Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: 4G LTE WIFI ROUTER

Trade Mark: N/A

Test Model: FG8002AC

Environmental Conditions

Temperature:	23.4 ° C
Relative Humidity:	55.7%
ATM Pressure:	100.0 kPa
Test Engineer:	Keven Wu
Supervised by:	Henry Wang

A.1 MAXIMUM CONDUCTED OUTPUT POWER

Test Result

Condition	Mode	Frequency (MHz)	Antenna	Maximum peak conducted output power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.89	30	Pass
NVNT	b	2437	Ant1	14.72	30	Pass
NVNT	b	2462	Ant1	15.06	30	Pass
NVNT	g	2412	Ant1	18.70	30	Pass
NVNT	g	2437	Ant1	19.46	30	Pass
NVNT	g	2462	Ant1	18.50	30	Pass
NVNT	n20	2412	Ant1	18.11	30	Pass
NVNT	n20	2437	Ant1	19.64	30	Pass
NVNT	n20	2462	Ant1	18.75	30	Pass
NVNT	n40	2422	Ant1	20.06	30	Pass
NVNT	n40	2437	Ant1	20.25	30	Pass
NVNT	n40	2452	Ant1	19.87	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Maximum peak conducted output power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant2	14.48	30	Pass
NVNT	b	2437	Ant2	15.37	30	Pass
NVNT	b	2462	Ant2	15.09	30	Pass
NVNT	g	2412	Ant2	16.73	30	Pass
NVNT	g	2437	Ant2	16.38	30	Pass
NVNT	g	2462	Ant2	15.65	30	Pass
NVNT	n20	2412	Ant2	14.97	30	Pass
NVNT	n20	2437	Ant2	16.24	30	Pass
NVNT	n20	2462	Ant2	16.48	30	Pass
NVNT	n40	2422	Ant2	16.50	30	Pass
NVNT	n40	2437	Ant2	16.71	30	Pass
NVNT	n40	2452	Ant2	17.32	30	Pass

MIMO

Condition	Mode	Frequency (MHz)	Total Power (dBm)			Limit (dBm)	Verdict
			Ant1	Ant2	Ant1+Ant2		
NVNT	n20	2412	16.14	12.68	19.83	28.06	Pass
NVNT	n20	2437	16.06	12.66	21.27	28.06	Pass
NVNT	n20	2462	16.18	12.79	20.77	28.06	Pass
NVNT	n40	2422	15.75	12.36	21.65	28.06	Pass
NVNT	n40	2437	15.78	12.24	21.84	28.06	Pass
NVNT	n40	2452	15.90	12.13	21.79	28.06	Pass

A.2 99% BANDWIDTH

Test Result

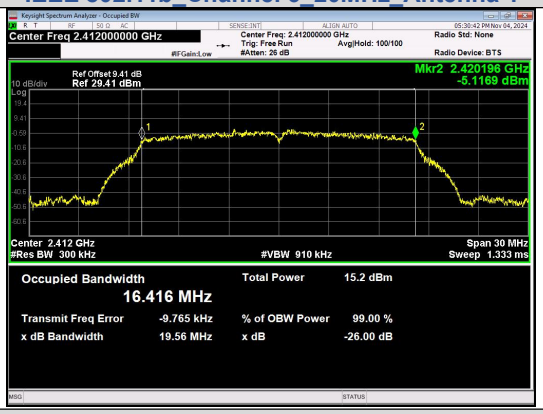
Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	1	2412	14.151
	6		2437	14.171
	11		2462	14.215
IEEE 802.11g	1		2412	16.416
	6		2437	16.394
	11		2462	16.396
IEEE 802.11n_20	1		2412	17.585
	6		2437	17.534
	11		2462	17.567
IEEE 802.11n_40	3		2422	35.875
	6		2437	35.792
	9		2452	35.905

