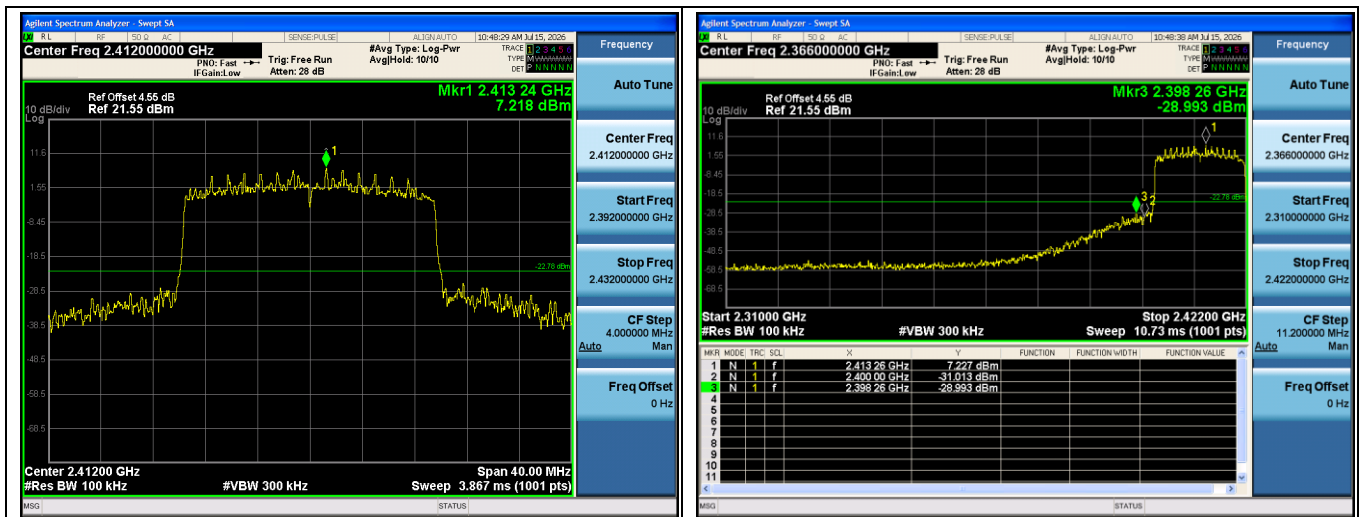
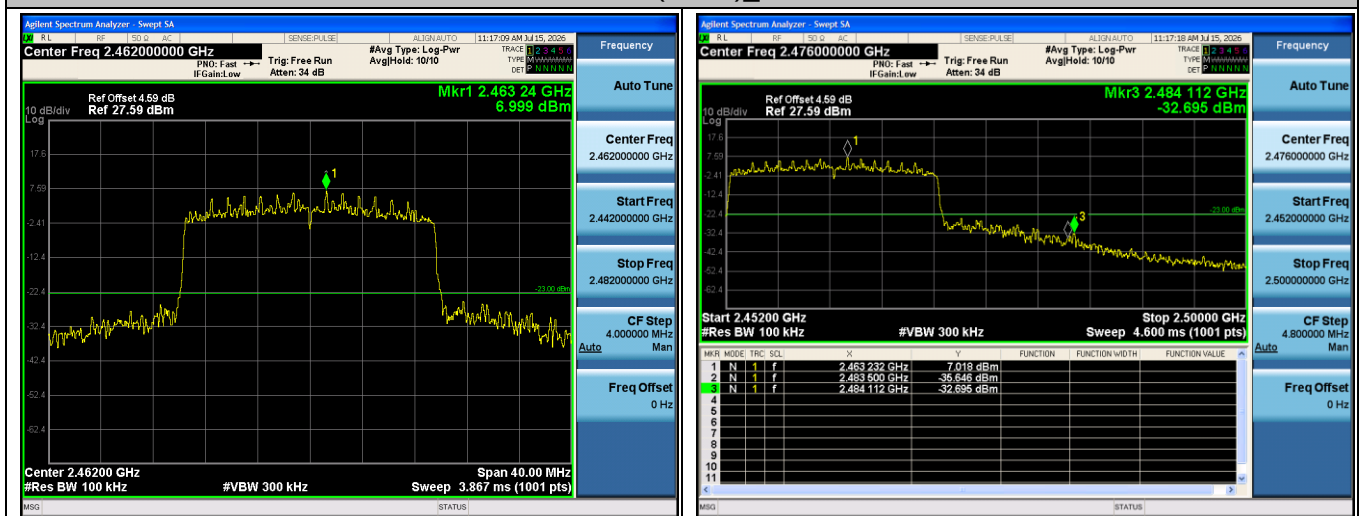
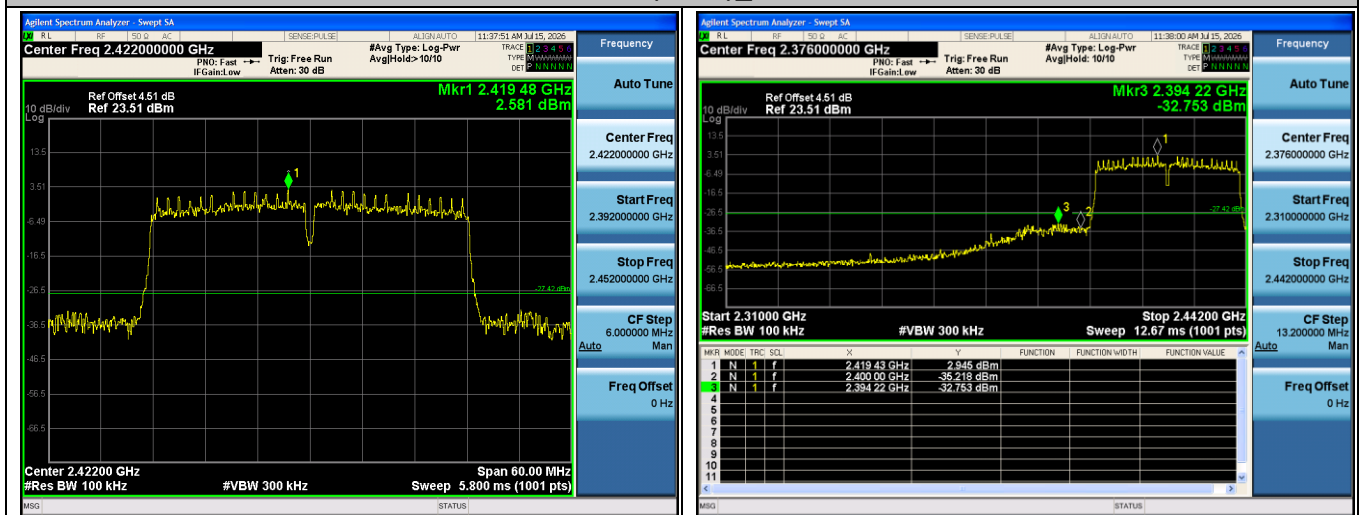




