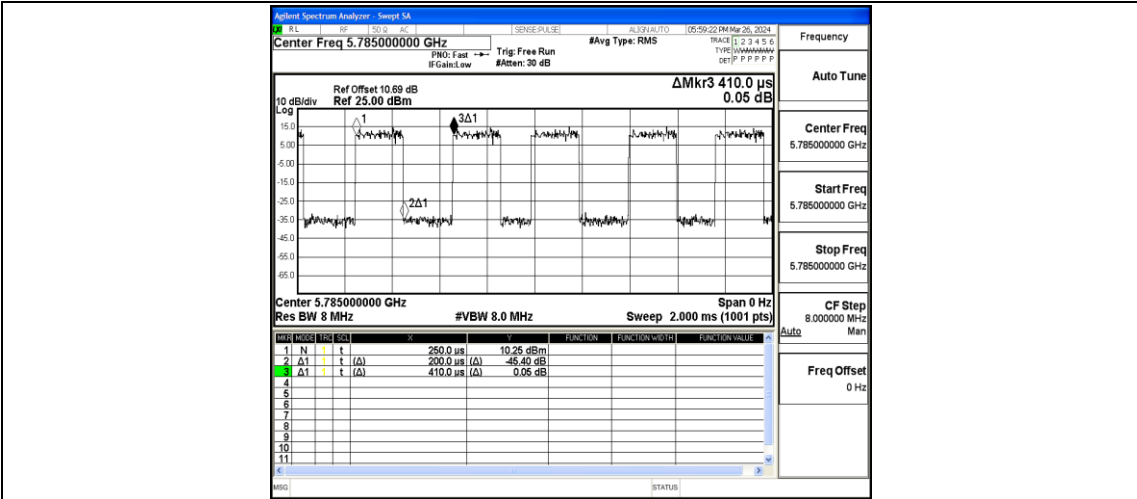
NTVN-11N40MIMO-Ant1-5755



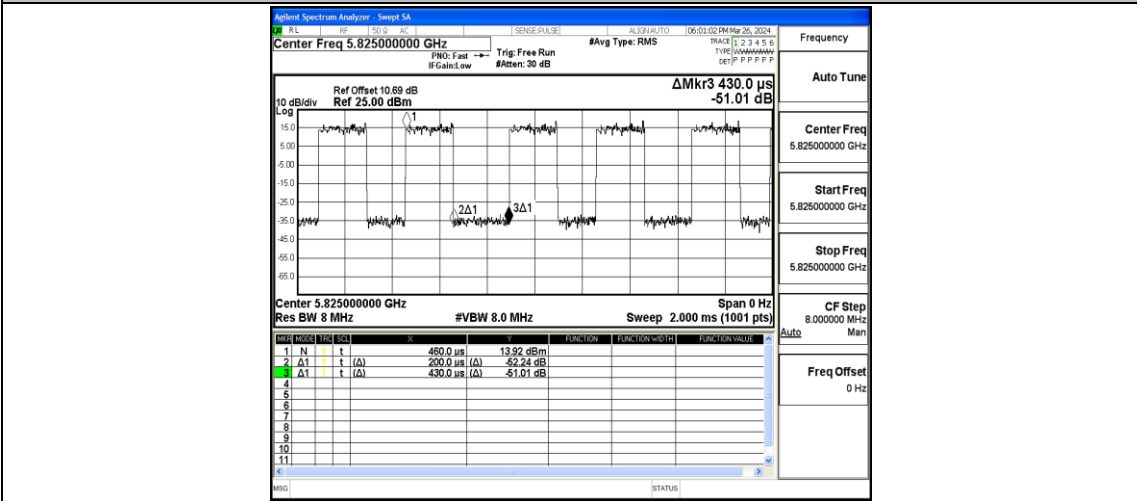
NTVN-11N40MIMO-Ant1-5795



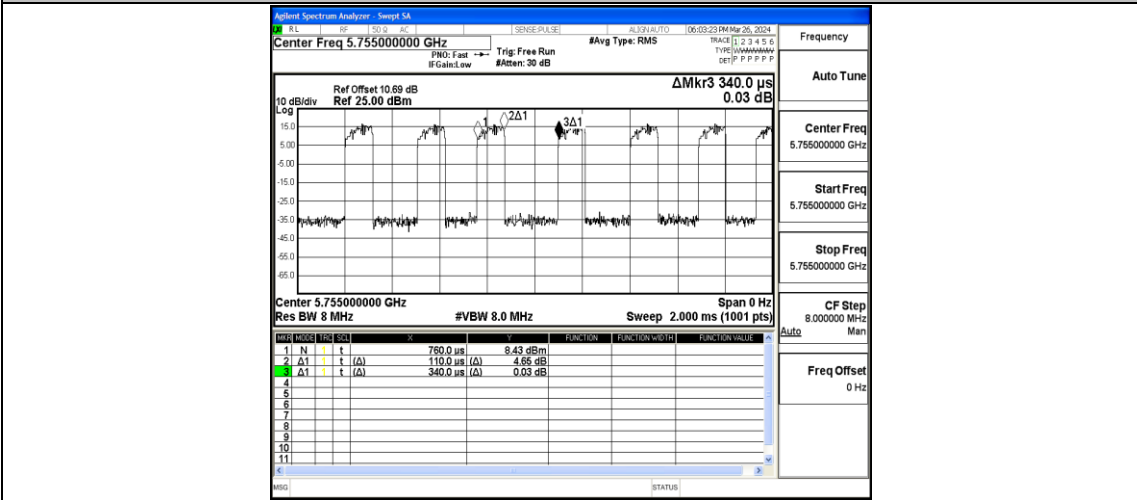
NTVN-11AC20MIMO-Ant1-5745



