



CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China
Tel: +86-755- 27521059 Fax: +86-755- 27521011 Http://www.sz-ctc.org.cn

Appendix for 5GHz WIFI

Applicant: Fanvil Link Technology Co.,LTD

**Address: Room 1517, Building G, Hualian City Panorama.27
Region, Bao'an District, Shenzhen, China**

Product Name: Android IP Video Phone

Model: A308i, J308, J308i, J308P, i508, A308, J308P-i

FCC ID: 2BCUQ-308

TABLE OF CONTENTS

Appendix A1: Emission Bandwidth.....	3
Appendix A2: Occupied channel bandwidth	10
Appendix A3: Min emission bandwidth	17
Appendix B: Maximum conducted output power	21
Appendix C: Maximum power spectral density.....	22
Appendix D: Frequency Stability	29
Appendix E: Duty Cycle	32

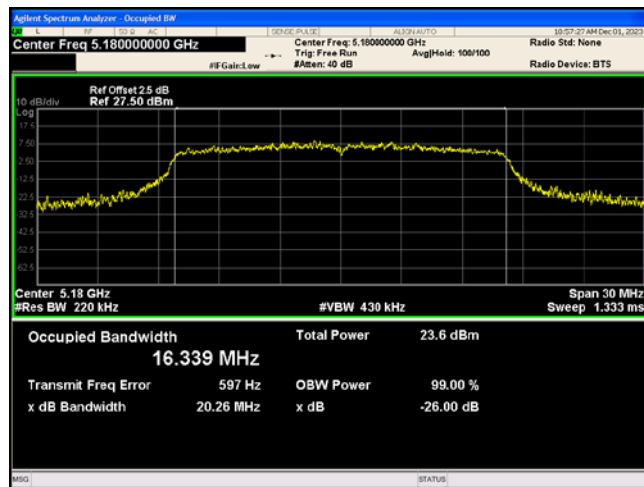
Appendix A1: Emission Bandwidth

Test Result

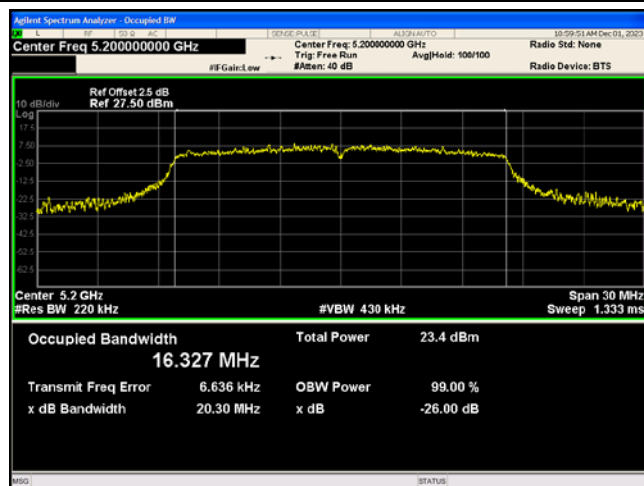
Test Mode	Channel	26db EBW [MHz]	Verdict
802.11a	5180	20.26	PASS
	5200	20.30	PASS
	5240	19.25	PASS
	5745	29.64	PASS
	5785	29.23	PASS
	5825	29.38	PASS
802.11n(HT20)	5180	20.26	PASS
	5200	20.48	PASS
	5240	20.06	PASS
	5745	29.41	PASS
	5785	29.27	PASS
	5825	28.55	PASS
802.11n(HT40)	5190	46.01	PASS
	5230	37.99	PASS
	5755	56.89	PASS
	5795	58.81	PASS

Test Graphs

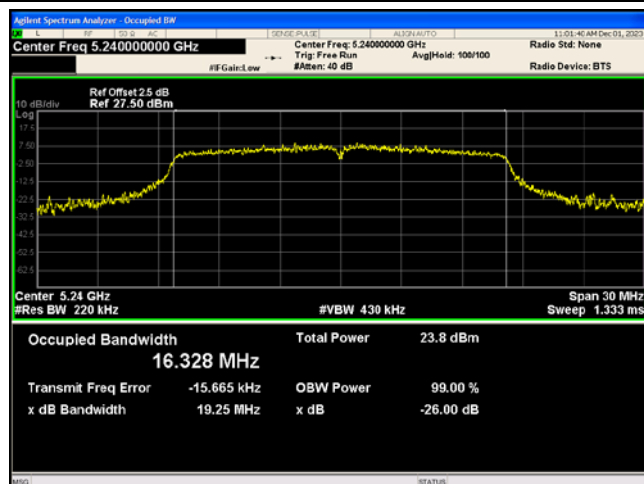
802.11a_5180



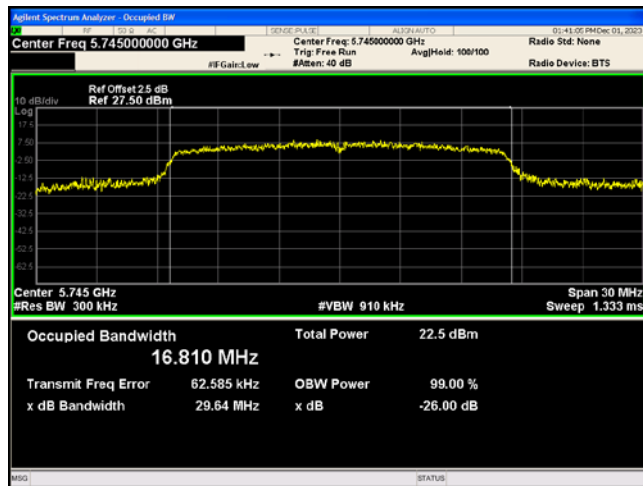
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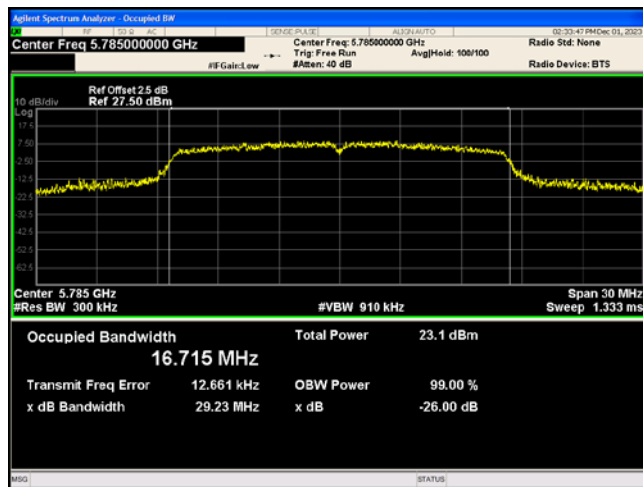
802.11a_5240