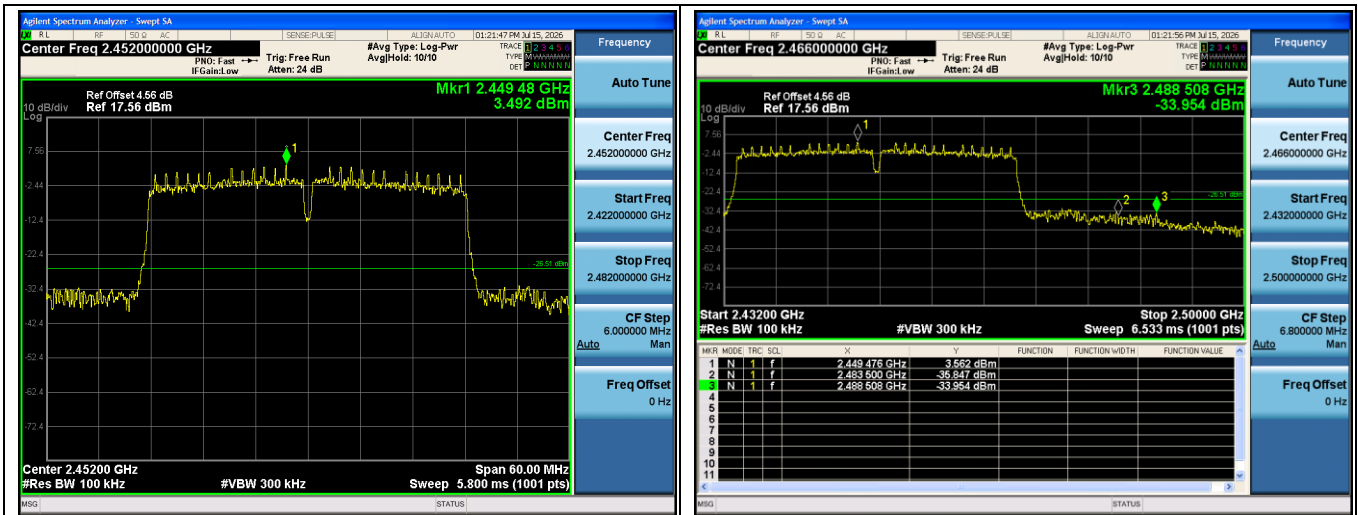
802.11ax(HE20)_2462



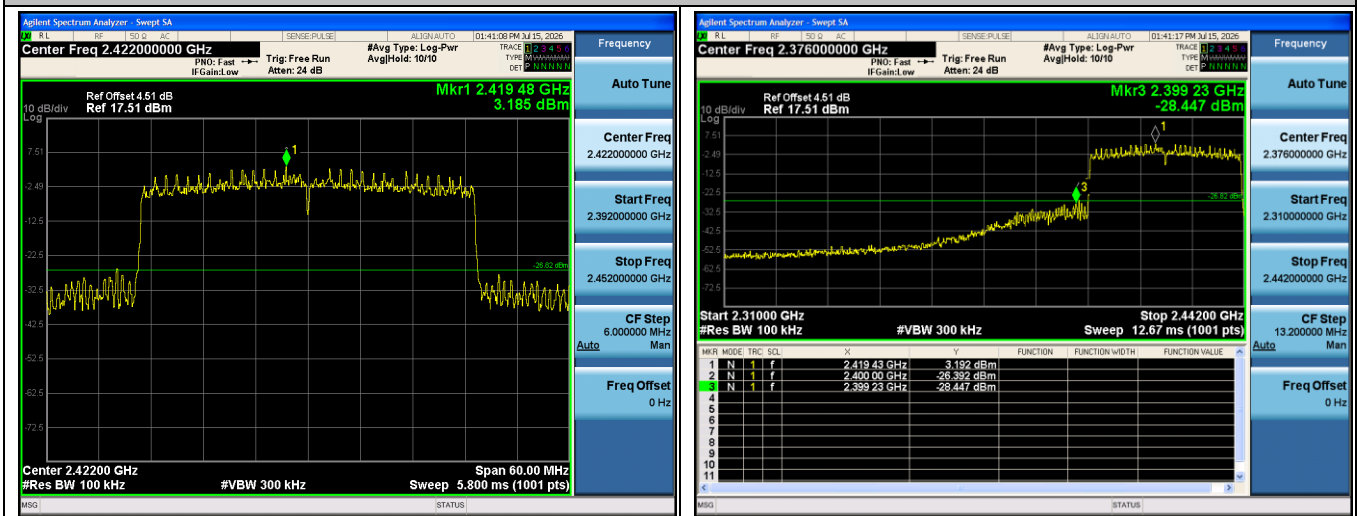
802.11n(HT40)_2422



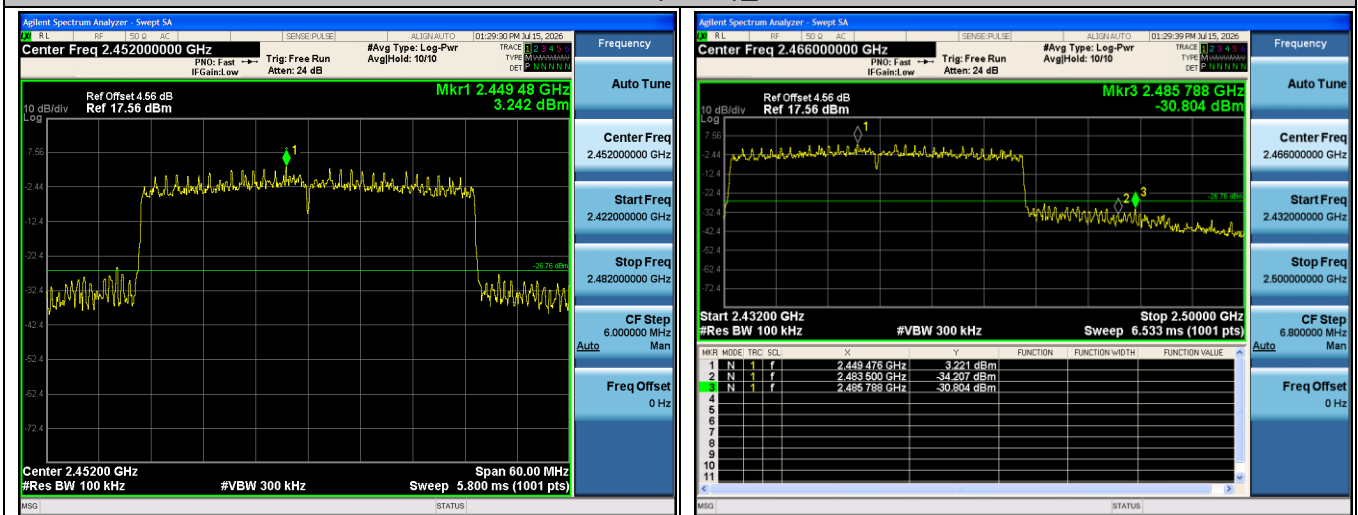
802.11n(HT40)_2452



802.11ax(HE40) 2422



802.11ax(HE40) 2452

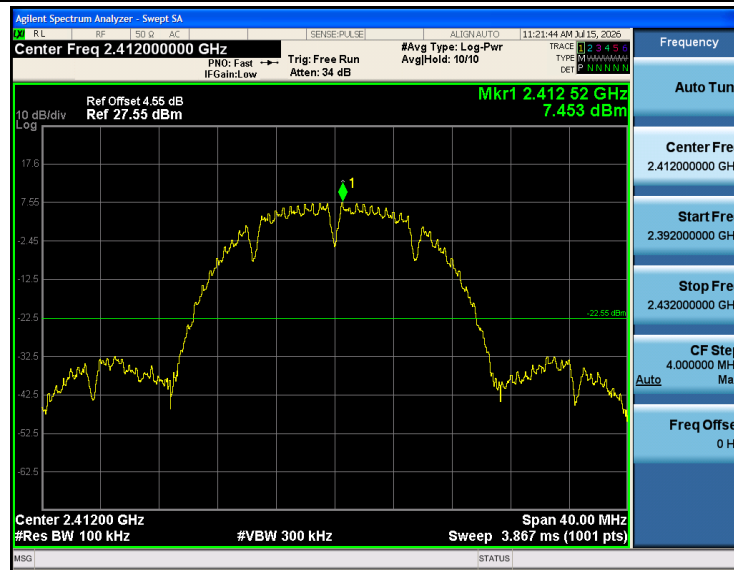


**(2) Conducted Spurious Emissions Test**

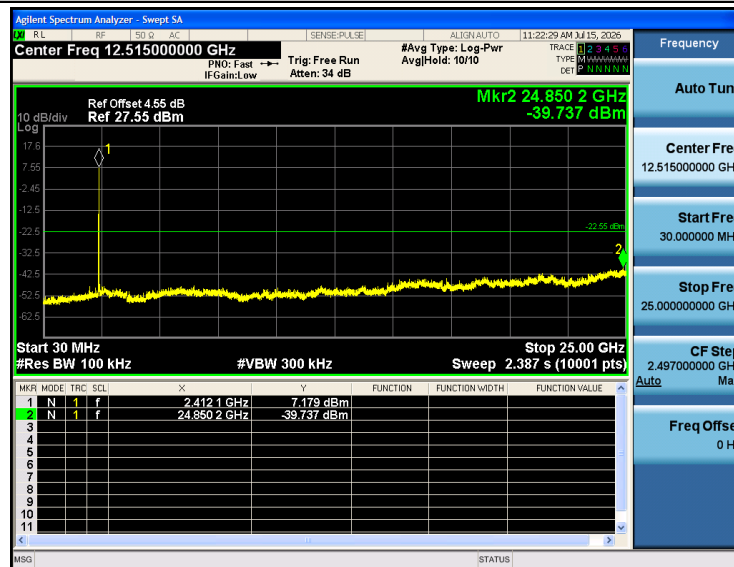
Test Mode	Frequency [MHz]	Ref Level [dBm]	Spurious level[dBm]	Limit[dBm]	Verdict
802.11b	2412	7.453	-39.737	-22.547	PASS
	2437	7.465	-39.178	-22.535	PASS
	2462	7.267	-39.142	-22.733	PASS
802.11g	2412	7.347	-38.525	-22.653	PASS
	2437	7.076	-39.959	-22.924	PASS
	2462	7.258	-44.254	-22.742	PASS
802.11n(HT20)	2412	6.932	-39.635	-23.068	PASS
	2437	7.732	-44.270	-22.268	PASS
	2462	7.304	-39.384	-22.696	PASS
802.11ax(HE20)	2412	7.218	-44.538	-22.782	PASS
	2437	6.821	-44.682	-23.179	PASS
	2462	6.999	-39.473	-23.001	PASS
802.11n(HT40)	2422	2.581	-43.915	-27.419	PASS
	2437	3.174	-49.075	-26.826	PASS
	2452	3.492	-43.261	-26.508	PASS
802.11ax(HE40)	2422	3.185	-48.087	-26.815	PASS
	2437	3.009	-48.780	-26.991	PASS
	2452	3.242	-44.529	-26.758	PASS



