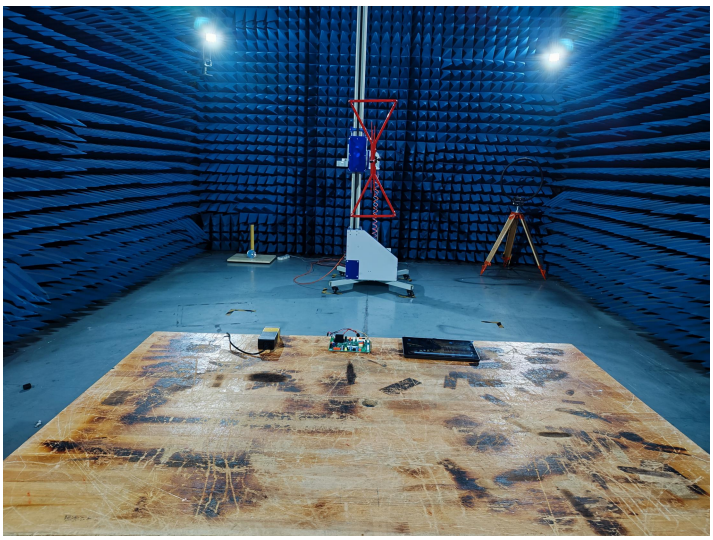
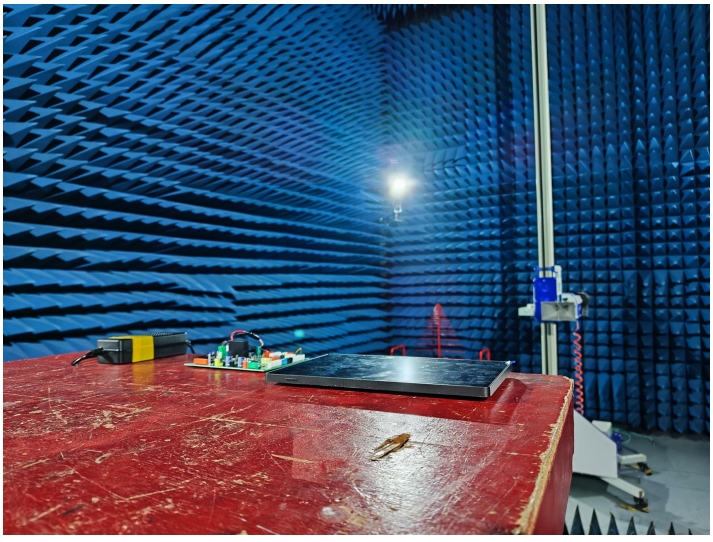
6 Test Setup Photos of the EUT





7 Photos of the EUT

see photo report.

APPENDIX I. Frequency Stability

Test Result

Note:Measured all conditions and recorded worst case.

U-NII 1

Mode:IEEE 802.11a							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	36	5180.0	5180.002456	0.47	Within authorized band	PASS
20	21.6	36	5180.0	5180.002494	0.48		PASS
50	24	36	5180.0	5180.001294	0.25		PASS
40	24	36	5180.0	5180.001731	0.33		PASS
30	24	36	5180.0	5180.002294	0.44		PASS
20	24	36	5180.0	5180.002630	0.51		PASS
10	24	36	5180.0	5180.001056	0.20		PASS
0	24	36	5180.0	5180.001059	0.20		PASS
-10	24	36	5180.0	5180.002369	0.46		PASS
-20	24	36	5180.0	5180.003020	0.58		PASS
-30	24	36	5180.0	5180.002248	0.43		PASS

Mode:IEEE 802.11n_20							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	36	5180.0	5180.002100	0.41	Within authorized band	PASS
20	21.6	36	5180.0	5180.002302	0.44		PASS
50	24	36	5180.0	5180.001899	0.37		PASS
40	24	36	5180.0	5180.001695	0.33		PASS
30	24	36	5180.0	5180.003041	0.59		PASS
20	24	36	5180.0	5180.003000	0.58		PASS
10	24	36	5180.0	5180.004126	0.80		PASS
0	24	36	5180.0	5180.002647	0.51		PASS
-10	24	36	5180.0	5180.002652	0.51		PASS
-20	24	36	5180.0	5180.003112	0.60		PASS
-30	24	36	5180.0	5180.002521	0.49		PASS

Mode:IEEE 802.11n_40							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	38	5190.0	5190.002306	0.44	Within authorized band	PASS
20	21.6	38	5190.0	5190.002222	0.43		PASS
50	24	38	5190.0	5190.002965	0.57		PASS
40	24	38	5190.0	5190.002102	0.41		PASS
30	24	38	5190.0	5190.003302	0.64		PASS
20	24	38	5190.0	5190.002356	0.45		PASS
10	24	38	5190.0	5190.002741	0.53		PASS
0	24	38	5190.0	5190.002845	0.55		PASS
-10	24	38	5190.0	5190.002966	0.57		PASS
-20	24	38	5190.0	5190.002645	0.51		PASS
-30	24	38	5190.0	5190.002790	0.54		PASS