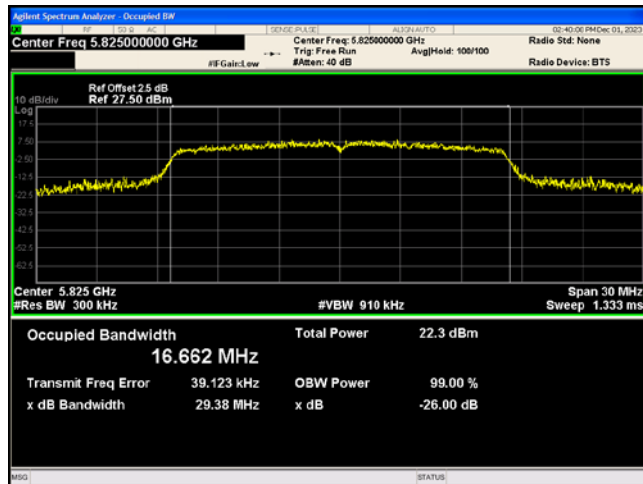
802.11a_5745



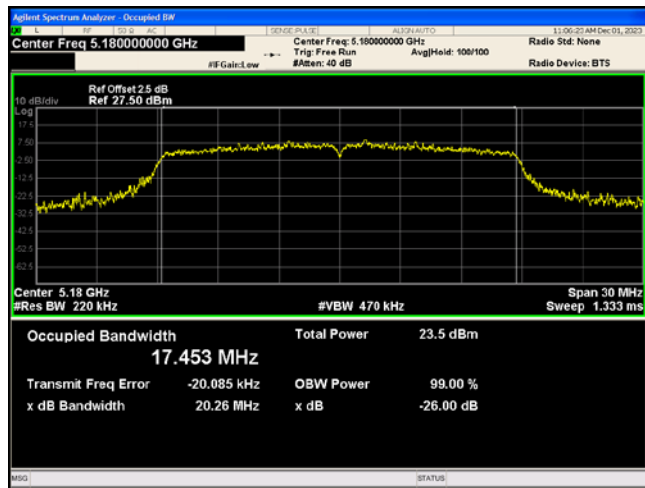
802.11a_5785



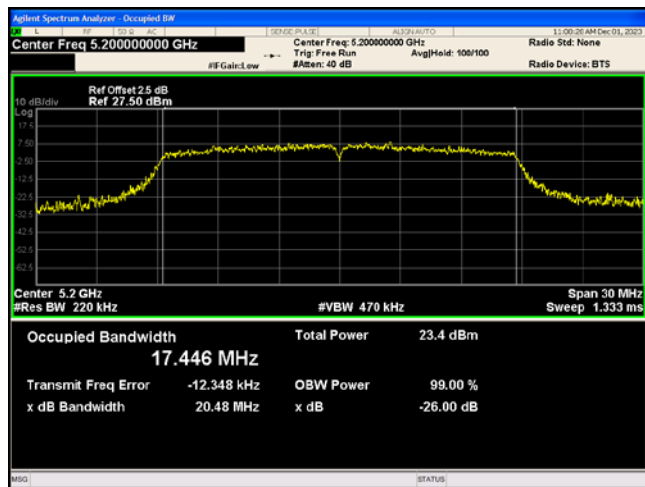
802.11a_5825



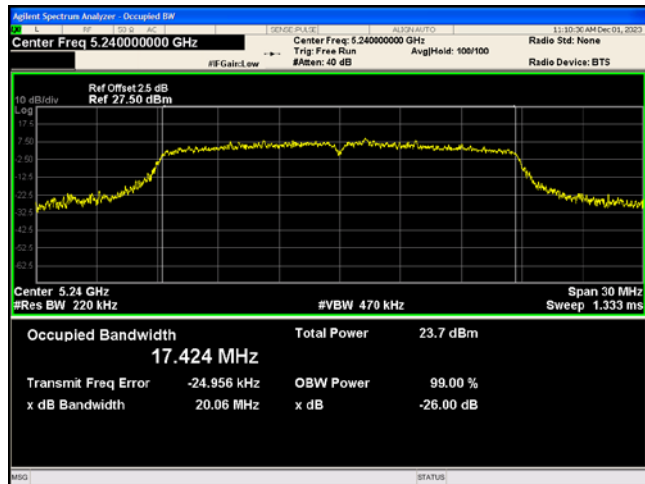
802.11n(HT20)_5180



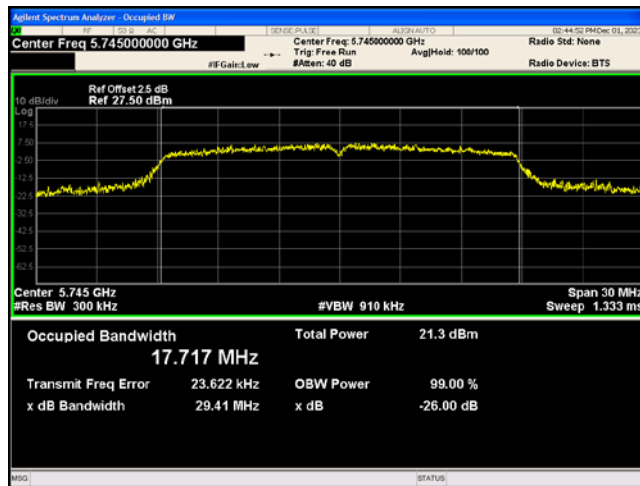
802.11n(HT20)_5200



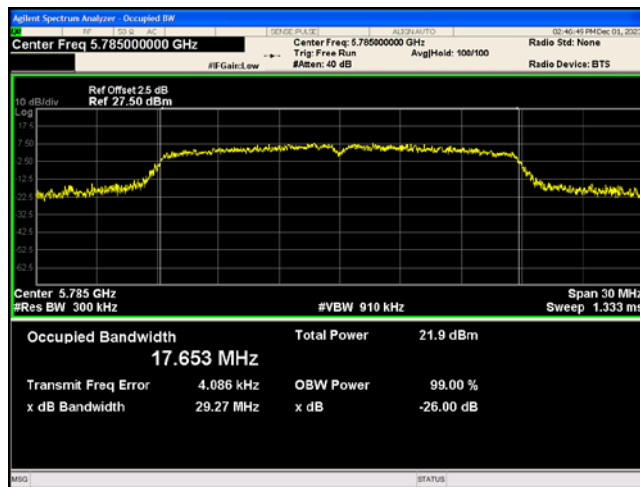
802.11n(HT20)_5240



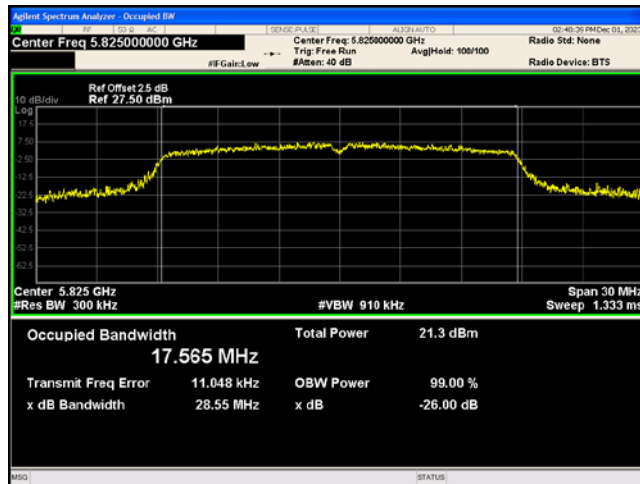
802.11n(HT20)_5745



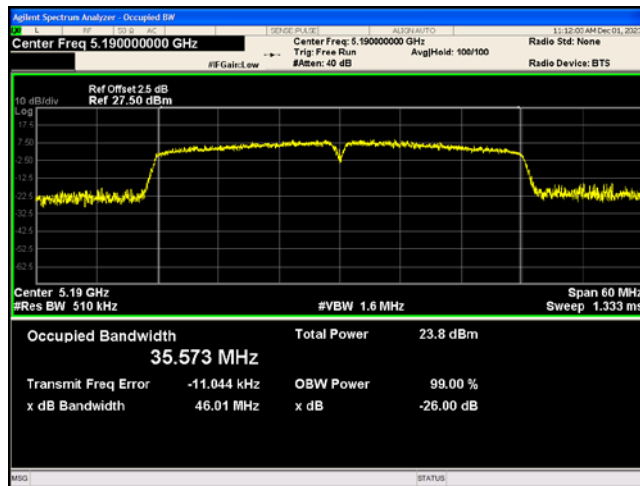
802.11n(HT20)_5785



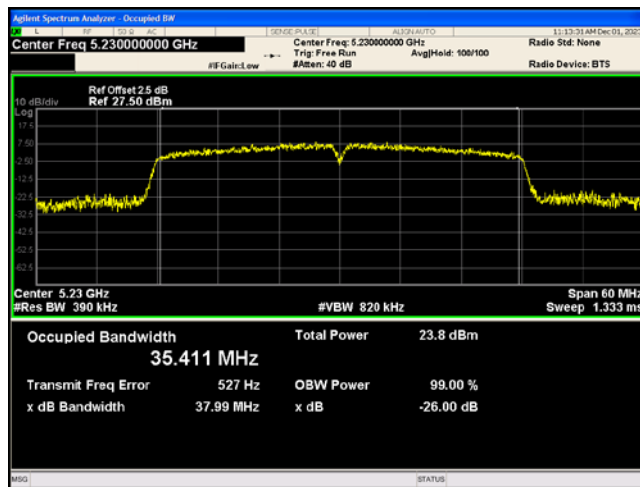
802.11n(HT20)_5825



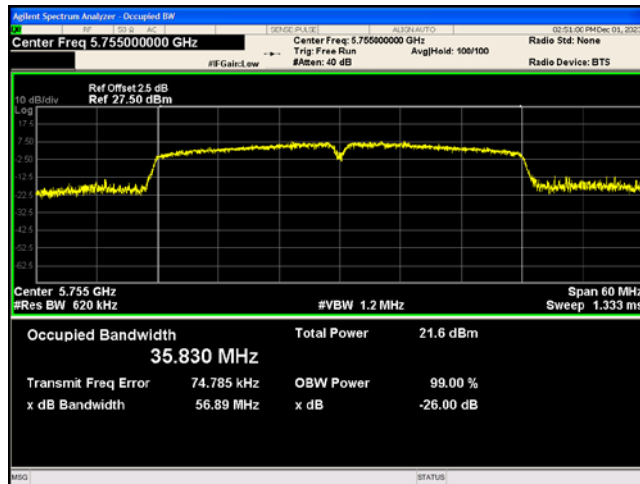
802.11n(HT40)_5190



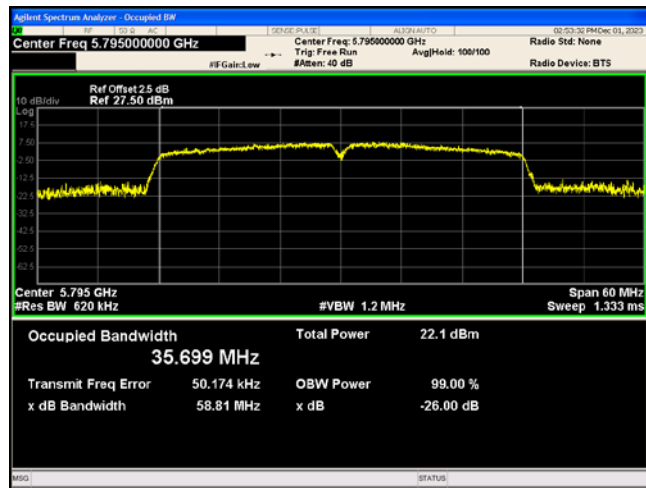
802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



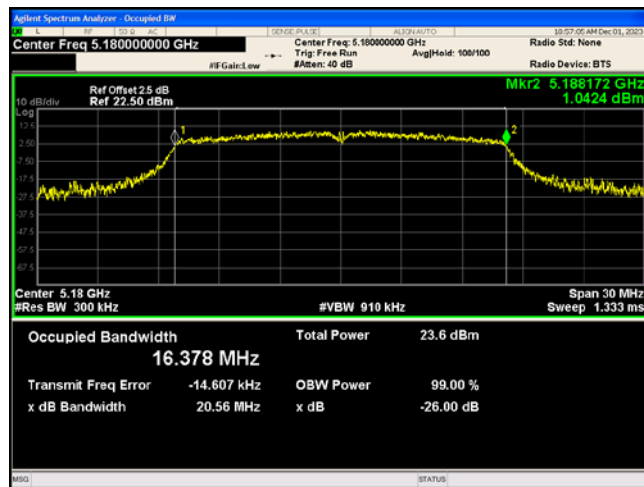
Appendix A2: Occupied channel bandwidth

Test Result

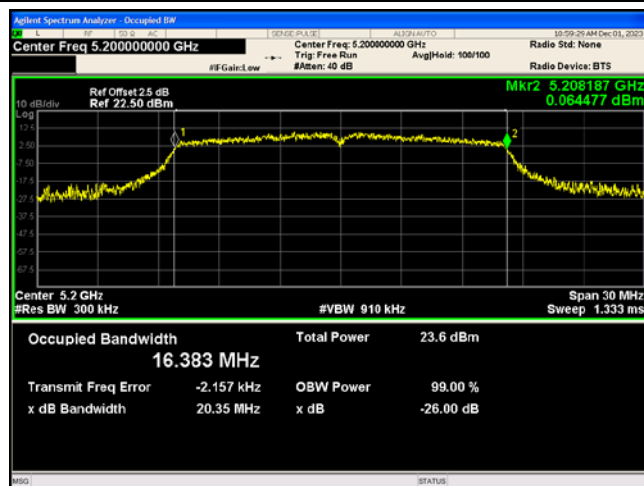
Test Mode	Channel	OCB [MHz]	Verdict
802.11a	5180	16.378	PASS
	5200	16.383	PASS
	5240	16.385	PASS
	5745	16.769	PASS
	5785	16.726	PASS
	5825	16.623	PASS
802.11n(HT20)	5180	17.467	PASS
	5200	17.494	PASS
	5240	17.524	PASS
	5745	17.717	PASS
	5785	17.636	PASS
	5825	17.578	PASS
802.11n(HT40)	5190	35.545	PASS
	5230	35.444	PASS
	5755	35.719	PASS
	5795	35.753	PASS