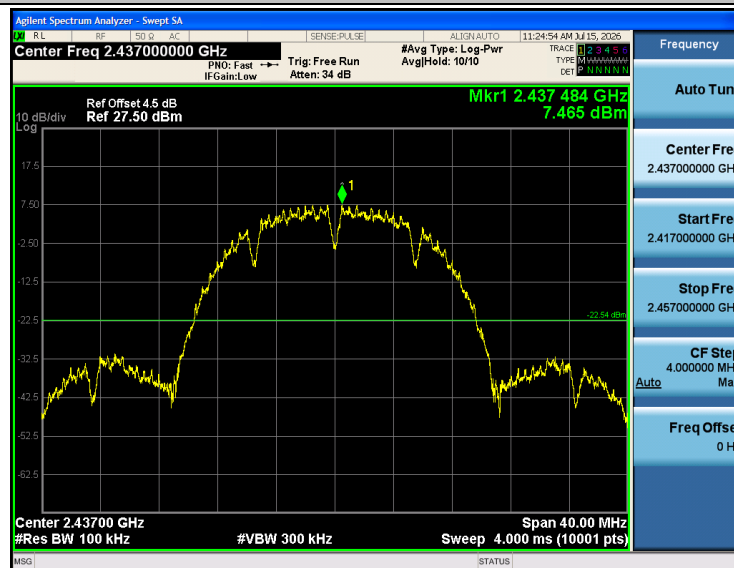
802.11b_2412_0~Reference



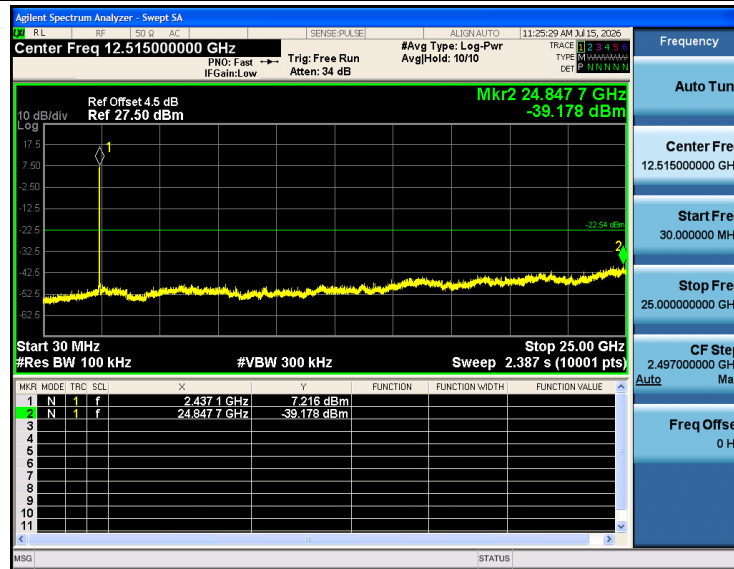
802.11b_2412_30~25000



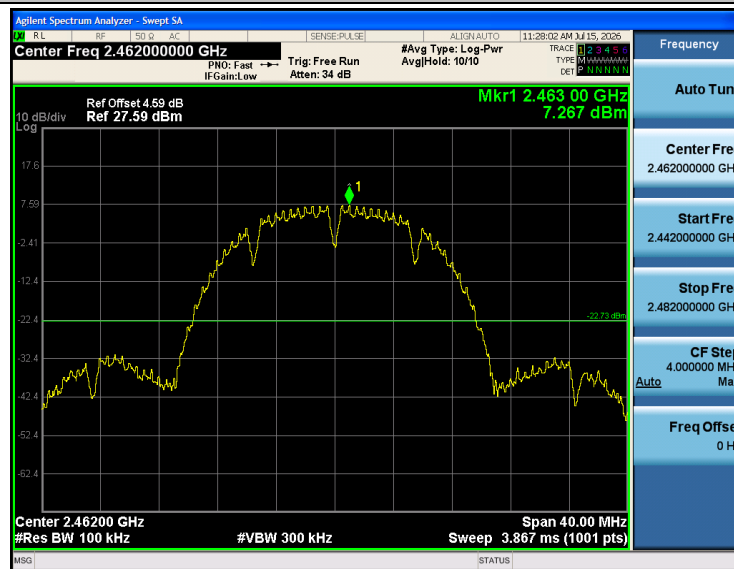
802.11b_2437_0~Reference



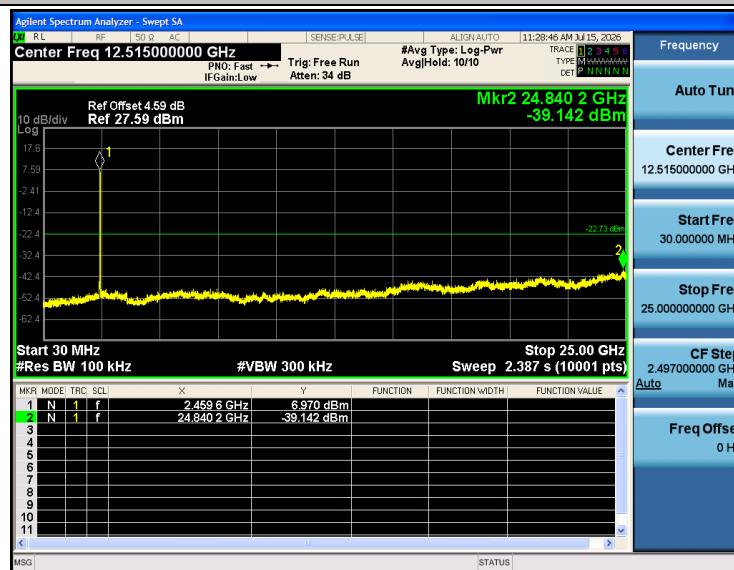
802.11b_2437_30~25000



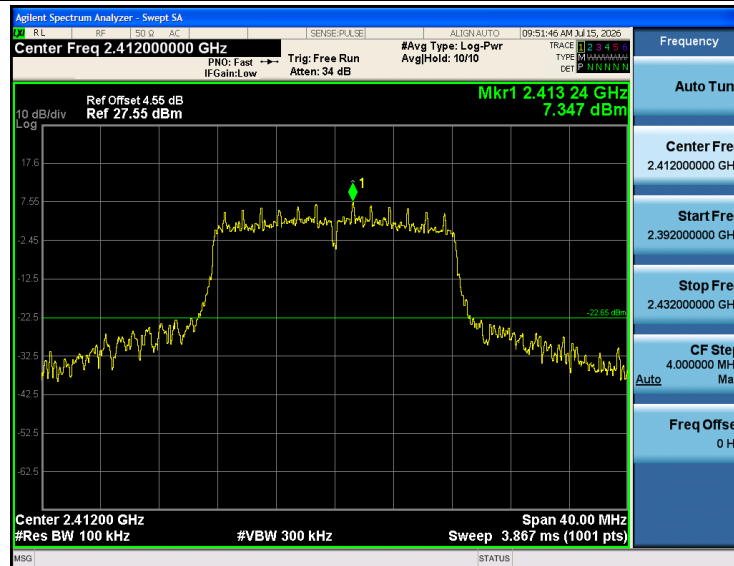
802.11b_2462_0~Reference