U-NII 2A

Mode:IEEE 802.11a							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	52	5260.0	5260.002456	0.47	Within authorized band	PASS
20	21.6	52	5260.0	5260.003912	0.74		PASS
50	24	52	5260.0	5260.002875	0.55		PASS
40	24	52	5260.0	5260.002699	0.51		PASS
30	24	52	5260.0	5260.002360	0.45		PASS
20	24	52	5260.0	5260.002874	0.55		PASS
10	24	52	5260.0	5260.002520	0.48		PASS
0	24	52	5260.0	5260.004710	0.90		PASS
-10	24	52	5260.0	5260.005520	1.05		PASS
-20	24	52	5260.0	5260.003564	0.68		PASS
-30	24	52	5260.0	5260.005241	1.00		PASS

Mode:IEEE 802.11n_20							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	52	5260.0	5260.001745	0.33	Within authorized band	PASS
20	21.6	52	5260.0	5260.002852	0.54		PASS
50	24	52	5260.0	5260.002745	0.52		PASS
40	24	52	5260.0	5260.002698	0.51		PASS
30	24	52	5260.0	5260.003052	0.58		PASS
20	24	52	5260.0	5260.003033	0.58		PASS
10	24	52	5260.0	5260.002847	0.54		PASS
0	24	52	5260.0	5260.002906	0.55		PASS
-10	24	52	5260.0	5260.002847	0.54		PASS
-20	24	52	5260.0	5260.002555	0.49		PASS
-30	24	52	5260.0	5260.002539	0.48		PASS

Mode:IEEE 802.11n_40							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	54	5270.0	5270.002306	0.44	Within authorized band	PASS
20	21.6	54	5270.0	5270.003860	0.73		PASS
50	24	54	5270.0	5270.003301	0.63		PASS
40	24	54	5270.0	5270.002846	0.54		PASS
30	24	54	5270.0	5270.002701	0.51		PASS
20	24	54	5270.0	5270.002758	0.52		PASS
10	24	54	5270.0	5270.002863	0.54		PASS
0	24	54	5270.0	5270.002748	0.52		PASS
-10	24	54	5270.0	5270.001995	0.38		PASS
-20	24	54	5270.0	5270.002633	0.50		PASS
-30	24	54	5270.0	5270.002754	0.52		PASS

U-NII 2C

Mode:IEEE 802.11a							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	100	5500.0	5500.003210	0.58	Within authorized band	PASS
20	21.6	100	5500.0	5500.003002	0.55		PASS
50	24	100	5500.0	5500.002870	0.52		PASS
40	24	100	5500.0	5500.002630	0.48		PASS
30	24	100	5500.0	5500.002881	0.52		PASS
20	24	100	5500.0	5500.002963	0.54		PASS
10	24	100	5500.0	5500.003005	0.55		PASS
0	24	100	5500.0	5500.003104	0.56		PASS
-10	24	100	5500.0	5500.004002	0.73		PASS
-20	24	100	5500.0	5500.003890	0.71		PASS
-30	24	100	5500.0	5500.003623	0.66		PASS

Mode:IEEE 802.11n_20							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	100	5500.0	5500.001999	0.36	Within authorized band	PASS
20	21.6	100	5500.0	5500.003302	0.60		PASS
50	24	100	5500.0	5500.002458	0.45		PASS
40	24	100	5500.0	5500.002479	0.45		PASS
30	24	100	5500.0	5500.002636	0.48		PASS
20	24	100	5500.0	5500.002714	0.49		PASS
10	24	100	5500.0	5500.002842	0.52		PASS
0	24	100	5500.0	5500.002696	0.49		PASS
-10	24	100	5500.0	5500.002794	0.51		PASS
-20	24	100	5500.0	5500.002815	0.51		PASS
-30	24	100	5500.0	5500.002963	0.54		PASS

Mode:IEEE 802.11n_40							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	102	5510.0	5510.002306	0.42	Within authorized band	PASS
20	21.6	102	5510.0	5510.002874	0.52		PASS
50	24	102	5510.0	5510.002990	0.54		PASS
40	24	102	5510.0	5510.003054	0.55		PASS
30	24	102	5510.0	5510.004125	0.75		PASS
20	24	102	5510.0	5510.001994	0.36		PASS
10	24	102	5510.0	5510.002369	0.43		PASS
0	24	102	5510.0	5510.002247	0.41		PASS
-10	24	102	5510.0	5510.001066	0.19		PASS
-20	24	102	5510.0	5510.001898	0.34		PASS
-30	24	102	5510.0	5510.002888	0.52		PASS

U-NII 3

Mode:IEEE 802.11a							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	149	5745.0	5745.001599	0.28	Within authorized band	PASS
20	21.6	149	5745.0	5745.001586	0.28		PASS
50	24	149	5745.0	5745.002455	0.43		PASS
40	24	149	5745.0	5745.002777	0.48		PASS
30	24	149	5745.0	5745.002896	0.50		PASS
20	24	149	5745.0	5745.001299	0.23		PASS
10	24	149	5745.0	5745.005210	0.91		PASS
0	24	149	5745.0	5745.002542	0.44		PASS
-10	24	149	5745.0	5745.002698	0.47		PASS
-20	24	149	5745.0	5745.004712	0.82		PASS
-30	24	149	5745.0	5745.004002	0.70		PASS