Test Graphs

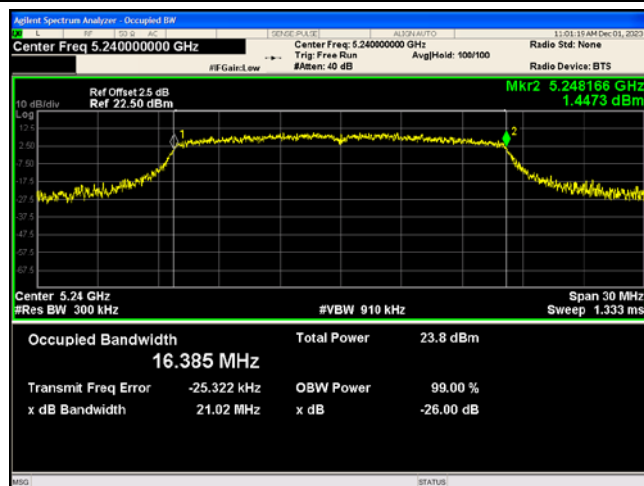
802.11a_5180



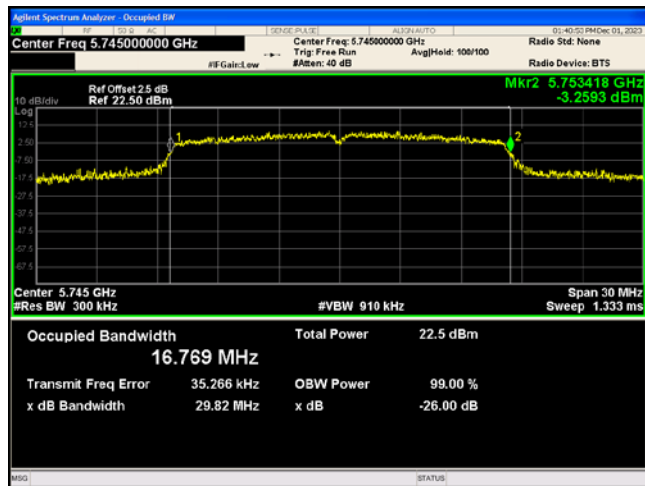
802.11a_5200



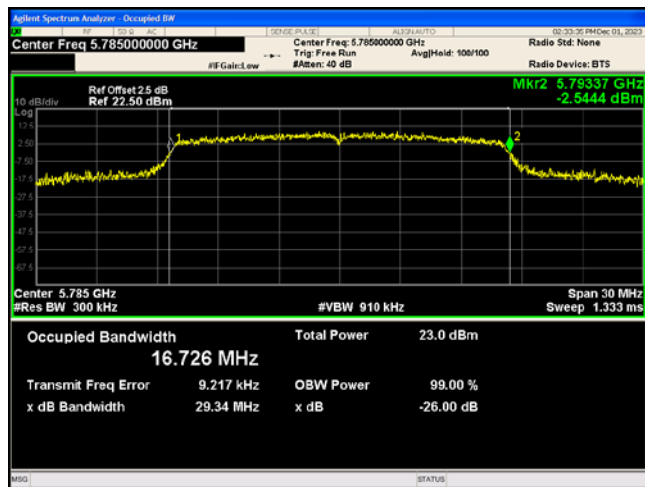
802.11a_5240



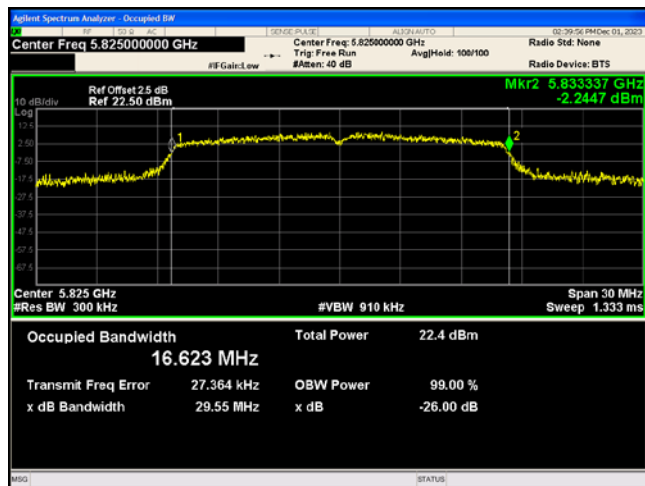
802.11a_5745



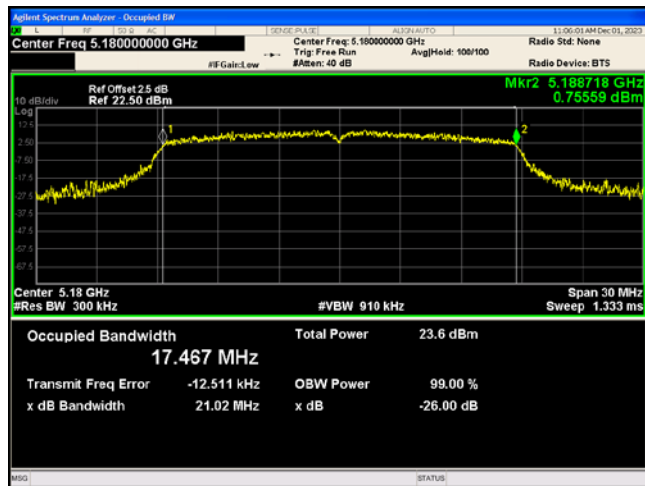
802.11a_5785



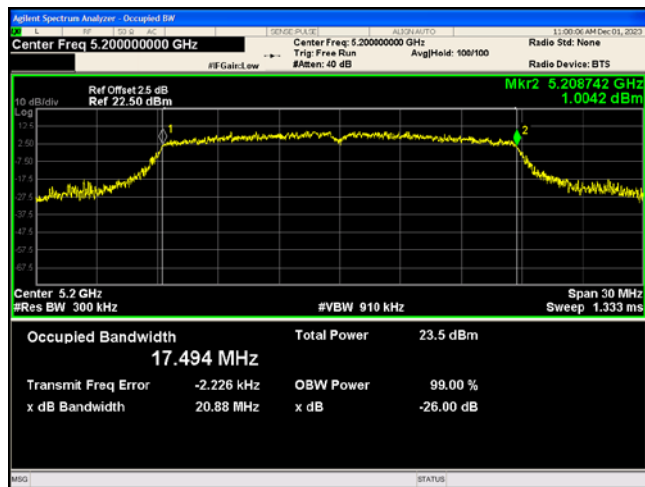
802.11a_5825



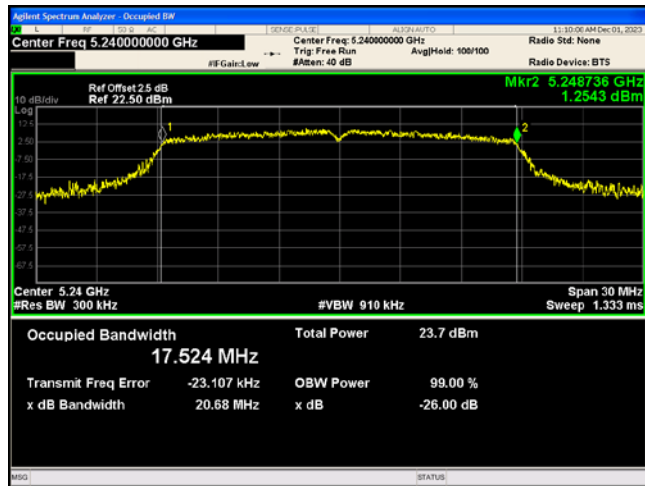
802.11n(HT20)_5180



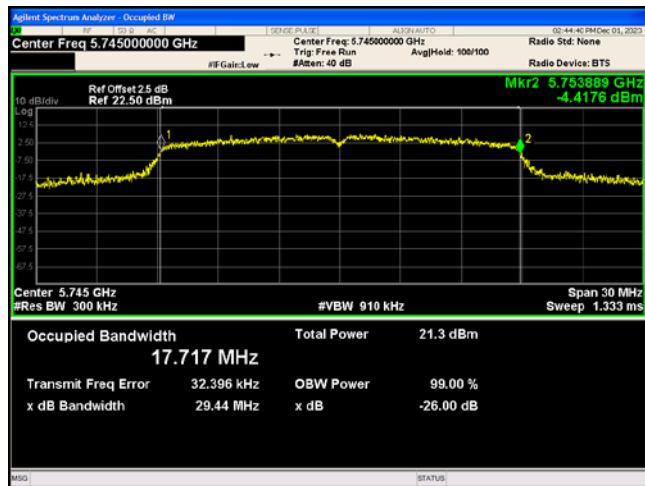
802.11n(HT20)_5200



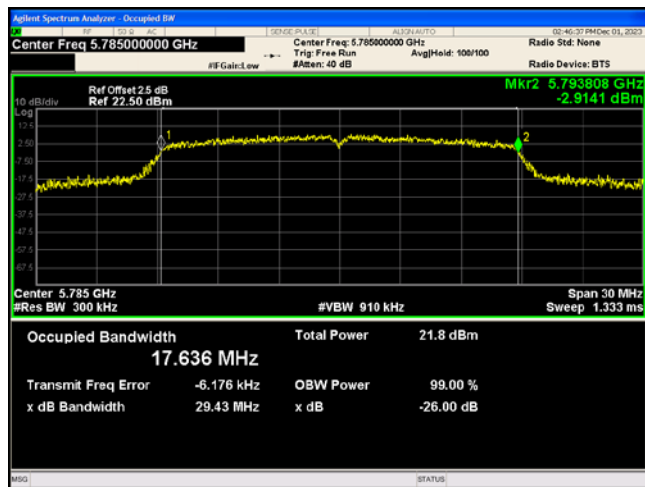
802.11n(HT20)_5240



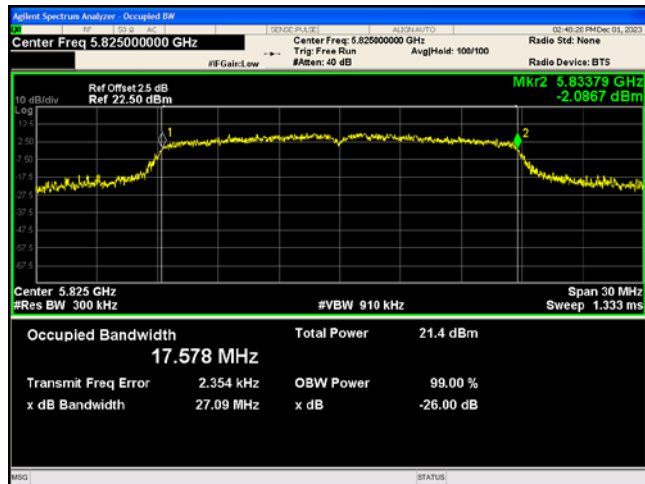
802.11n(HT20)_5745



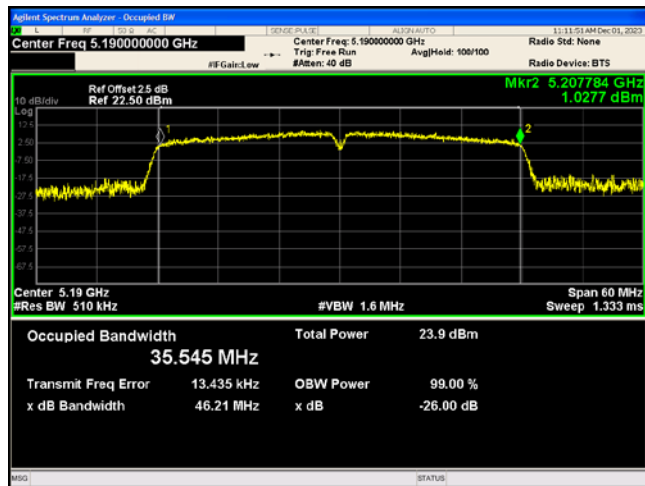
802.11n(HT20)_5785



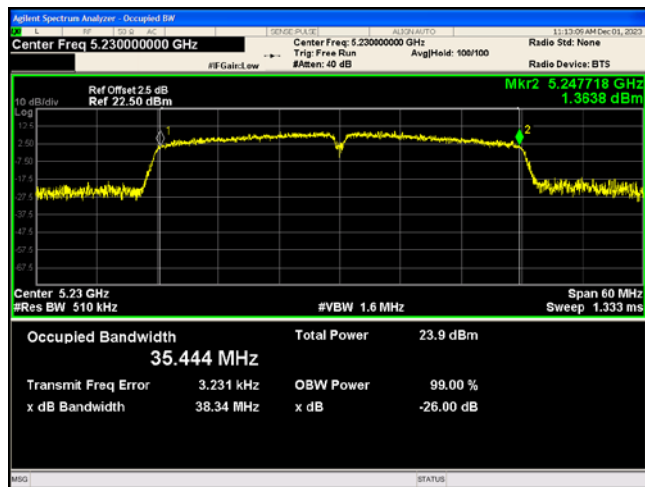
802.11n(HT20)_5825



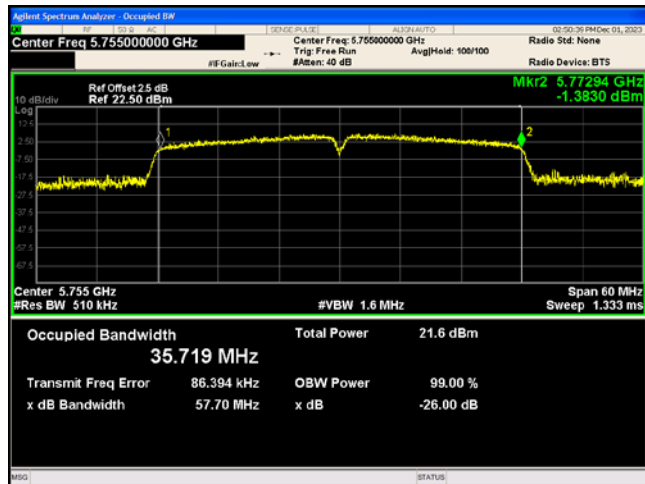
802.11n(HT40)_5190



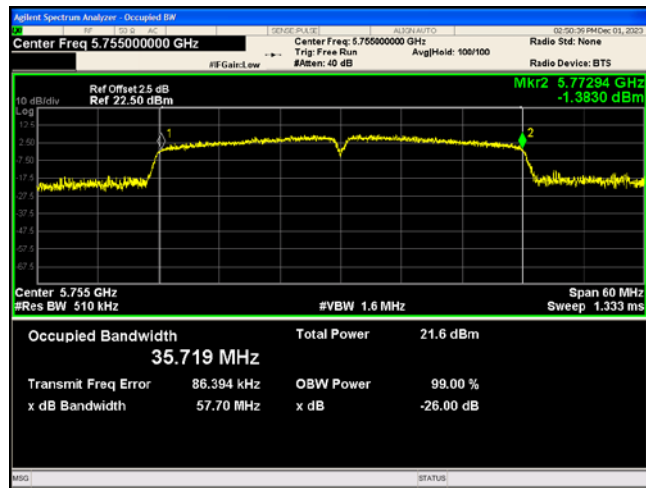
802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



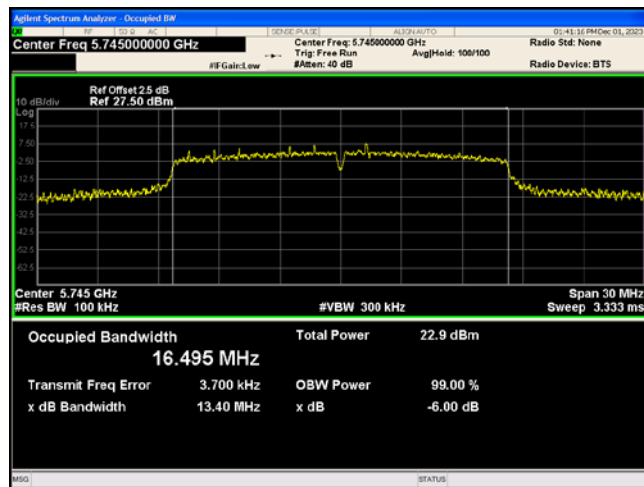
Appendix A3: Min emission bandwidth

Test Result

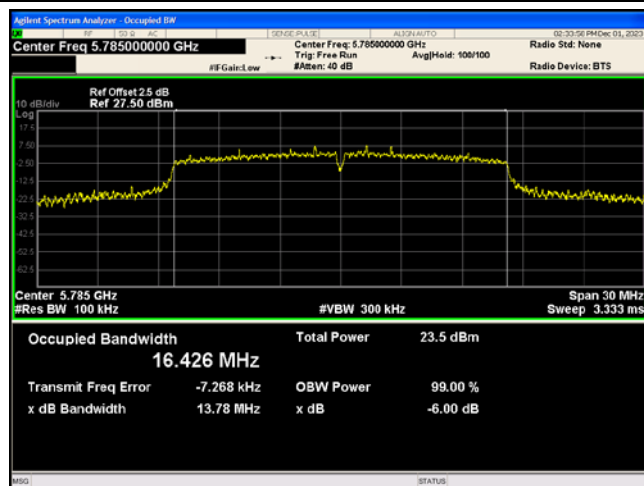
Test Mode	Channel	6db EBW [MHz]	Limit[MHz]	Verdict
802.11a	5745	13.40	>0.5	PASS
	5785	13.78	>0.5	PASS