Test Graphs

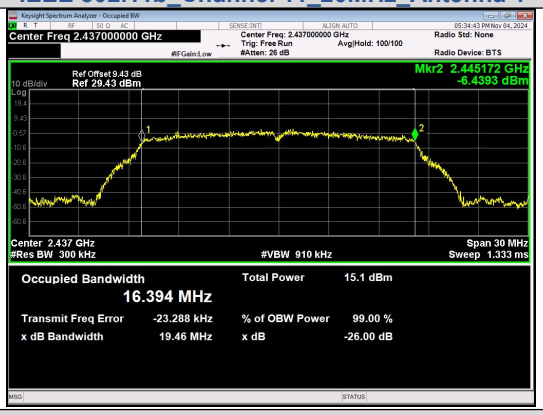
IEEE 802.11b_Channel 1_20MHz_Antenna 1

IEEE 802.11b_Channel 6_20MHz_Antenna 1

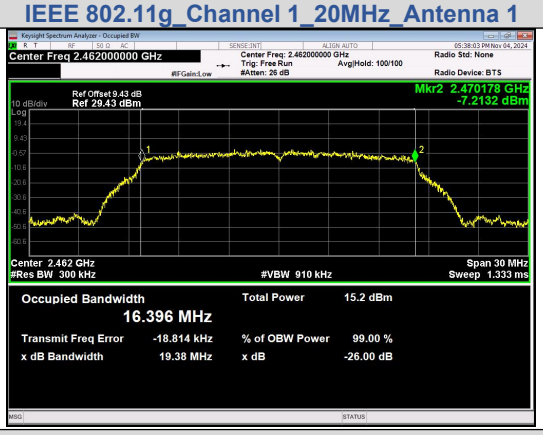
IEEE 802.11b_Channel 11_20MHz_Antenna 1



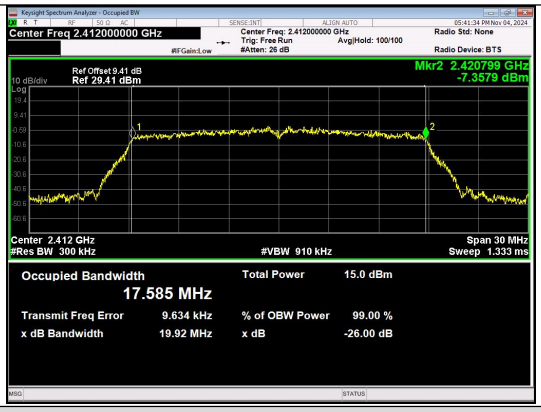
IEEE 802.11g_Channel 1_20MHz_Antenna 1



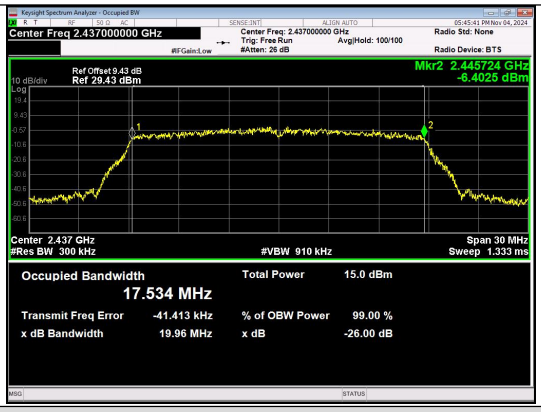
IEEE 802.11g_Channel 6_20MHz_Antenna 1



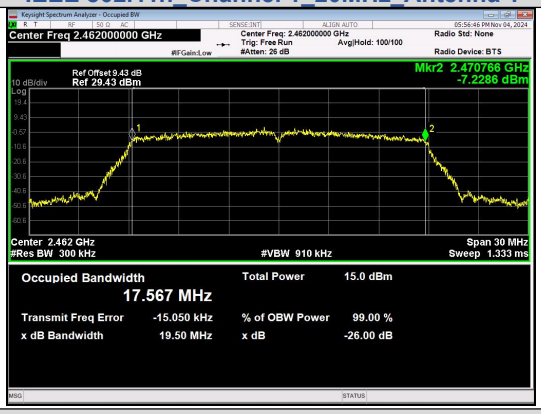
IEEE 802.11g_Channel 11_20MHz_Antenna 1



IEEE 802.11n_Channel 1_20MHz_Antenna 1



IEEE 802.11n_Channel 6_20MHz_Antenna 1