Mode:IEEE 802.11n_20							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	149	5745.0	5745.001899	0.33	Within authorized band	PASS
20	21.6	149	5745.0	5745.002005	0.35		PASS
50	24	149	5745.0	5745.002102	0.37		PASS
40	24	149	5745.0	5745.002026	0.35		PASS
30	24	149	5745.0	5745.002052	0.36		PASS
20	24	149	5745.0	5745.002145	0.37		PASS
10	24	149	5745.0	5745.002632	0.46		PASS
0	24	149	5745.0	5745.002582	0.45		PASS
-10	24	149	5745.0	5745.002471	0.43		PASS
-20	24	149	5745.0	5745.002252	0.39		PASS
-30	24	149	5745.0	5745.002447	0.43		PASS

Mode:IEEE 802.11n_40							
Temperature (℃)	Voltage (V)	Ch.	Center Frequency (MHz)	Calculated Value of Center Frequency(MHz)	Result (ppm)	Limit (ppm)	result
20	26.4	151	5755.0	5755.001995	0.35	Within authorized band	PASS
20	21.6	151	5755.0	5755.002484	0.43		PASS
50	24	151	5755.0	5755.002411	0.42		PASS
40	24	151	5755.0	5755.002630	0.46		PASS
30	24	151	5755.0	5755.002741	0.48		PASS
20	24	151	5755.0	5755.002852	0.50		PASS
10	24	151	5755.0	5755.004766	0.83		PASS
0	24	151	5755.0	5755.004587	0.80		PASS
-10	24	151	5755.0	5755.003052	0.53		PASS
-20	24	151	5755.0	5755.003885	0.68		PASS
-30	24	151	5755.0	5755.003015	0.52		PASS

APPENDIX II. Conducted Output Power

Conducted output power

Mode	Channel	Ant. 0 (dBm) Detector(AVG)	Duty Cycle Factor (dB)	Ant (dBm)	Limit (dBm)	Result
IEEE 802.11a	36	12.94	2.1882	15.1282	≤24	PASS
	40	13.70	2.321	16.0210	≤24	PASS
	48	13.65	2.3158	15.9658	≤24	PASS
	52	12.42	2.1882	14.6082	≤24	PASS
	56	11.15	2.1882	13.3382	≤24	PASS
	64	10.74	2.3158	13.0558	≤24	PASS
	100	12.67	2.321	14.9910	≤24	PASS
	120	14.52	2.321	16.8410	≤24	PASS
	140	13.65	2.1882	15.8382	≤24	PASS
IEEE 802.11n_20	36	12.45	2.5814	15.0314	≤24	PASS
	40	13.26	2.579	15.8390	≤24	PASS
	48	13.07	2.5767	15.6467	≤24	PASS
	52	11.83	2.5845	14.4145	≤24	PASS
	56	11.75	2.5908	14.3408	≤24	PASS
	64	11.26	2.579	13.8390	≤24	PASS
	100	13.52	2.5845	16.1045	≤24	PASS
	120	11.01	2.579	13.5890	≤24	PASS
	140	11.50	2.579	14.0790	≤24	PASS
IEEE 802.11n_40	38	6.80	4.6967	11.4967	≤24	PASS
	46	10.94	4.689	15.6290	≤24	PASS
	54	11.92	4.7031	16.6231	≤24	PASS
	62	7.29	4.6852	11.9752	≤24	PASS
	102	7.21	4.698	11.9080	≤24	PASS
	118	12.32	4.689	17.0090	≤24	PASS
	134	11.30	4.6942	15.9942	≤24	PASS

Conducted output power

Mode	Channel	Ant. 0 (dBm) Detector(AVG)	Duty Cycle Factor (dB)	Ant (dBm)	Limit (dBm)	Result
IEEE 802.11a	149	15.85	2.3181	18.1681	≤30	PASS
	157	15.89	2.1882	18.0782	≤30	PASS
	165	14.07	2.3232	16.3932	≤30	PASS
IEEE 802.11n_20	149	13.32	2.5814	15.9014	≤30	PASS
	157	13.33	2.579	15.9090	≤30	PASS
	165	12.31	2.5861	14.8961	≤30	PASS
IEEE 802.11n_40	151	13.16	4.6852	17.8452	≤30	PASS
	159	9.30	4.689	13.9890	≤30	PASS

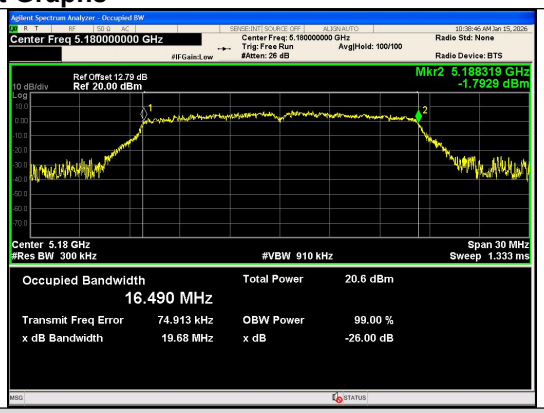
Note:Ant(dBm)=Ant.0(dBm)+Duty Cycle Factor (dB)