	5825	14.16	>0.5	PASS
802.11n(HT20)	5745	13.40	>0.5	PASS
	5785	15.43	>0.5	PASS
	5825	13.58	>0.5	PASS
802.11n(HT40)	5755	33.79	>0.5	PASS
	5795	32.54	>0.5	PASS

Test Graphs

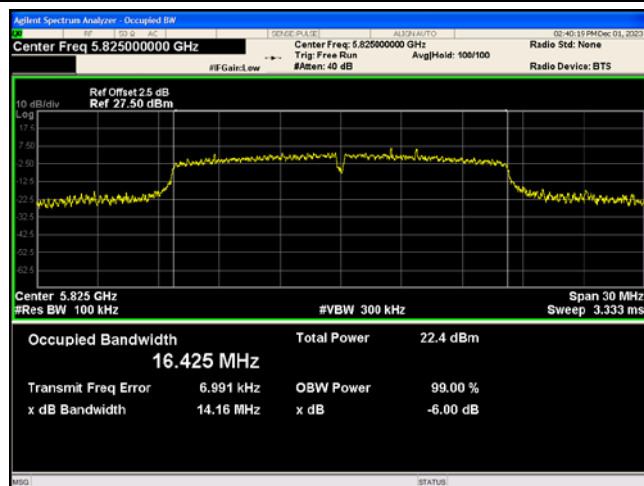
802.11a_5745



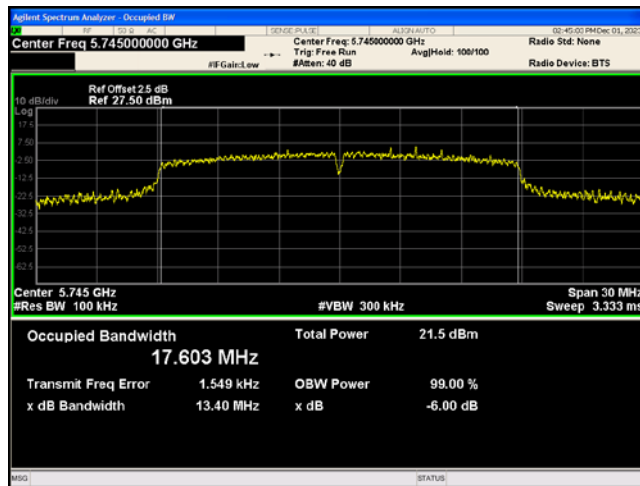
802.11a_5785



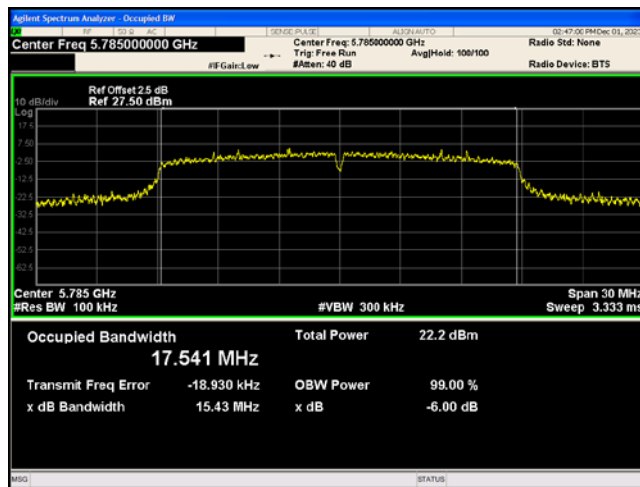
802.11a_5825



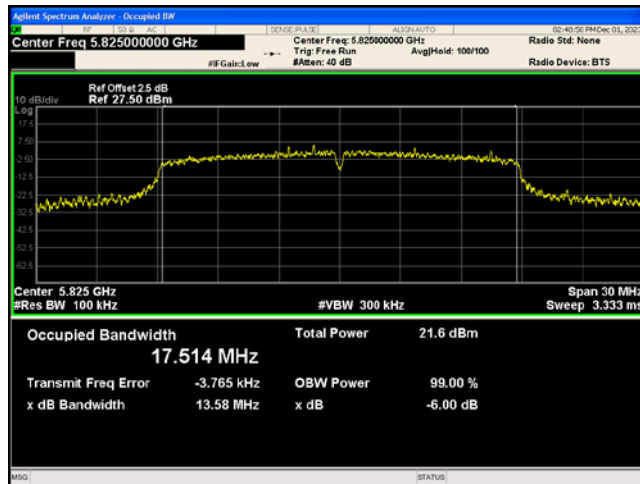
802.11n(HT20)_5745



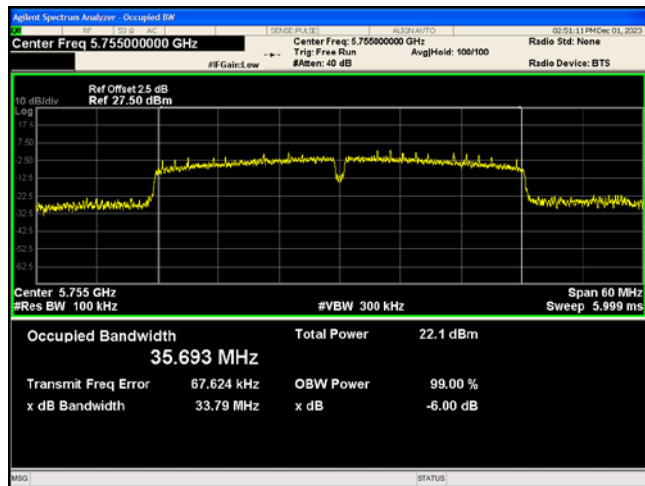
802.11n(HT20)_5785



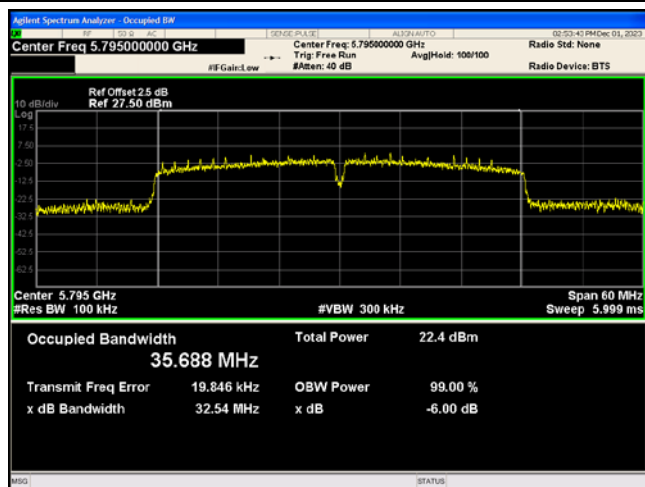
802.11n(HT20)_5825



802.11n(HT40)_5755



802.11n(HT40)_5795



Appendix B: Maximum conducted output power

Test Result

Test Mode	Channel	Result[dBm]	Limit[dBm]	Verdict
802.11a	5180	17.194	<=24	PASS
	5200	17.168	<=24	PASS
	5240	17.546	<=24	PASS
	5745	16.122	<=30	PASS
	5785	16.761	<=30	PASS
	5825	16.080	<=30	PASS
802.11n(HT20)	5180	17.050	<=24	PASS
	5200	17.182	<=24	PASS
	5240	17.230	<=24	PASS
	5745	14.824	<=30	PASS
	5785	15.515	<=30	PASS
	5825	14.979	<=30	PASS
802.11n(HT40)	5190	16.579	<=24	PASS
	5230	16.630	<=24	PASS
	5755	14.417	<=30	PASS
	5795	14.665	<=30	PASS

Note: Test results increased RF cable loss by 2.5dB.