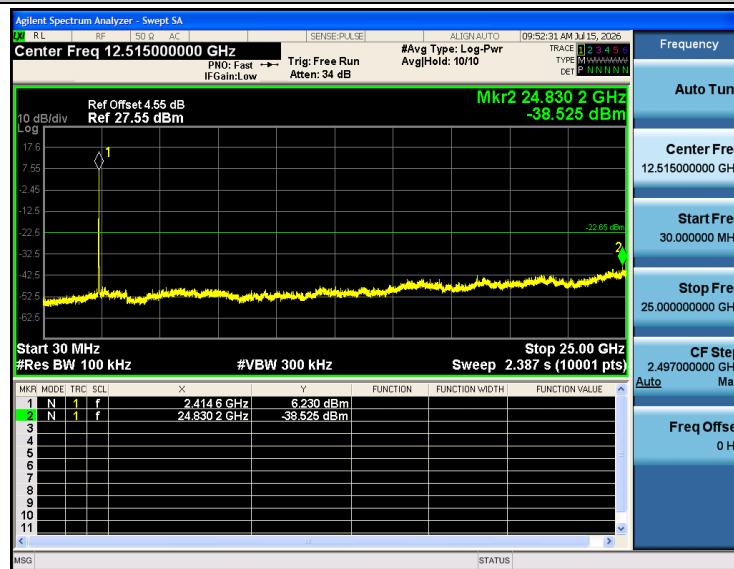
802.11b_2462_30~25000



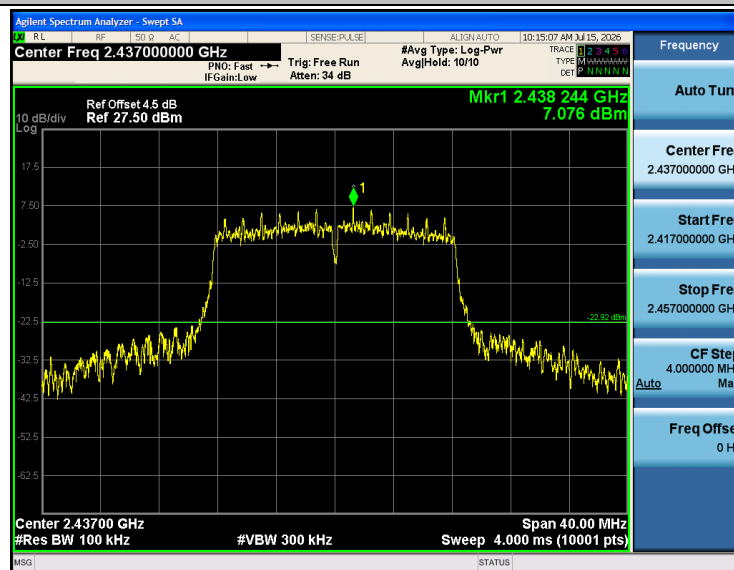
802.11g_2412_0~Reference



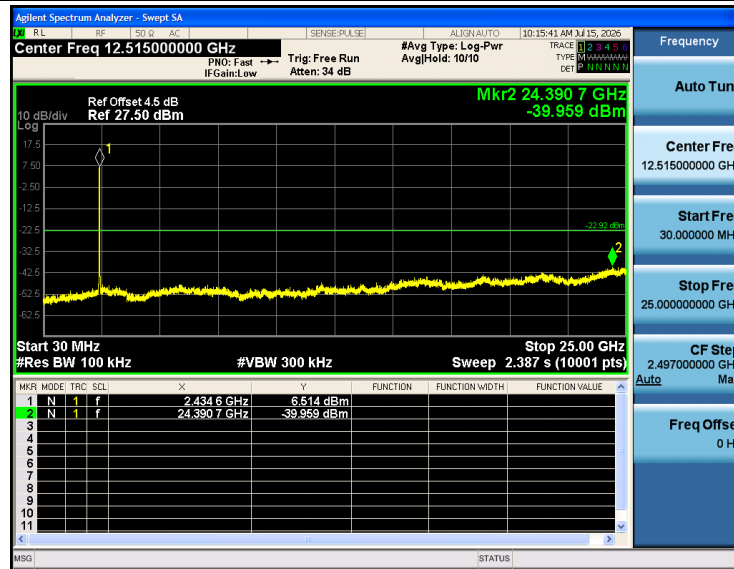
802.11g_2412_30~25000



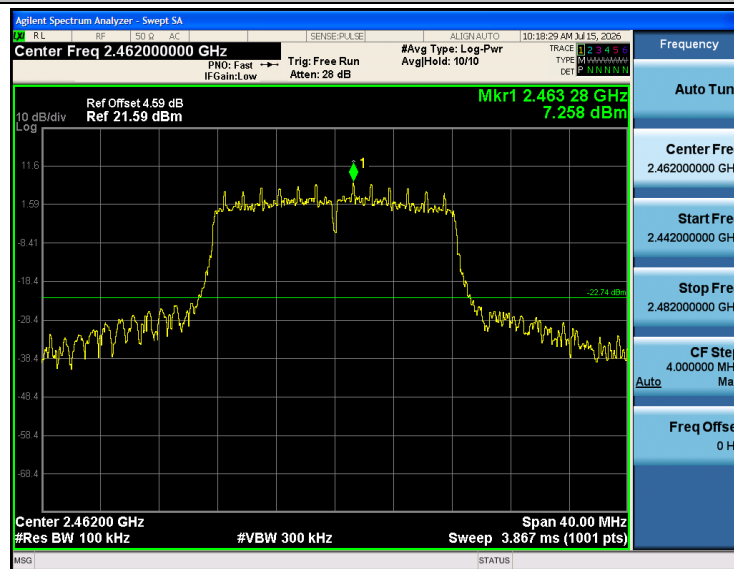
802.11g_2437_0~Reference



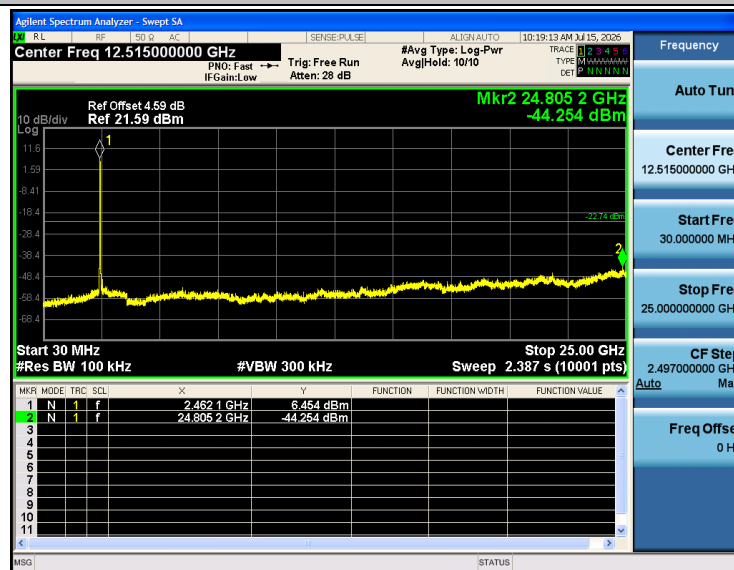
802.11g_2437_30~25000



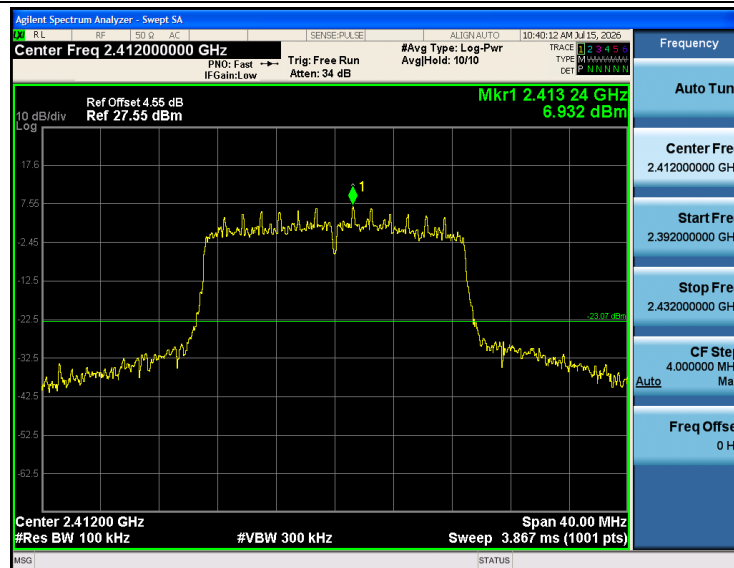