IEEE 802.11n_Channel 11_20MHz_Antenna 1

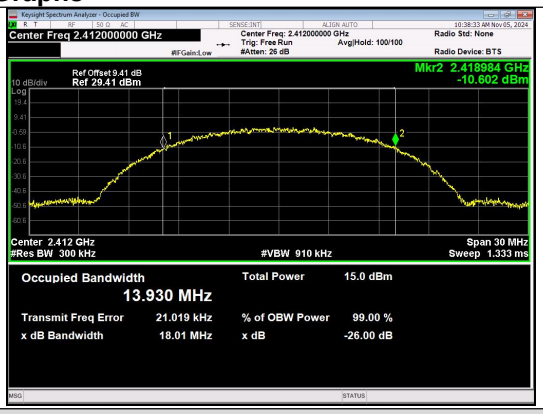
IEEE 802.11n_Channel 3_40MHz_Antenna 1

IEEE 802.11n_Channel 6_40MHz_Antenna 1

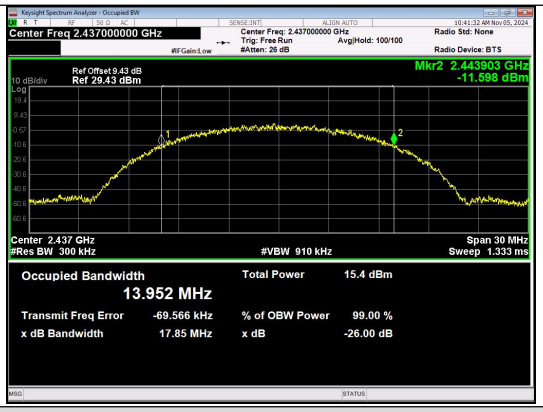
IEEE 802.11n_Channel 9_40MHz_Antenna 1

Mode	Channel	Ant.	Center Frequency (MHz)	99% BW (MHz)
IEEE 802.11b	1	2	2412	13.930
	6		2437	13.952
	11		2462	13.943
IEEE 802.11g	1		2412	16.415
	6		2437	16.443
	11		2462	16.460
IEEE 802.11n_20	1		2412	17.563
	6		2437	17.577
	11		2462	17.563
IEEE 802.11n_40	3		2422	35.913
	6		2437	35.884
	9		2452	35.835