Appendix C: Maximum power spectral density

Test Result

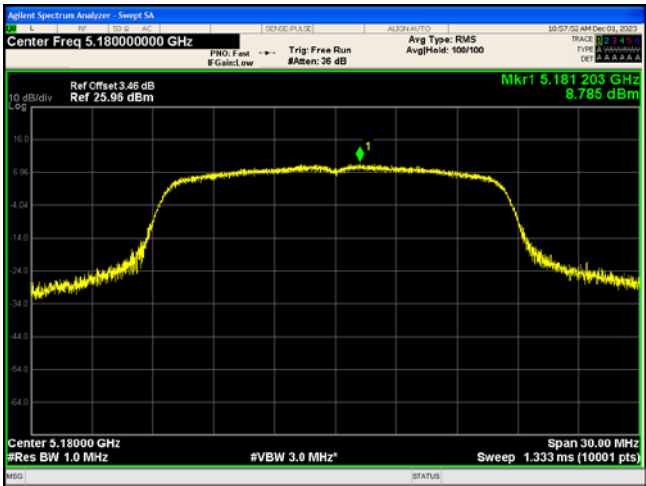
Test Mode	Channel	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
802.11a	5180	8.785	<=11	PASS
	5200	8.413	<=11	PASS
	5240	9.433	<=11	PASS
	5745	4.630	<=30	PASS
	5785	5.294	<=30	PASS
	5825	5.080	<=30	PASS
802.11n(HT20)	5180	8.874	<=11	PASS
	5200	8.786	<=11	PASS
	5240	8.864	<=11	PASS
	5745	3.049	<=30	PASS
	5785	4.010	<=30	PASS
	5825	3.743	<=30	PASS
802.11n(HT40)	5190	6.162	<=11	PASS
	5230	6.024	<=11	PASS
	5755	0.960	<=30	PASS
	5795	1.293	<=30	PASS

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

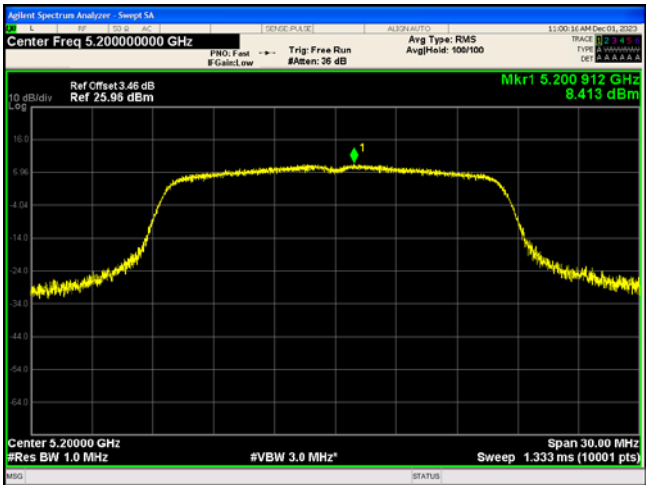
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