802.11g_2462_0~Reference



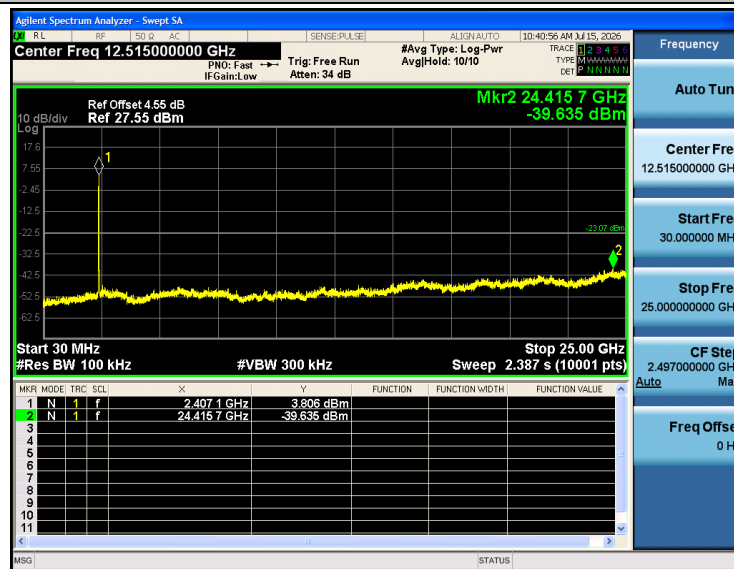
802.11g_2462_30~25000



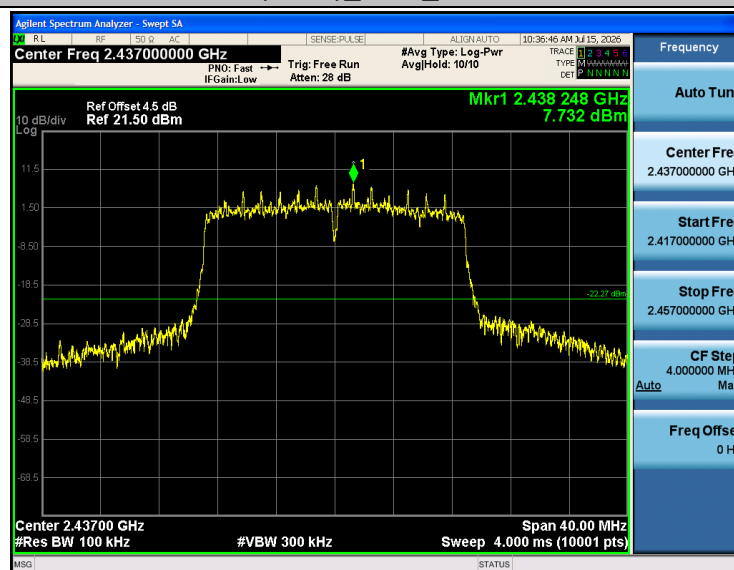
802.11n(HT20)_2412_0~Reference



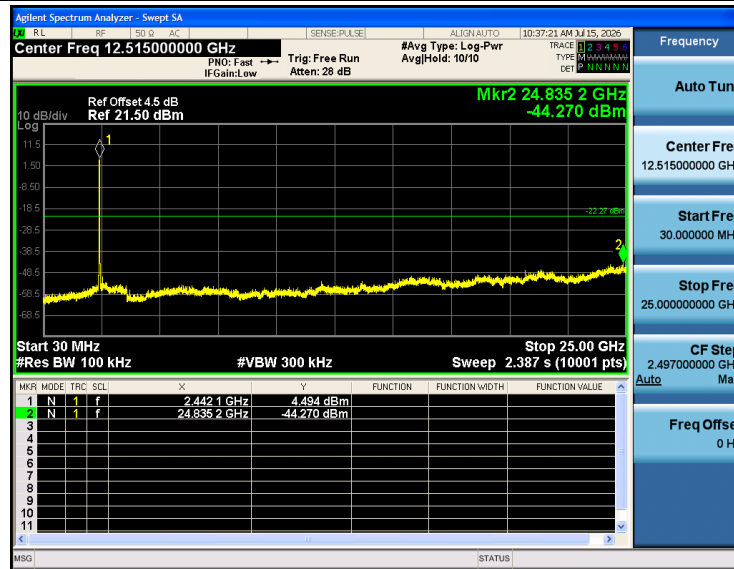
802.11n(HT20)_2412_30~25000



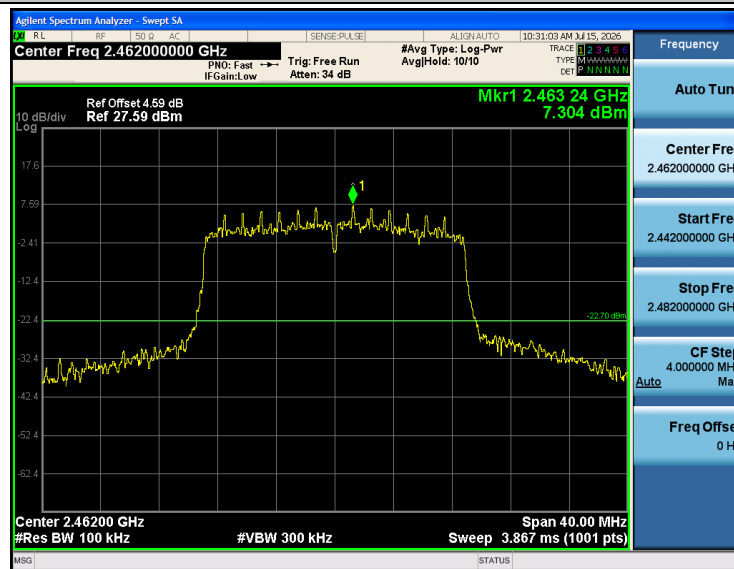
802.11n(HT20)_2437_0~Reference



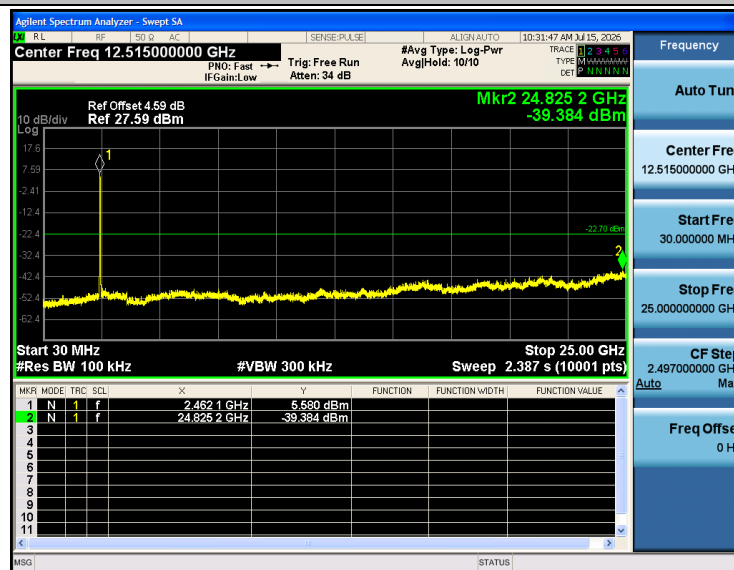