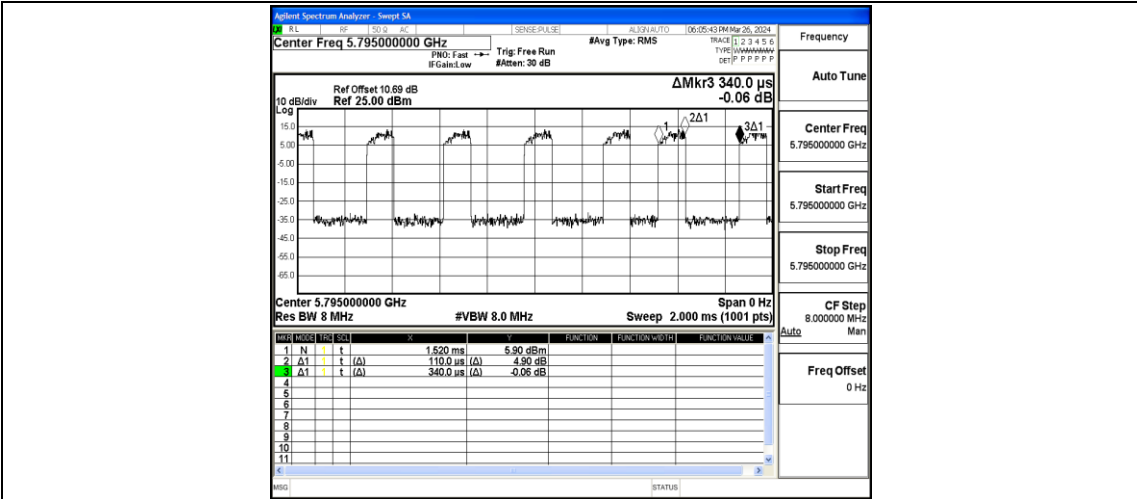
NTNV-11AC20MIMO-Ant1-5785



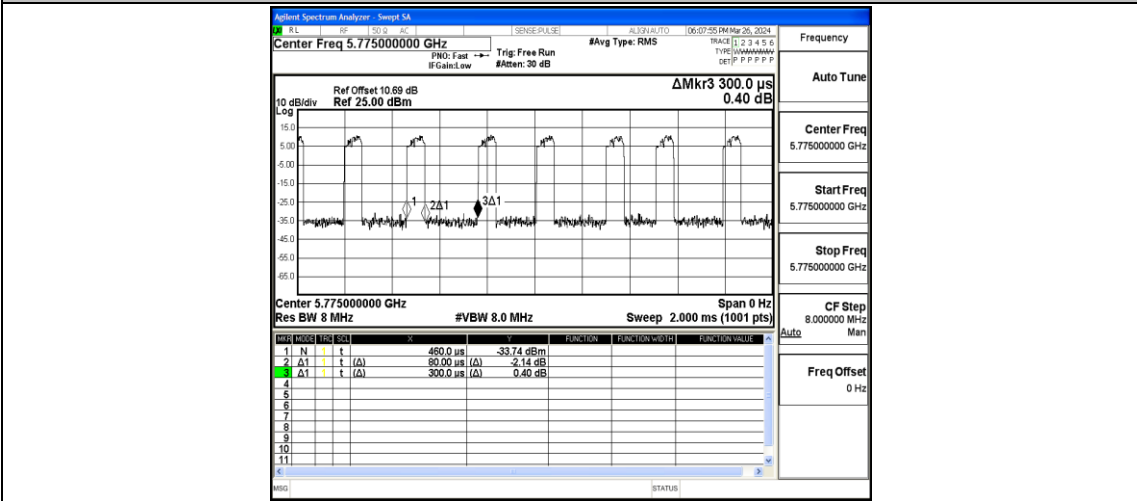
NTNV-11AC20MIMO-Ant1-5825



NTNV-11AC40MIMO-Ant1-5755



NTNV-11AC40MIMO-Ant1-5795



NTNV-11AC80MIMO-Ant1-5775