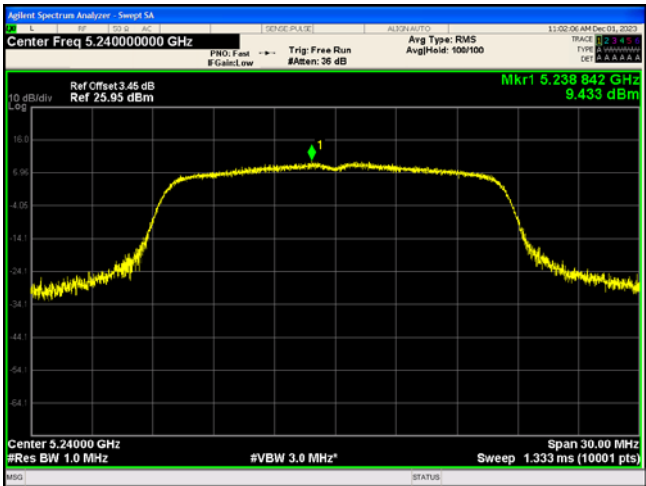
802.11a_5180



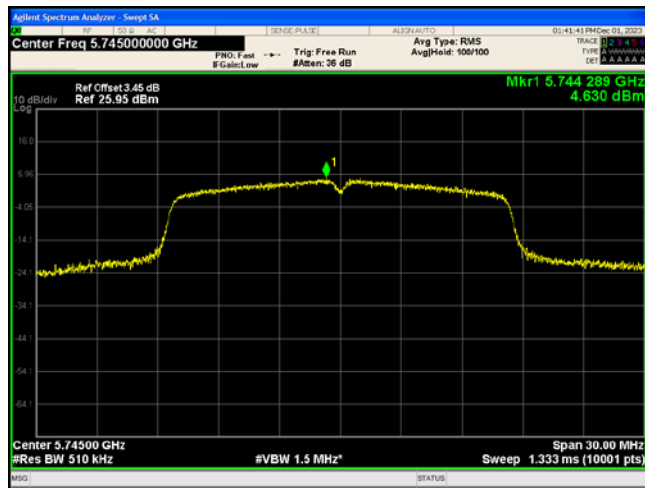
802.11a_5200



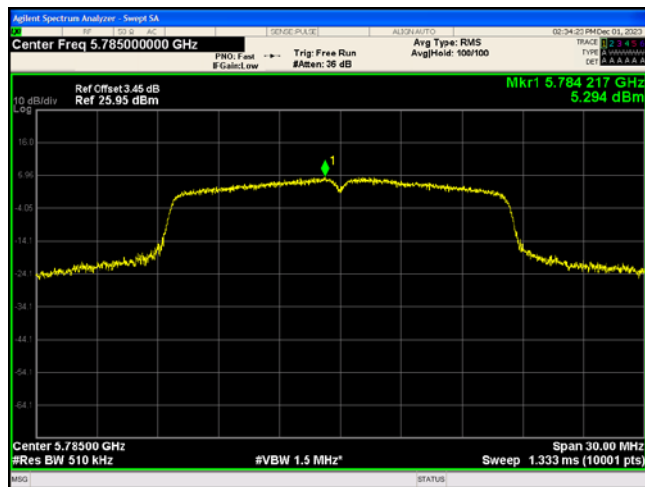
802.11a_5240



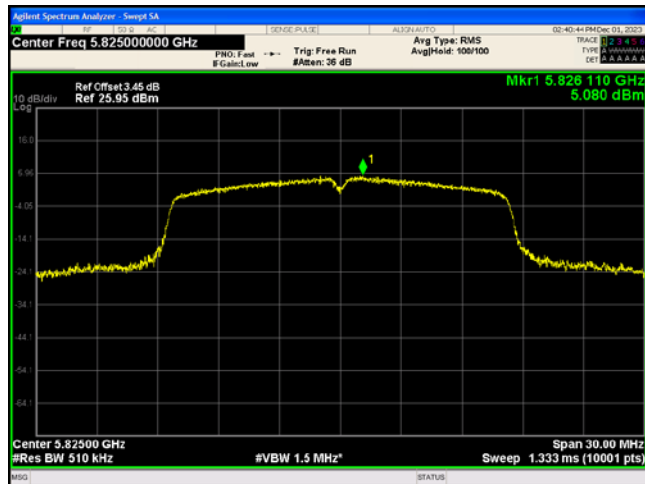
802.11a_5745



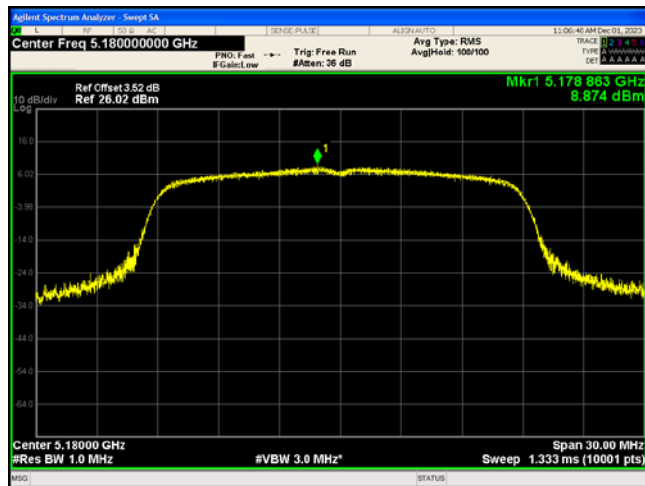
802.11a_5785



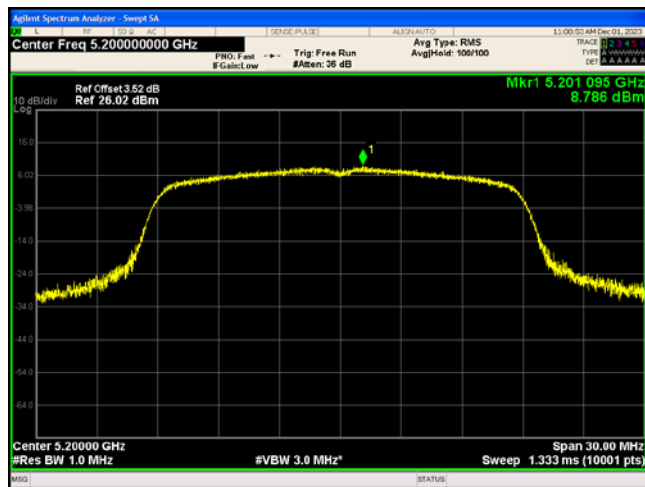
802.11a_5825



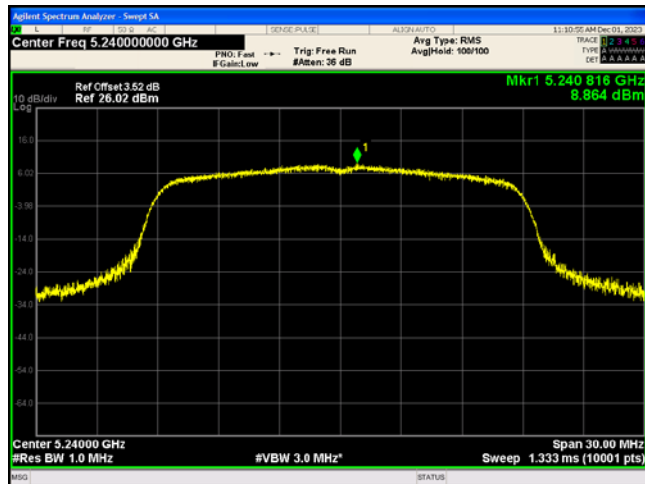
802.11n(HT20)_5180



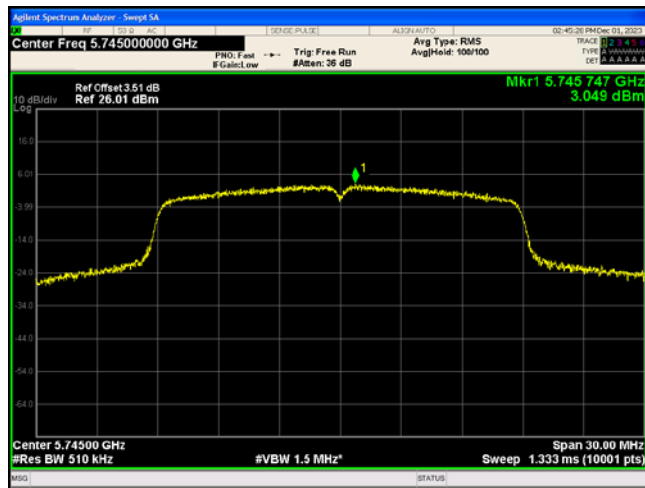
802.11n(HT20)_5200



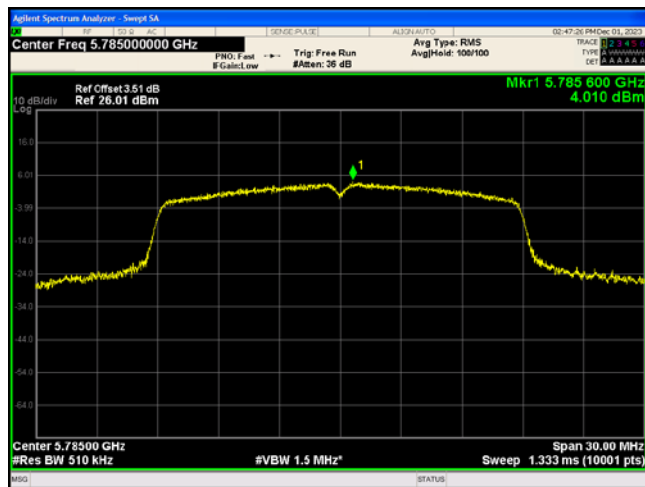
802.11n(HT20)_5240



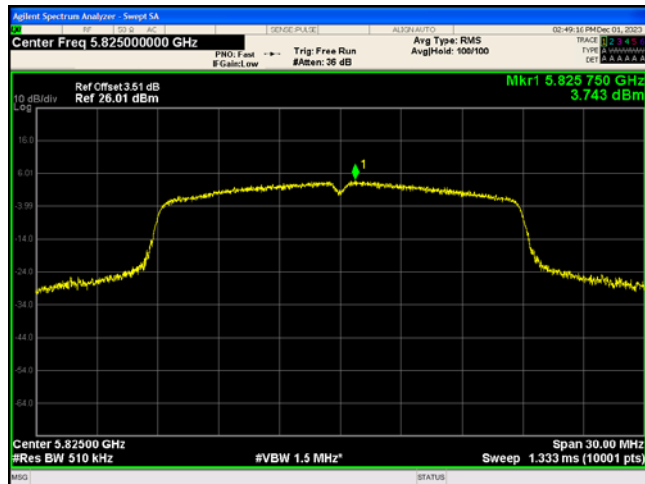
802.11n(HT20)_5745



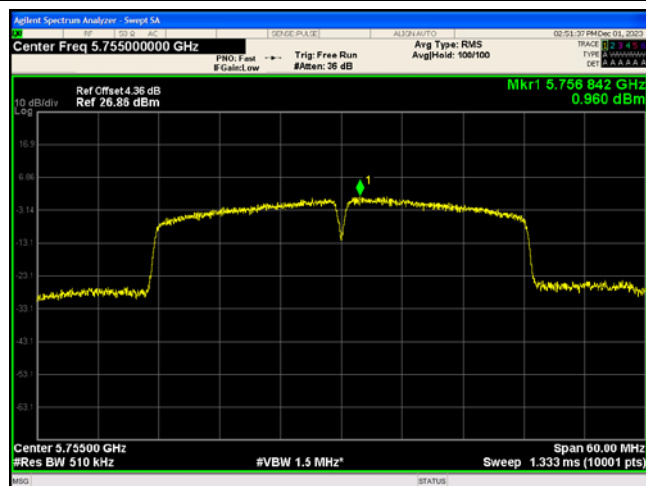
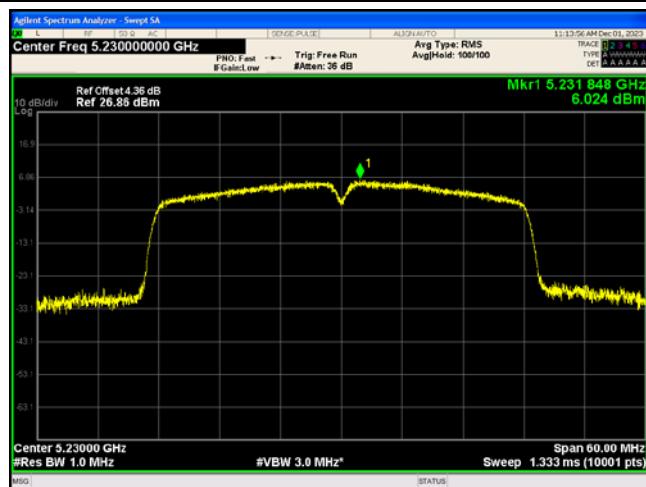
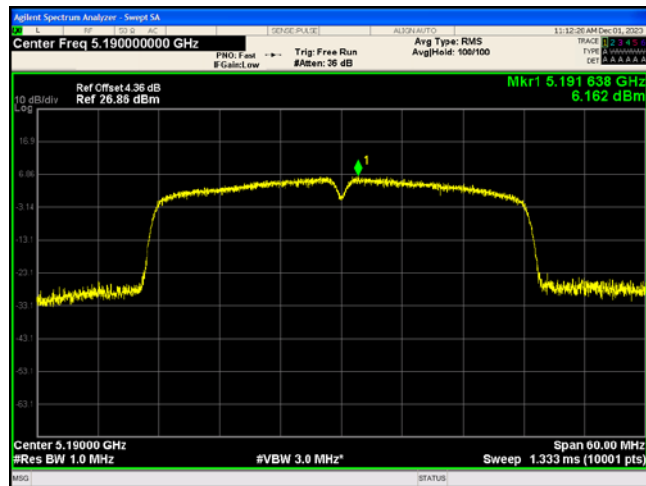
802.11n(HT20)_5785



802.11n(HT20)_5825



802.11n(HT40)_5190





Appendix D: Frequency Stability

Test Result

Condition	Mode	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	Verdict
NT/NV	20MHz	5180.0	5179.972031	-5.40	20	PASS
		5200.0	5199.971731	-5.44		PASS
		5240.0	5239.971356	-5.47		PASS
	40MHz	5190.0	5189.972318	-5.33		PASS
		5230.0	5229.972993	-5.16		PASS
LT/NV	20MHz	5180.0	5179.971981	-5.41		PASS
		5200.0	5199.971681	-5.45		PASS
		5240.0	5239.971368	-5.46		PASS
	40MHz	5190.0	5189.972206	-5.36		PASS
		5230.0	5229.972693	-5.22		PASS
HT/NV	20MHz	5180.0	5179.971868	-5.43		PASS
		5200.0	5199.971643	-5.45		PASS
		5240.0	5239.971306	-5.48		PASS
	40MHz	5190.0	5189.972181	-5.36		PASS
		5230.0	5229.972468	-5.26		PASS
0°C/NV	20MHz	5180.0	5179.971918	-5.42		PASS
		5200.0	5199.971668	-5.45		PASS
		5240.0	5239.971343	-5.47		PASS
	40MHz	5190.0	5189.972118	-5.37		PASS
		5230.0	5229.972368	-5.28		PASS
10°C/NV	20MHz	5180.0	5179.971893	-5.43		PASS
		5200.0	5199.971618	-5.46		PASS
		5240.0	5239.971231	-5.49		PASS
	40MHz	5190.0	5189.971956	-5.40		PASS
		5230.0	5229.972306	-5.30		PASS
20°C/NV	20MHz	5180.0	5179.971868	-5.43		PASS
		5200.0	5199.971593	-5.46		PASS
		5240.0	5239.971181	-5.50		PASS
	40MHz	5190.0	5189.971981	-5.40		PASS
		5230.0	5229.972143	-5.33		PASS
30°C/NV	20MHz	5180.0	5179.971918	-5.42		PASS
		5200.0	5199.971556	-5.47		PASS
		5240.0	5239.971193	-5.50		PASS
	40MHz	5190.0	5189.971906	-5.41		PASS
		5230.0	5229.972043	-5.35		PASS
40°C/NV	20MHz	5180.0	5179.971943	-5.42		PASS
		5200.0	5199.971593	-5.46		PASS
		5240.0	5239.971181	-5.50		PASS
	40MHz	5190.0	5189.972018	-5.39		PASS
		5230.0	5229.971993	-5.36		PASS

45°C/NV	20MHz	5180.0	5179.971956	-5.41		PASS
		5200.0	5199.971618	-5.46		PASS
		5240.0	5239.971193	-5.50		PASS
	40MHz	5190.0	5189.971831	-5.43		PASS
		5230.0	5229.971968	-5.36		PASS

Condition	Mode	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	State
NT/NV	20MHz	5745.0	5744.968093	-5.55	20	PASS
		5785.0	5784.976456	-4.07		PASS
		5825.0	5824.968643	-5.38		PASS
	40MHz	5755.0	5754.968043	-5.55		PASS
		5795.0	5794.967730	-5.57		PASS
LT/NV	20MHz	5745.0	5744.967868	-5.59		PASS
		5785.0	5784.973631	-4.56		PASS
		5825.0	5824.968568	-5.40		PASS
	40MHz	5755.0	5754.967980	-5.56		PASS
		5795.0	5794.967655	-5.58		PASS
HT/NV	20MHz	5745.0	5744.967830	-5.60		PASS
		5785.0	5784.972231	-4.80		PASS
		5825.0	5824.968355	-5.43		PASS
	40MHz	5755.0	5754.968005	-5.56		PASS
		5795.0	5794.967705	-5.57		PASS
0°C/NV	20MHz	5745.0	5744.967793	-5.61		PASS
		5785.0	5784.971406	-4.94		PASS
		5825.0	5824.968318	-5.44		PASS
	40MHz	5755.0	5754.967918	-5.57		PASS
		5795.0	5794.967618	-5.59		PASS
10°C/NV	20MHz	5745.0	5744.967843	-5.60		PASS
		5785.0	5784.970781	-5.05		PASS
		5825.0	5824.968193	-5.46		PASS
	40MHz	5755.0	5754.967918	-5.57		PASS
		5795.0	5794.967643	-5.58		PASS
20°C/NV	20MHz	5745.0	5744.968105	-5.55		PASS
		5785.0	5784.970231	-5.15		PASS
		5825.0	5824.968030	-5.49		PASS
	40MHz	5755.0	5754.967893	-5.58		PASS
		5795.0	5794.967605	-5.59		PASS
30°C/NV	20MHz	5745.0	5744.968155	-5.54		PASS
		5785.0	5784.969780	-5.22		PASS
		5825.0	5824.967905	-5.51		PASS
	40MHz	5755.0	5754.967905	-5.58		PASS
		5795.0	5794.967580	-5.59		PASS
40°C/NV	20MHz	5745.0	5744.968143	-5.55		PASS
		5785.0	5784.969493	-5.27		PASS