APPENDIX III. 99% Bandwidth

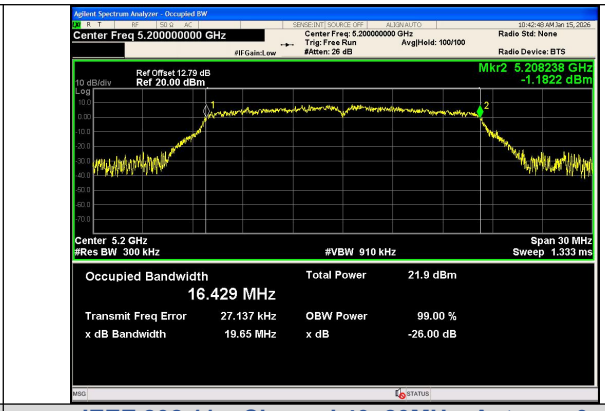
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	36	0	5180	16.490
	40		5200	16.429
	48		5240	16.470
	52		5260	16.456
	56		5280	16.446
	64		5320	16.451
	100		5500	16.487
	120		5600	16.436
	140		5700	16.468
IEEE 802.11n_20	36		5180	17.618
	40		5200	17.550
	48		5240	17.534
	52		5260	17.584
	56		5280	17.564
	64		5320	17.566
	100		5500	17.590
	120		5600	17.590
	140		5700	17.557
IEEE 802.11n_40	38		5190	35.889
	46		5230	35.932
	54		5270	35.905
	62		5310	35.957
	102		5510	35.903
	118		5590	35.906
	134		5670	35.963