802.11n(HT20)_2437_30~25000



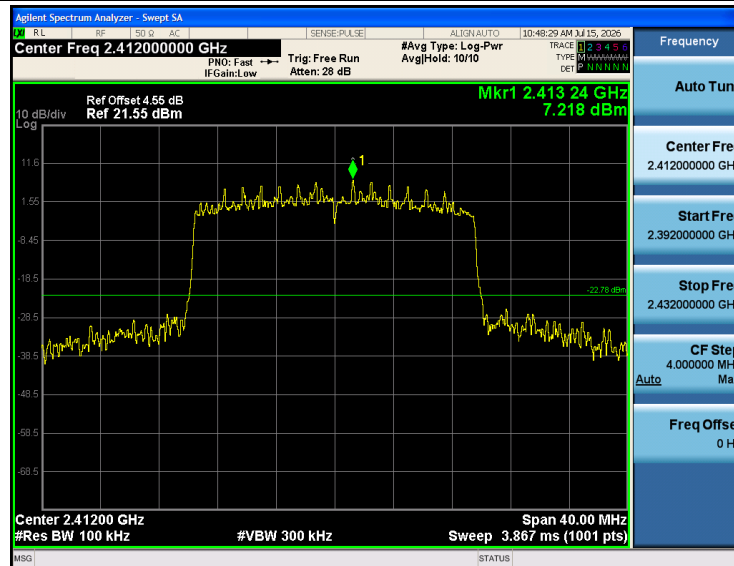
802.11n(HT20)_2462_0~Reference



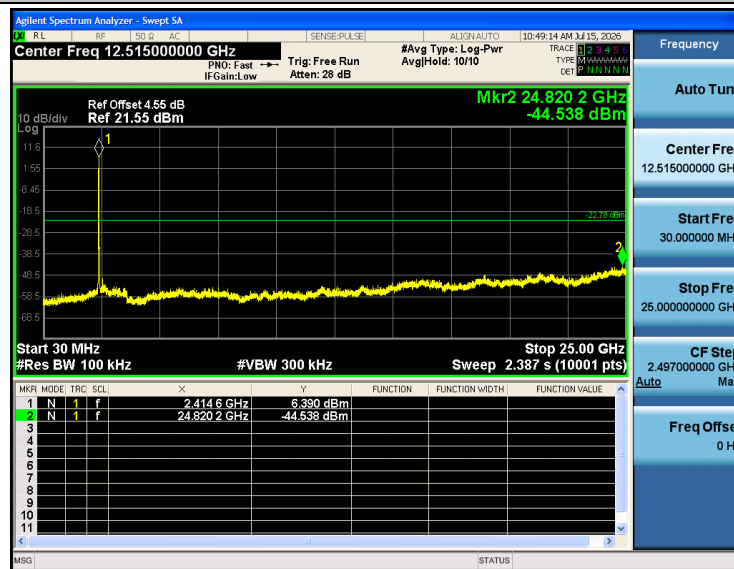
802.11n(HT20)_2462_30~25000



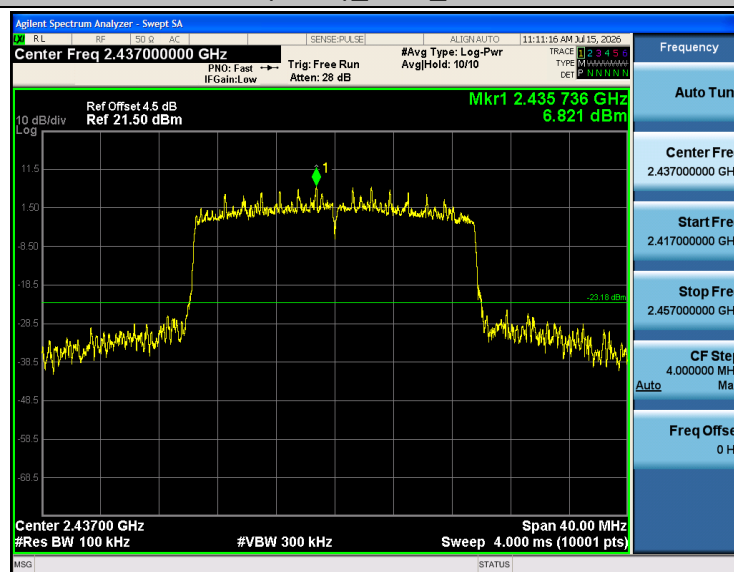
802.11ax(HE20)_2412_0~Reference



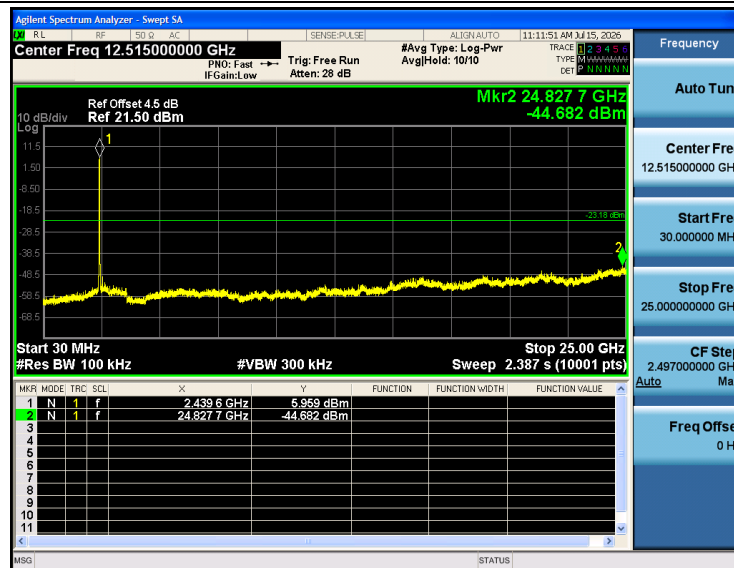
802.11ax(HE20)_2412_30~25000



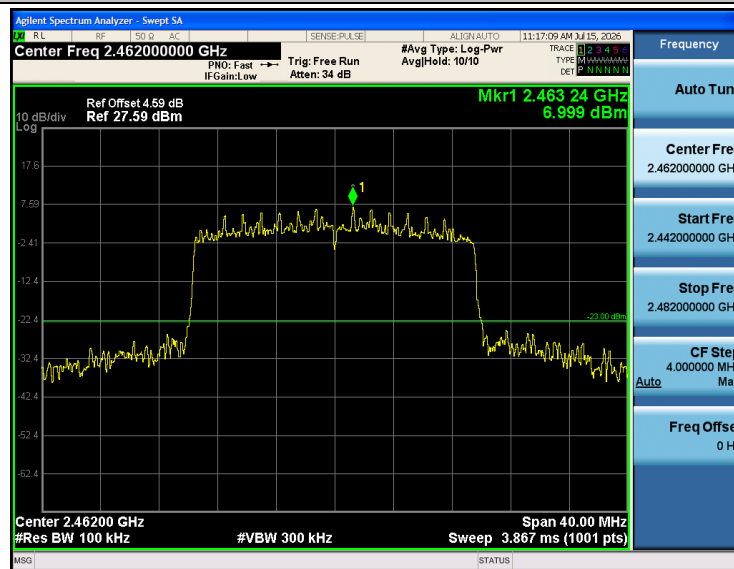