	40MHz	5825.0	5824.967780	-5.53		PASS
		5755.0	5754.967943	-5.57		PASS
		5795.0	5794.967643	-5.58		PASS
45°C/NV	20MHz	5745.0	5744.968118	-5.55		PASS
		5785.0	5784.969305	-5.31		PASS
		5825.0	5824.967730	-5.54		PASS
	40MHz	5755.0	5754.967943	-5.57		PASS
		5795.0	5794.967643	-5.58		PASS

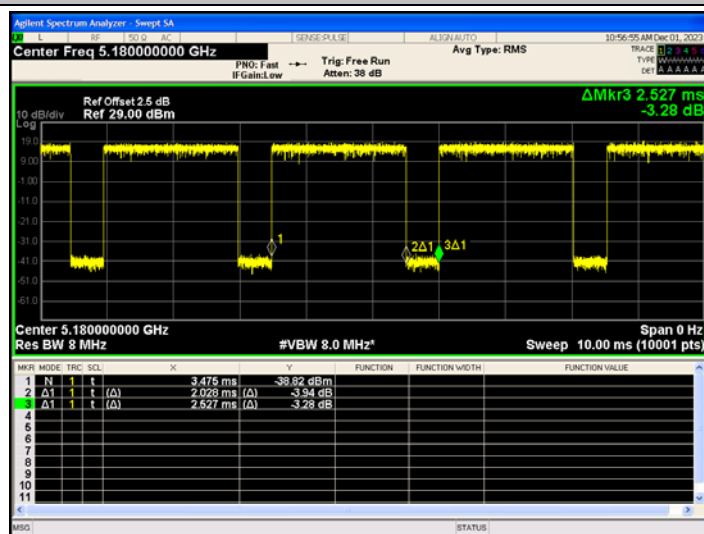
Appendix E: Duty Cycle

Test Result

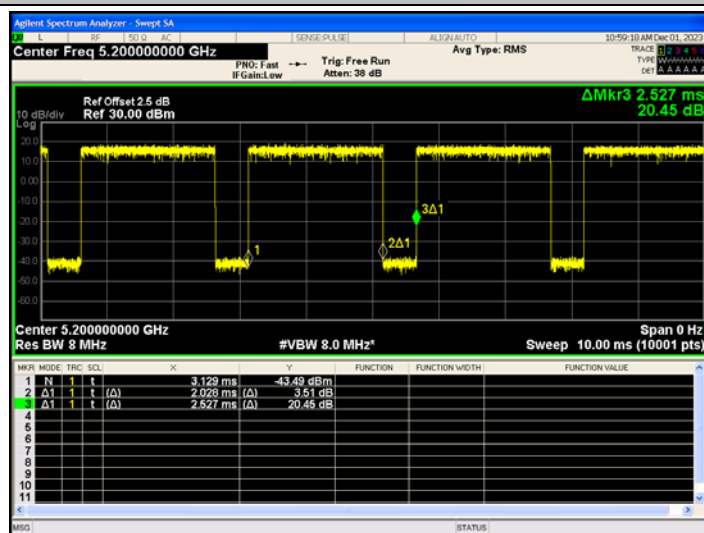
Test Mode	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
802.11a	5180	2.028	2.527	80.25	0.96	0.493	1
	5200	2.028	2.527	80.25	0.96	0.493	1
	5240	2.030	2.527	80.34	0.95	0.493	1
	5745	2.030	2.527	80.34	0.95	0.493	1
	5785	2.030	2.528	80.29	0.95	0.493	1
	5825	2.032	2.528	80.35	0.95	0.492	1
802.11n(HT20)	5180	1.892	2.391	79.13	1.02	0.529	1
	5200	1.892	2.391	79.13	1.02	0.529	1
	5240	1.892	2.392	79.10	1.02	0.529	1
	5745	1.895	2.392	79.23	1.01	0.528	1
	5785	1.894	2.390	79.22	1.01	0.528	1
	5825	1.895	2.392	79.23	1.01	0.528	1
802.11n(HT40)	5190	0.931	1.431	65.09	1.86	1.074	2
	5230	0.932	1.431	65.13	1.86	1.073	2
	5755	0.932	1.431	65.13	1.86	1.073	2
	5795	0.933	1.432	65.15	1.86	1.072	2