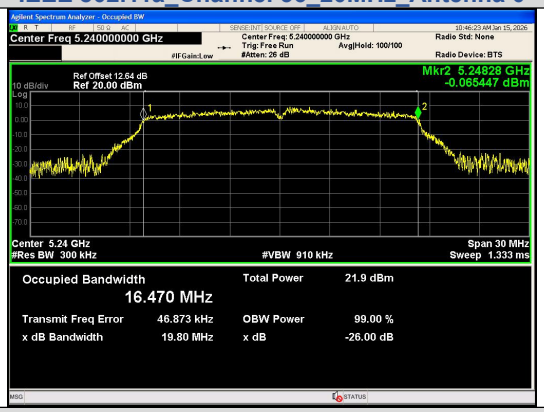
Test Graphs



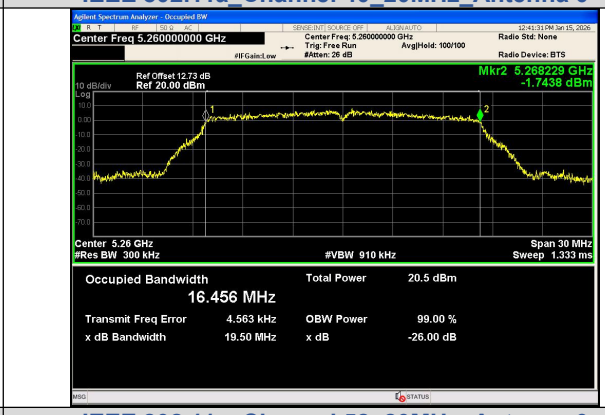
IEEE 802.11a_Channel 36_20MHz_Antenna 0



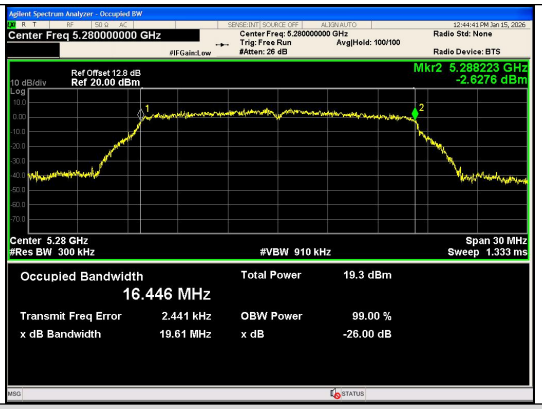
IEEE 802.11a_Channel 40_20MHz_Antenna 0



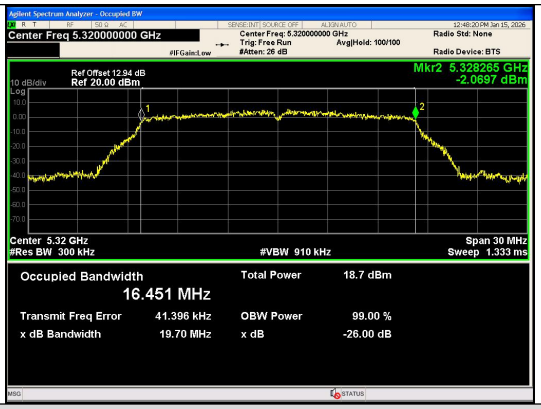
IEEE 802.11a_Channel 48_20MHz_Antenna 0



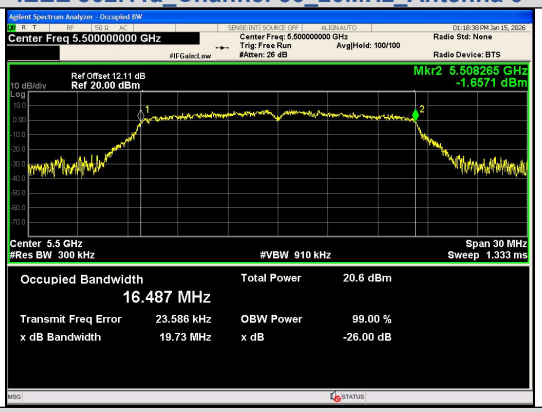
IEEE 802.11a_Channel 52_20MHz_Antenna 0



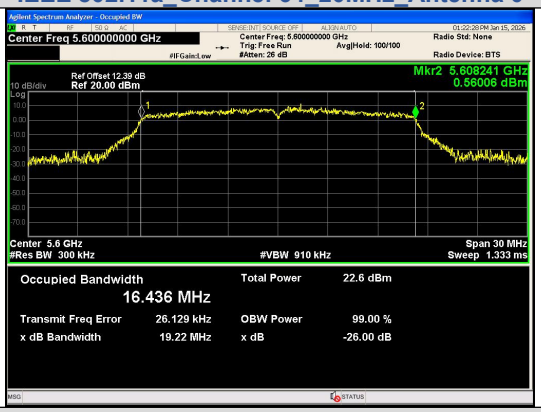
IEEE 802.11a_Channel 56_20MHz_Antenna 0



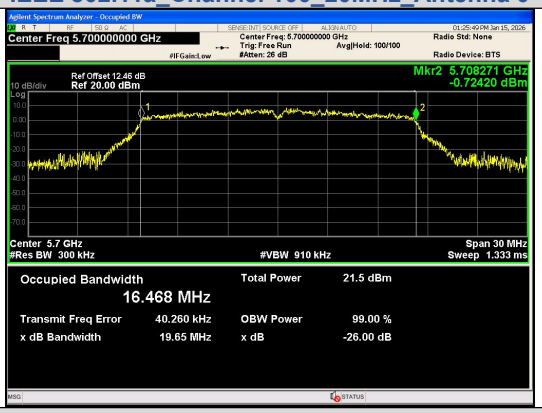
IEEE 802.11a_Channel 64_20MHz_Antenna 0



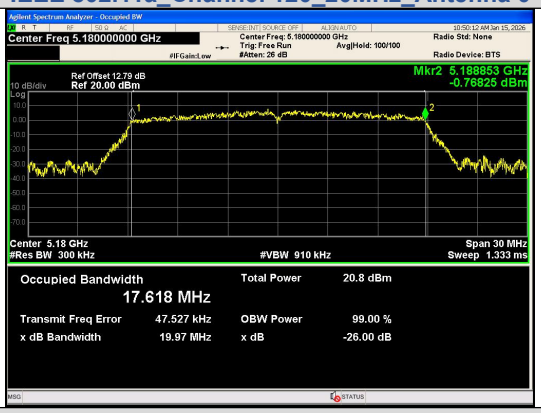
IEEE 802.11a_Channel 100_20MHz_Antenna 0



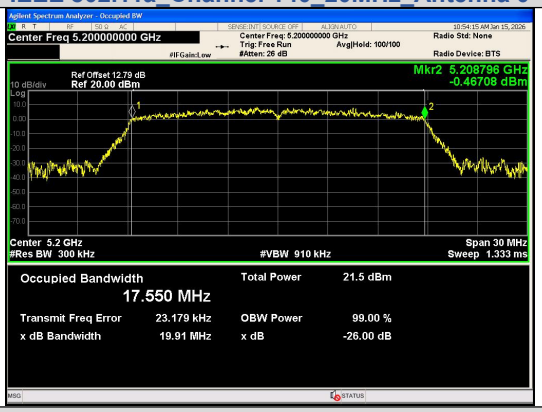
IEEE 802.11a_Channel 120_20MHz_Antenna 0



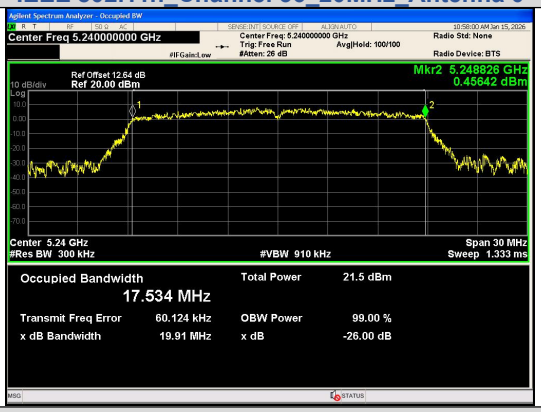
IEEE 802.11a_Channel 140_20MHz_Antenna 0