802.11ax(HE20)_2437_0~Reference



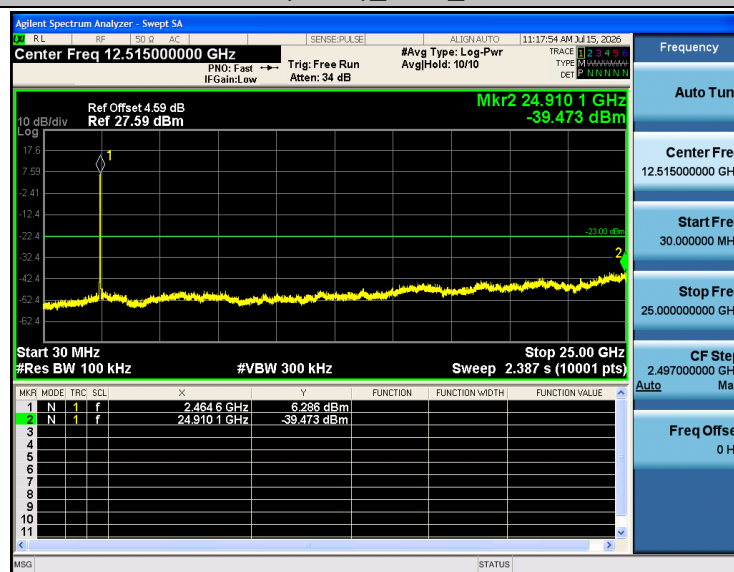
802.11ax(HE20)_2437_30~25000



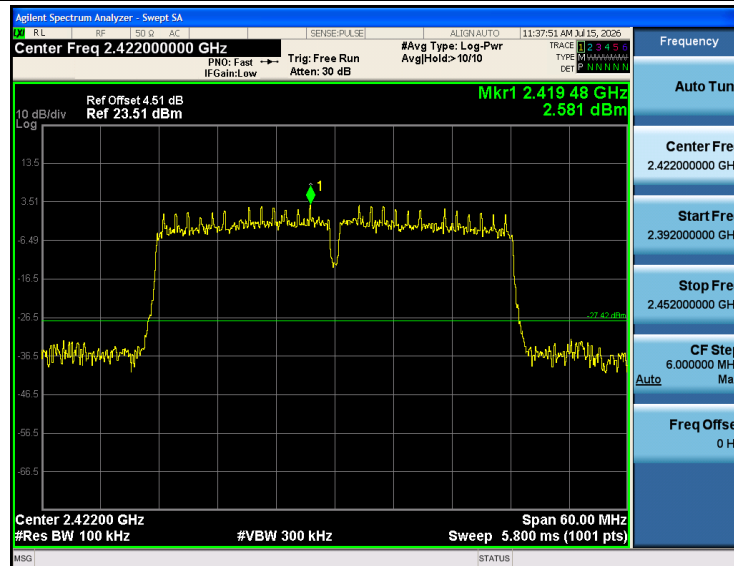
802.11ax(HE20)_2462_0~Reference



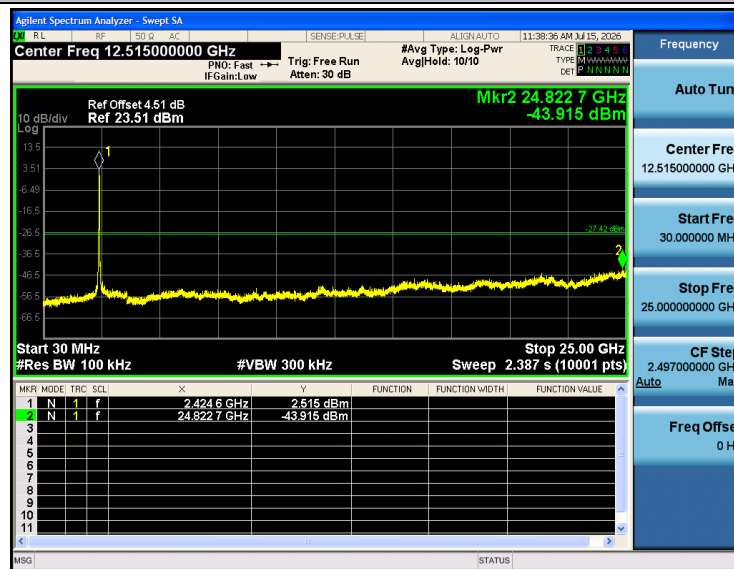
802.11ax(HE20)_2462_30~25000



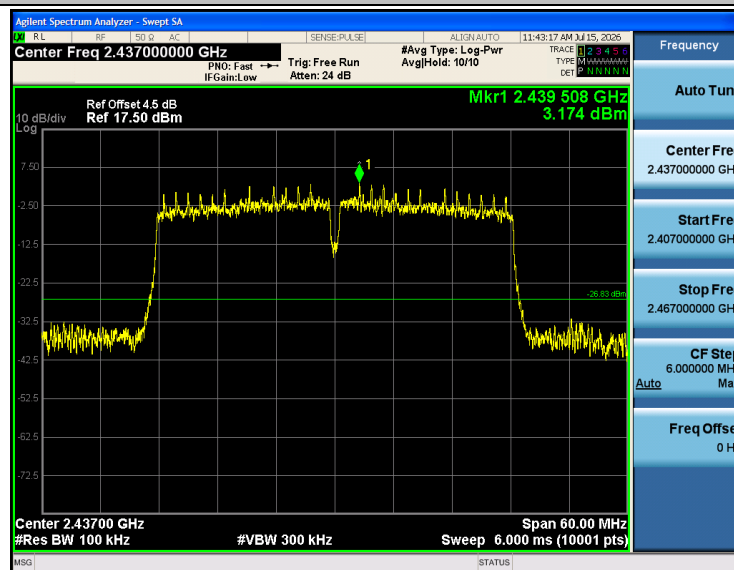
802.11n(HT40)_2422_0~Reference