Test Graphs

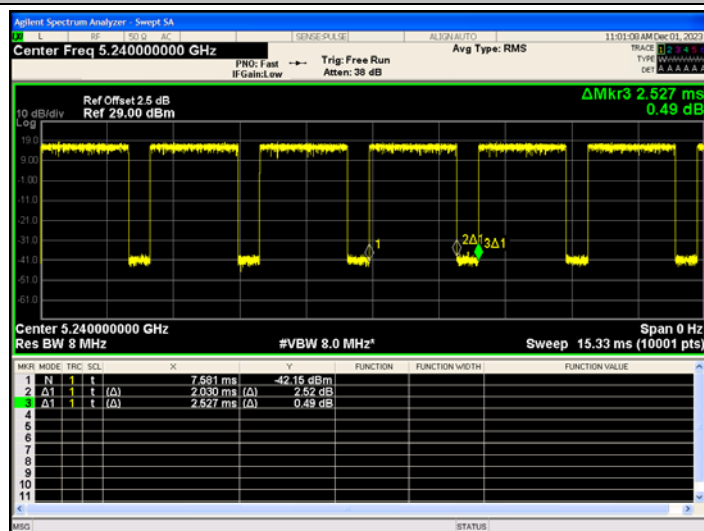
802.11a_5180



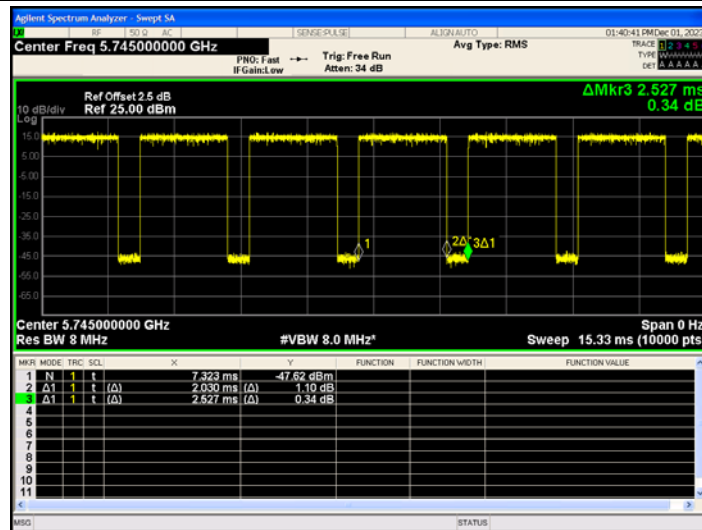
802.11a_5200



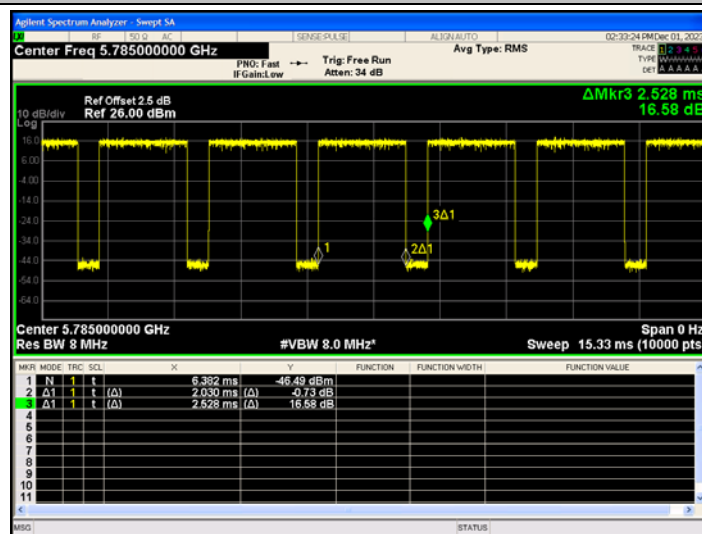
802.11a_5240



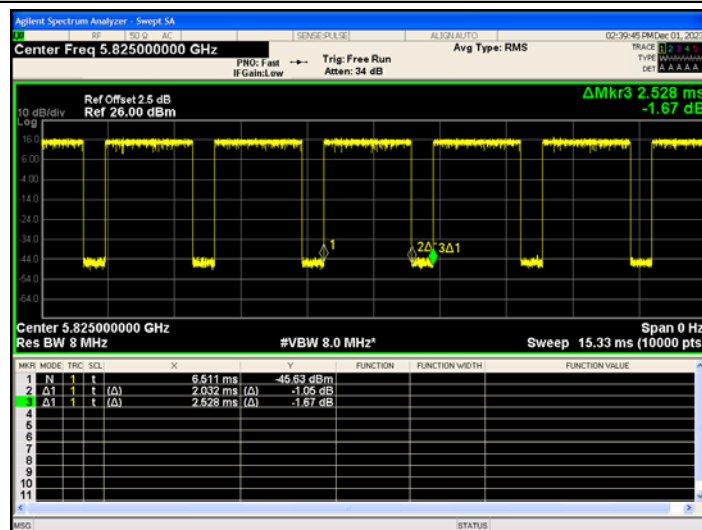
802.11a_5745



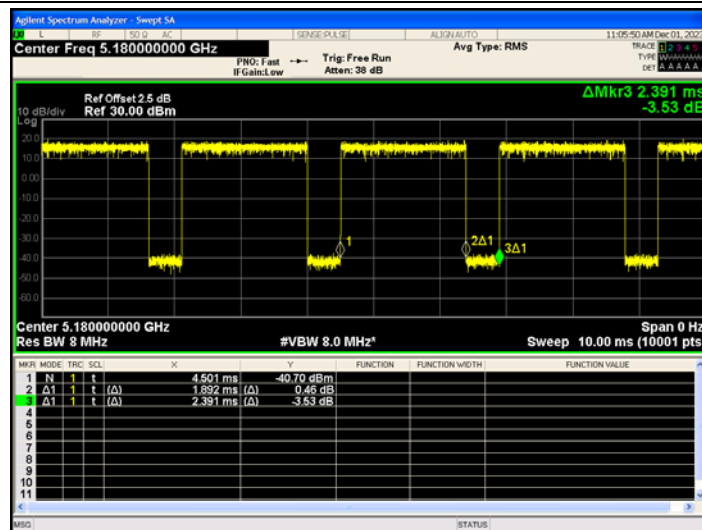
802.11a_5785



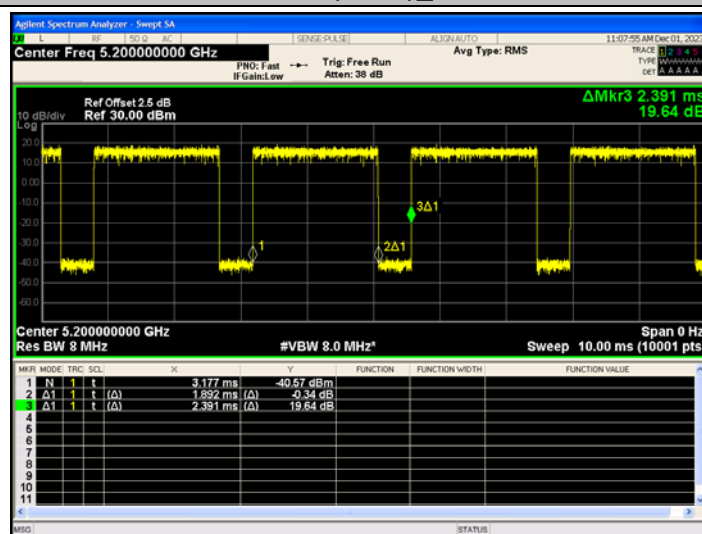
802.11a_5825



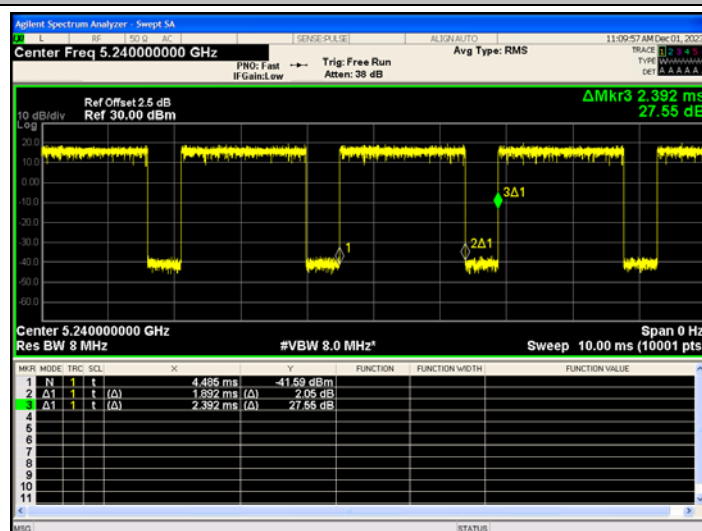
802.11n(HT20)_5180



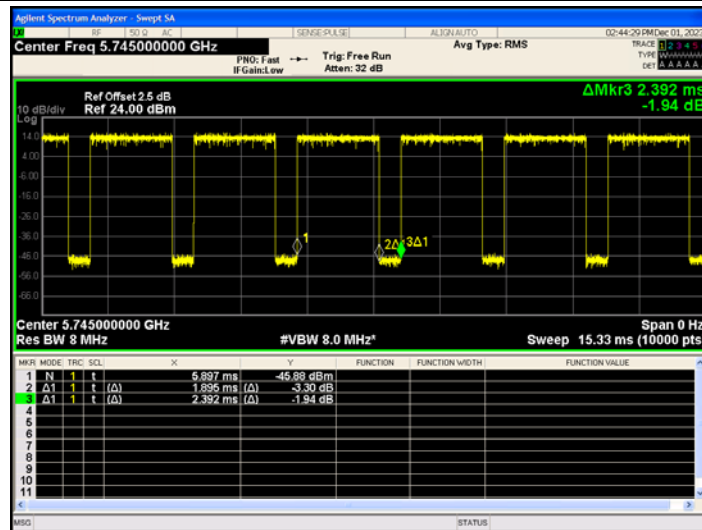
802.11n(HT20)_5200



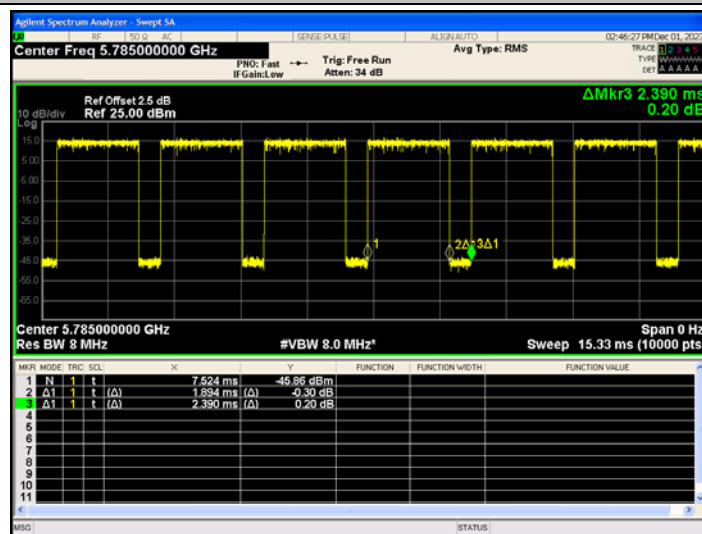
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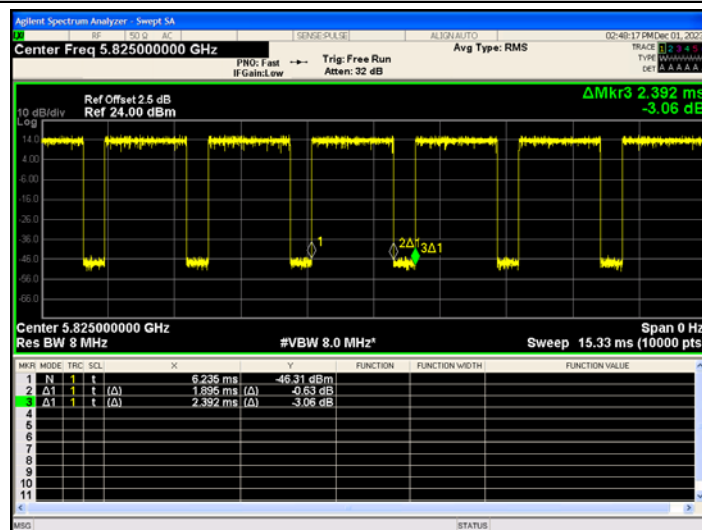
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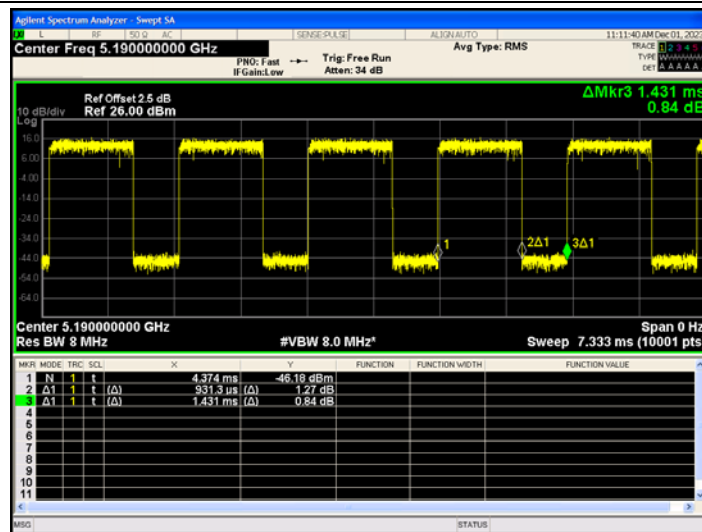
802.11n(HT20)_5785



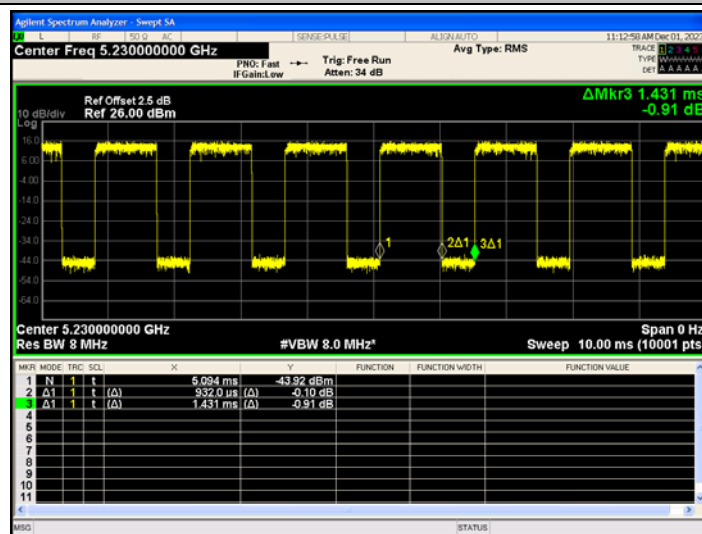
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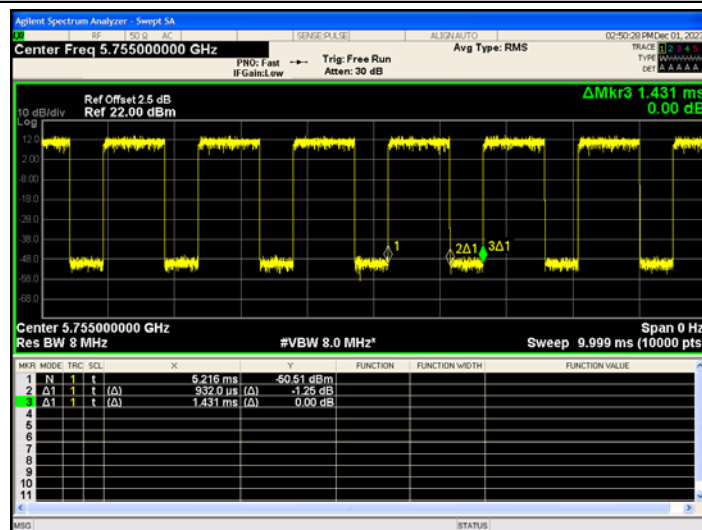
802.11n(HT40)_5190



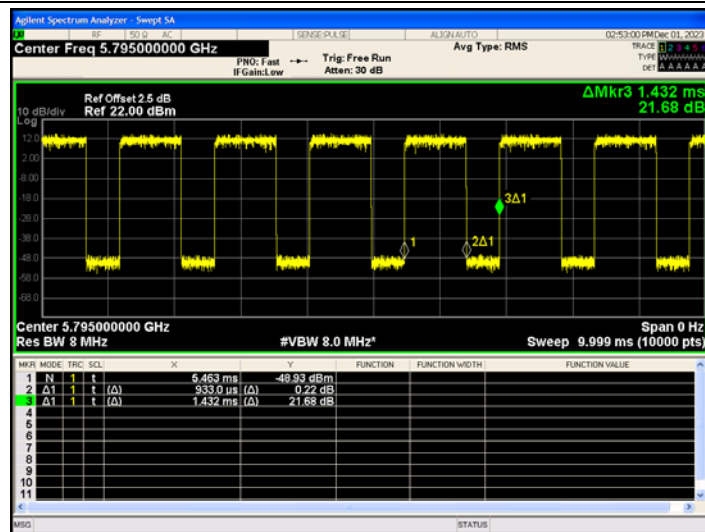
802.11n(HT40)_5230



802.11n(HT40)_5755



802.11n(HT40)_5795



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