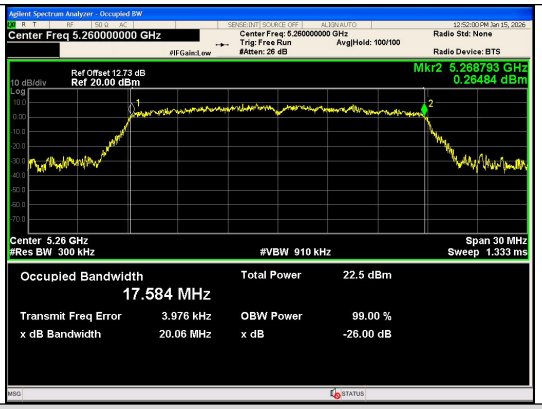
IEEE 802.11n_Channel 36_20MHz_Antenna 0



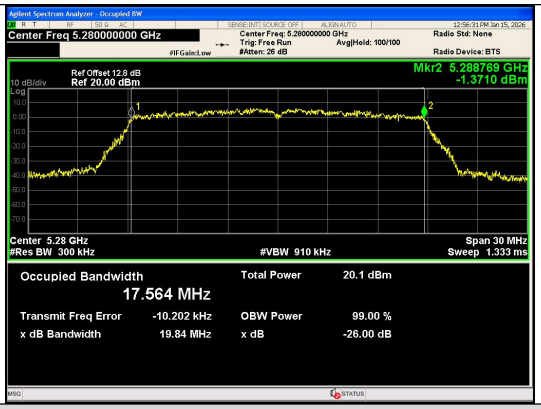
IEEE 802.11n_Channel 40_20MHz_Antenna 0



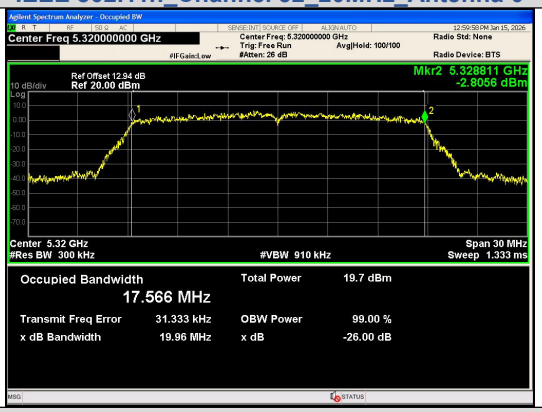
IEEE 802.11n_Channel 48_20MHz_Antenna 0



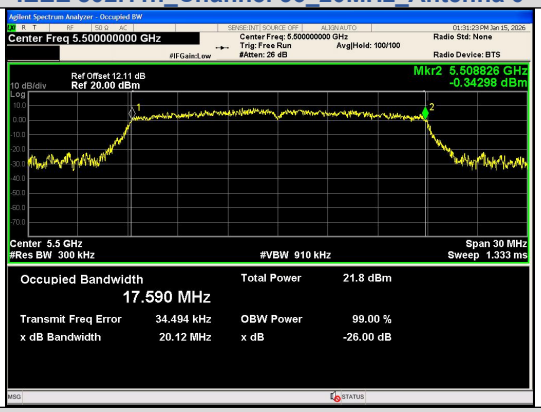
IEEE 802.11n_Channel 52_20MHz_Antenna 0



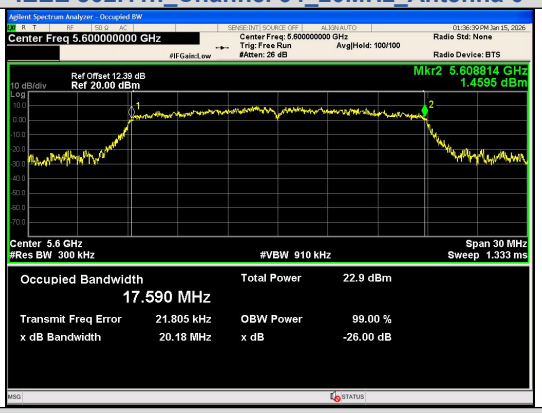
IEEE 802.11n_Channel 56_20MHz_Antenna 0



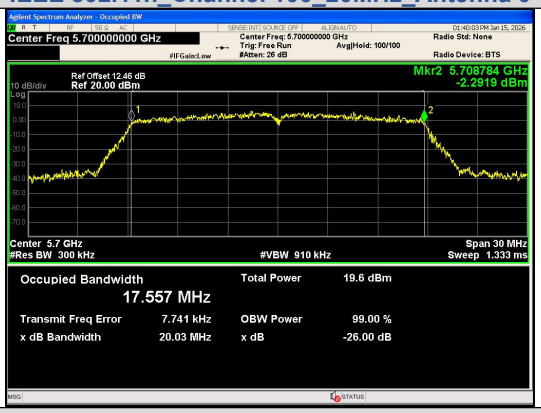
IEEE 802.11n_Channel 64_20MHz_Antenna 0



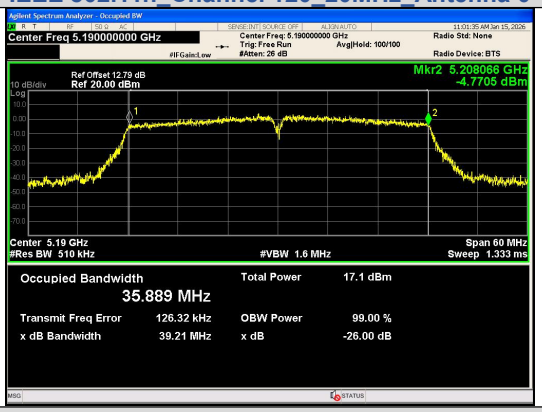
IEEE 802.11n_Channel 100_20MHz_Antenna 0