Test Graphs

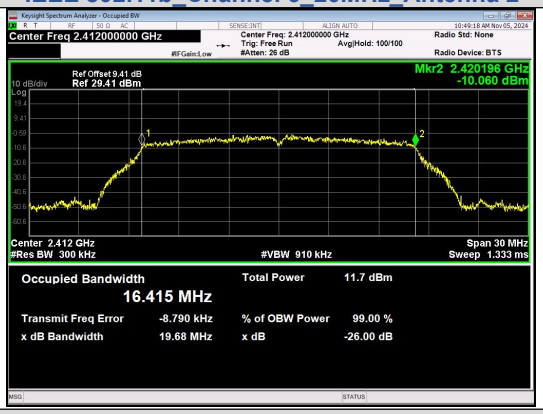


IEEE 802.11b_Channel 1_20MHz_Antenna 2

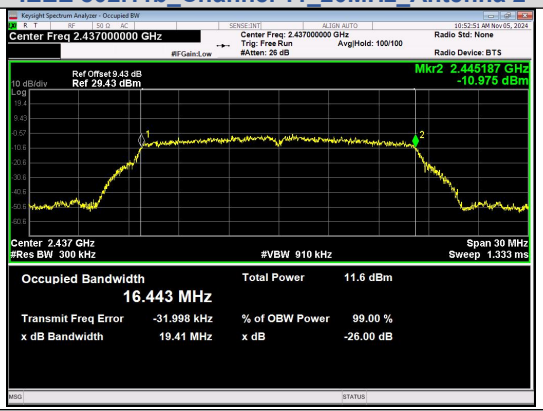


IEEE 802.11b_Channel 6_20MHz_Antenna 2

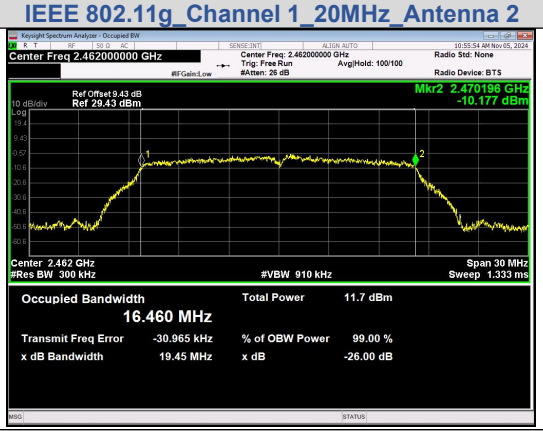
IEEE 802.11b_Channel 11_20MHz_Antenna 2



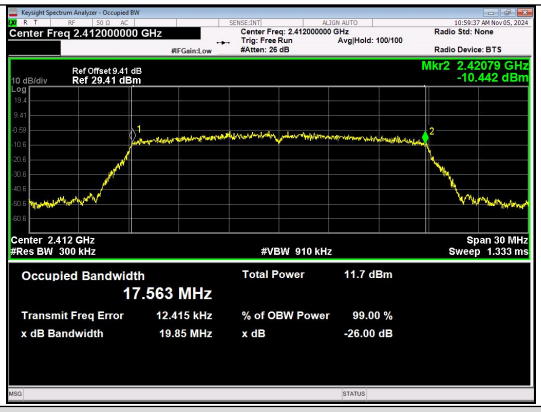
IEEE 802.11g_Channel 1_20MHz_Antenna 2



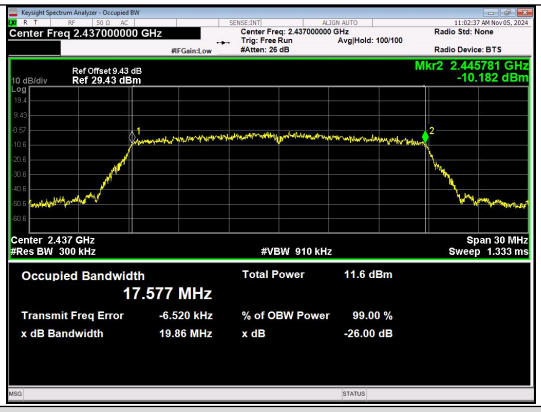
IEEE 802.11g_Channel 6_20MHz_Antenna 2



IEEE 802.11g_Channel 11_20MHz_Antenna 2



IEEE 802.11n_Channel 1_20MHz_Antenna 2



IEEE 802.11n_Channel 6_20MHz_Antenna 2

IEEE 802.11n_Channel 11_20MHz_Antenna 2

IEEE 802.11n_Channel 3_40MHz_Antenna 2

IEEE 802.11n_Channel 6_40MHz_Antenna 2

IEEE 802.11n_Channel 9_40MHz_Antenna 2

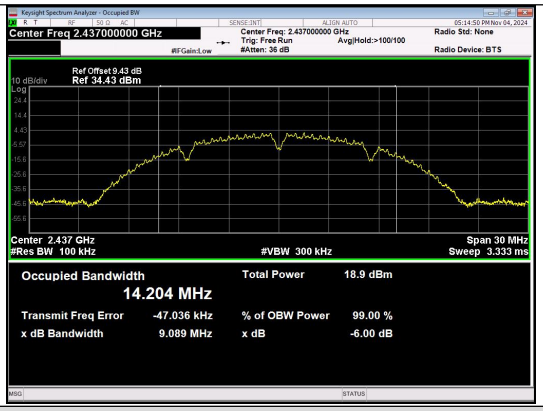
A.3 6DB BANDWIDTH

Test Result