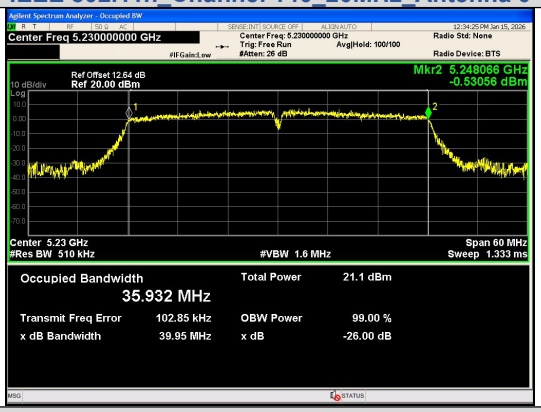
IEEE 802.11n_Channel 120_20MHz_Antenna 0



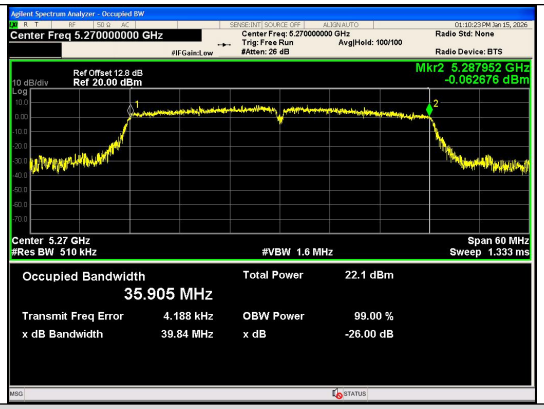
IEEE 802.11n_Channel 140_20MHz_Antenna 0