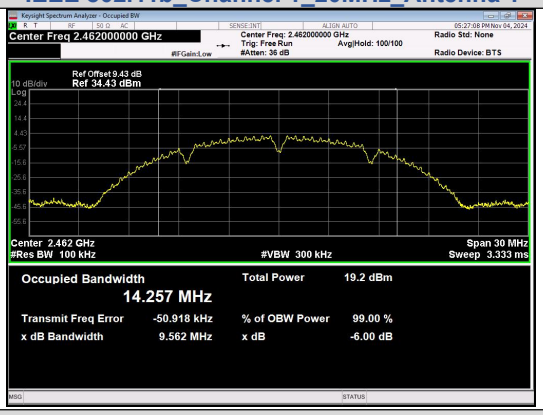
Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11b	1	1	2412	10.00	≥0.5	PASS
	6		2437	9.089		PASS
	11		2462	9.562		PASS
IEEE 802.11g	1		2412	15.10		PASS
	6		2437	15.08		PASS
	11		2462	15.11		PASS
IEEE 802.11n_20	1		2412	15.10		PASS
	6		2437	15.11		PASS
	11		2462	15.41		PASS
IEEE 802.11n_40	3		2422	35.08		PASS
	6		2437	35.08		PASS
	9		2452	35.08		PASS

Test Graphs

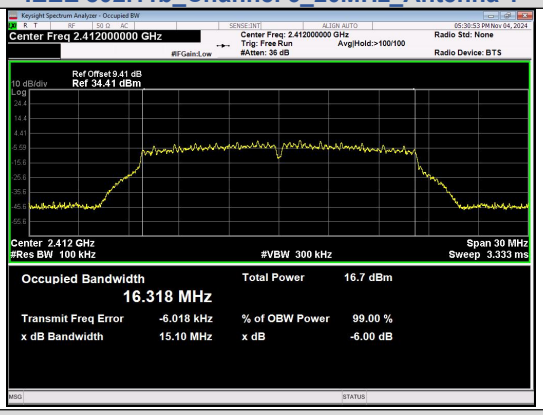
IEEE 802.11b_Channel 1_20MHz_Antenna 1



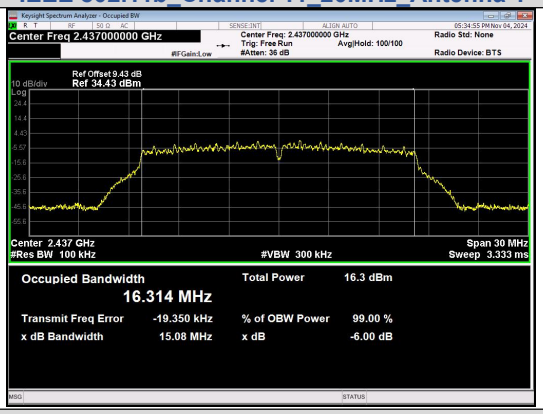
IEEE 802.11b_Channel 6_20MHz_Antenna 1



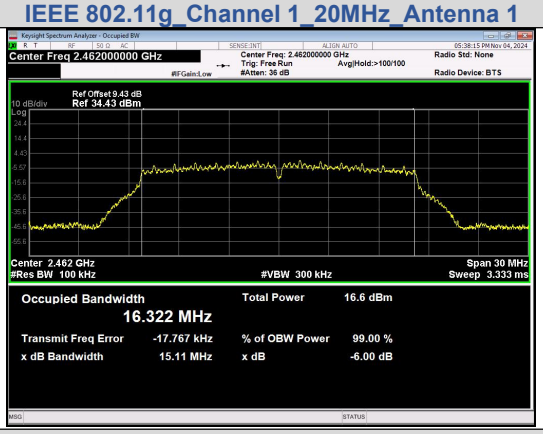
IEEE 802.11b_Channel 11_20MHz_Antenna 1



IEEE 802.11g_Channel 1_20MHz_Antenna 1



IEEE 802.11g_Channel 6_20MHz_Antenna 1



IEEE 802.11g_Channel 11_20MHz_Antenna 1