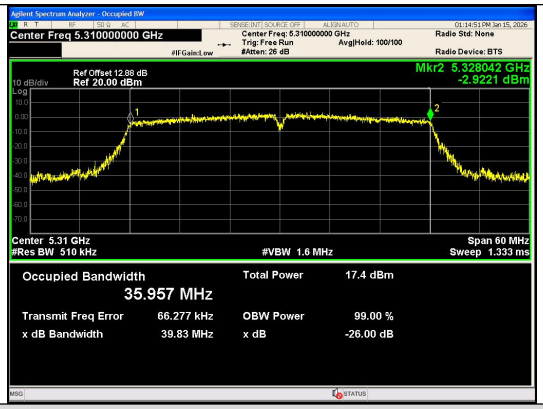
IEEE 802.11n_Channel 38_40MHz_Antenna 0



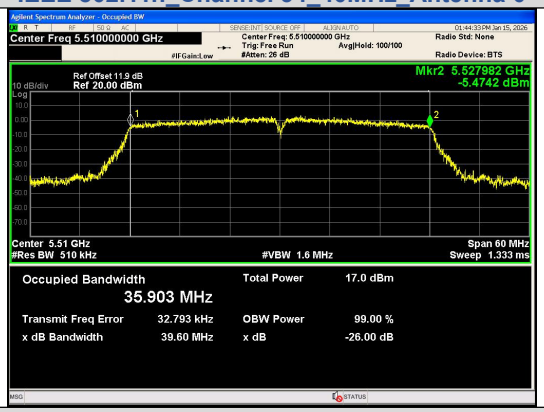
IEEE 802.11n_Channel 46_40MHz_Antenna 0



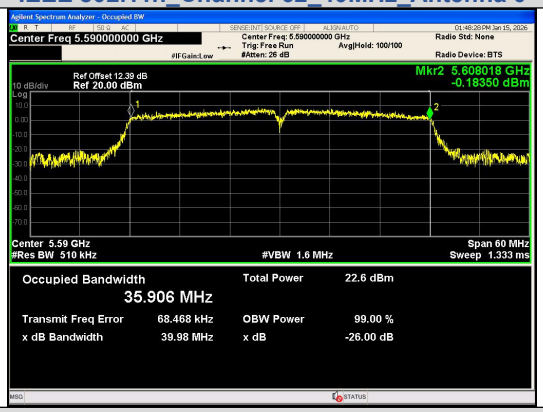
IEEE 802.11n_Channel 54_40MHz_Antenna 0



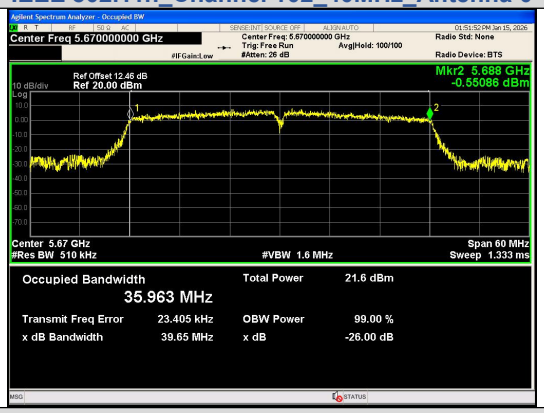
IEEE 802.11n_Channel 62_40MHz_Antenna 0



IEEE 802.11n_Channel 102_40MHz_Antenna 0



IEEE 802.11n_Channel 118_40MHz_Antenna 0

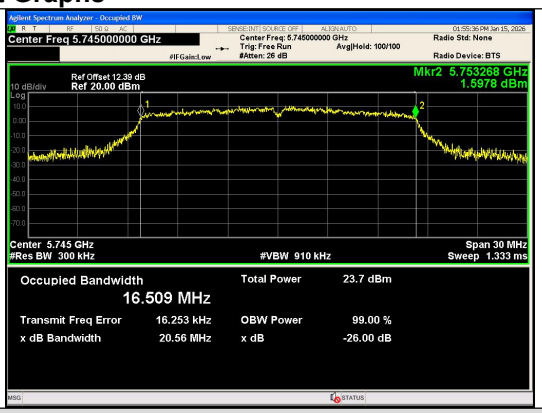


IEEE 802.11n_Channel 134_40MHz_Antenna 0

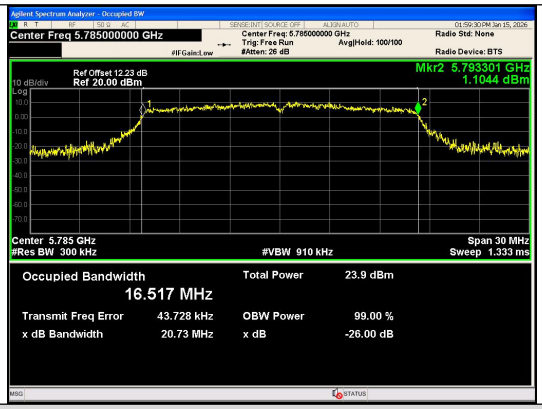
Test Result

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11a	149	0	5745	16.509
	157		5785	16.517
	165		5825	16.502
IEEE 802.11n_20	149		5745	17.578
	157		5785	17.613
	165		5825	17.597
IEEE 802.11n_40	151		5755	35.986
	159		5795	35.907

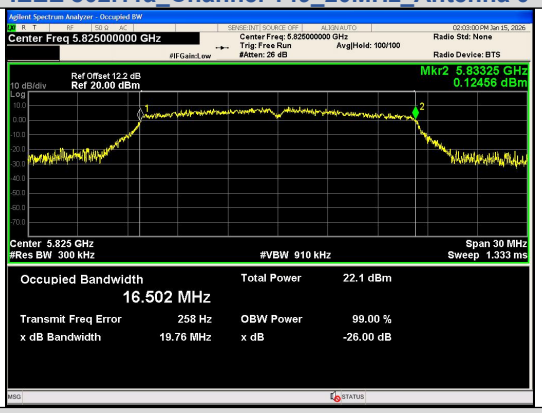
Test Graphs



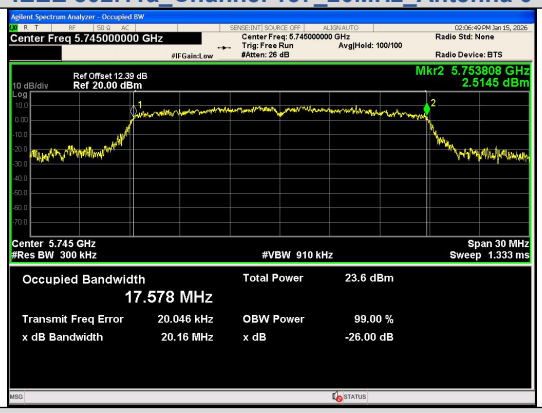
IEEE 802.11a_Channel 149_20MHz_Antenna 0



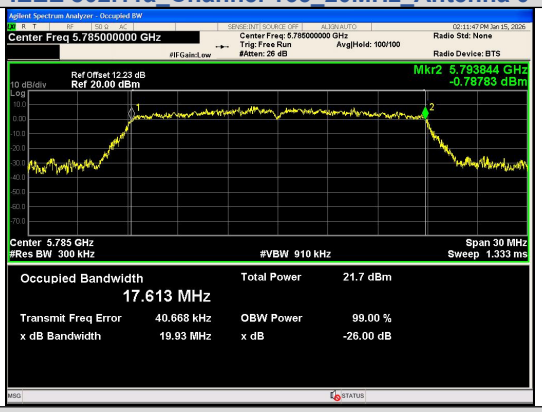
IEEE 802.11a_Channel 157_20MHz_Antenna 0



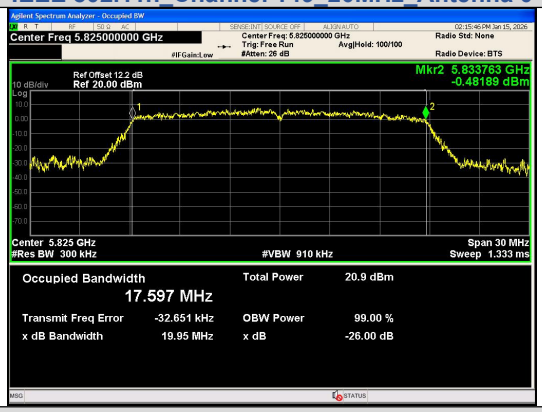
IEEE 802.11a_Channel 165_20MHz_Antenna 0



IEEE 802.11n_Channel 149_20MHz_Antenna 0



IEEE 802.11n_Channel 157_20MHz_Antenna 0



IEEE 802.11n_Channel 165_20MHz_Antenna 0