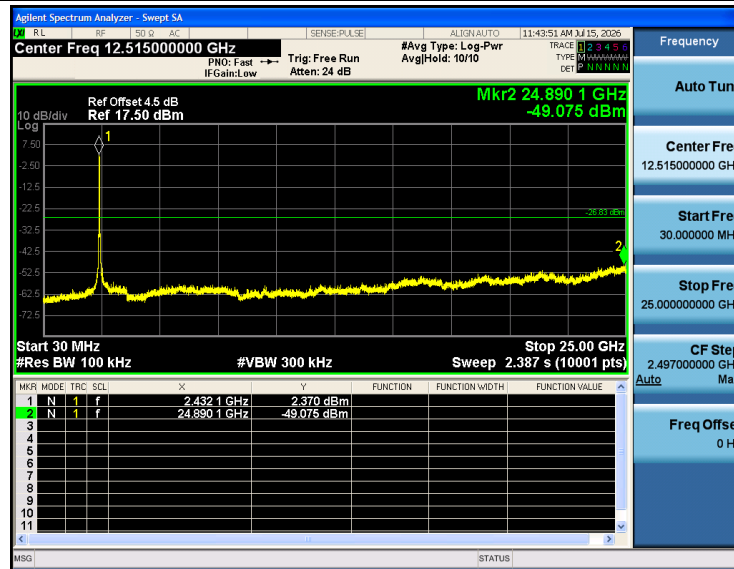
802.11n(HT40)_2422_30~25000



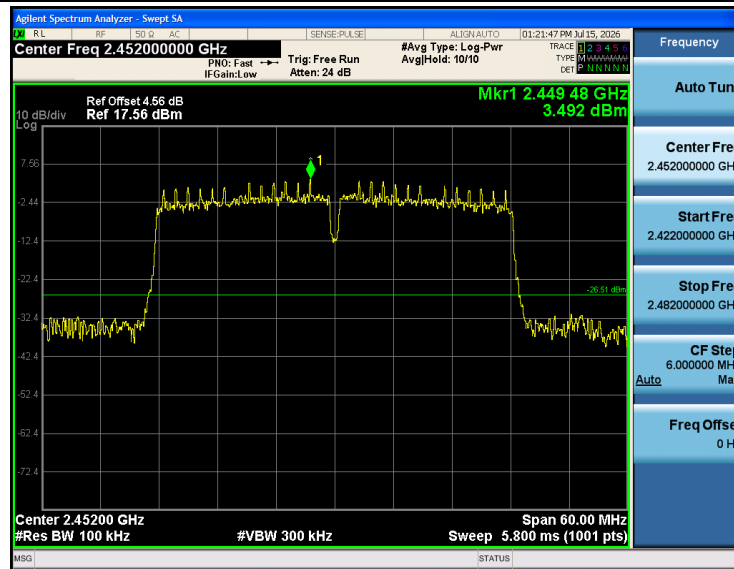
802.11n(HT40)_2437_0~Reference



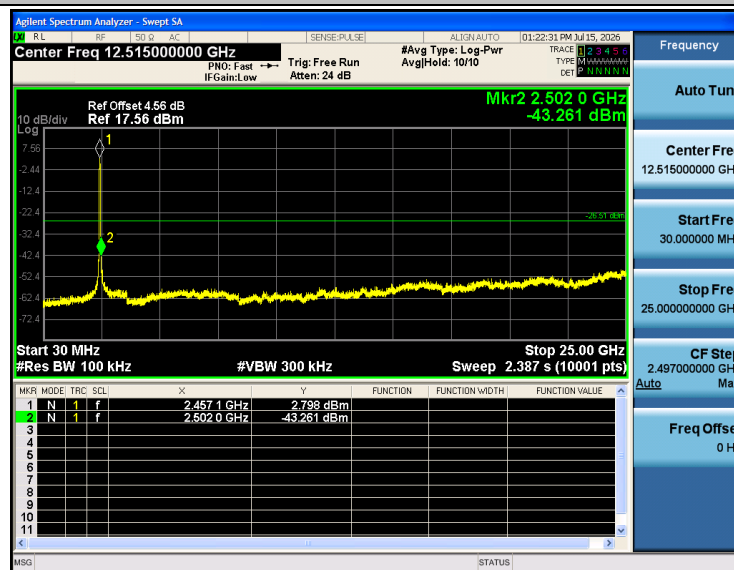
802.11n(HT40)_2437_30~25000



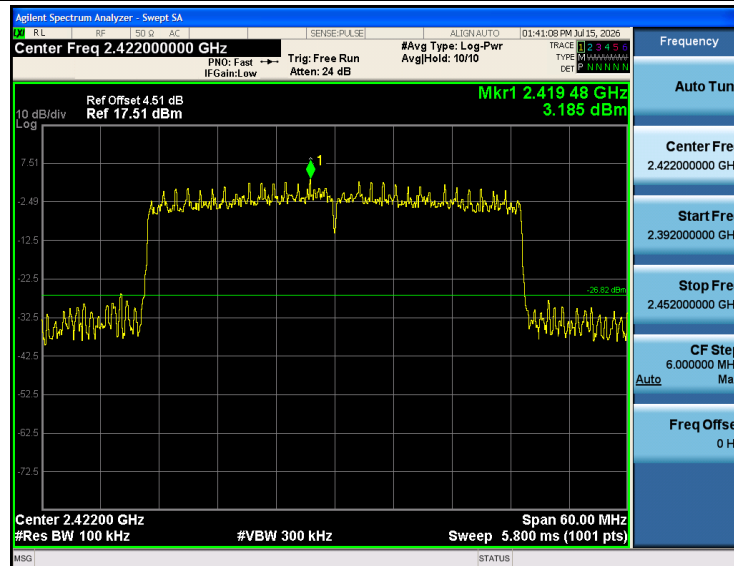
802.11n(HT40)_2452_0~Reference



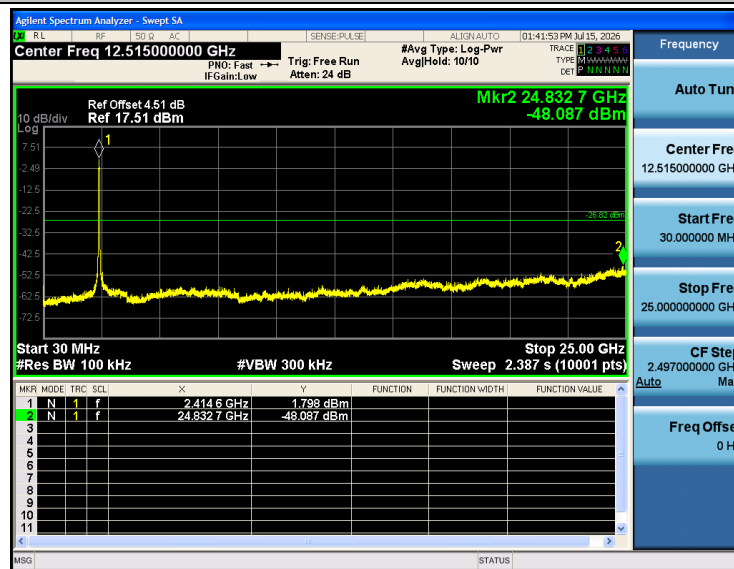
802.11n(HT40)_2452_30~25000



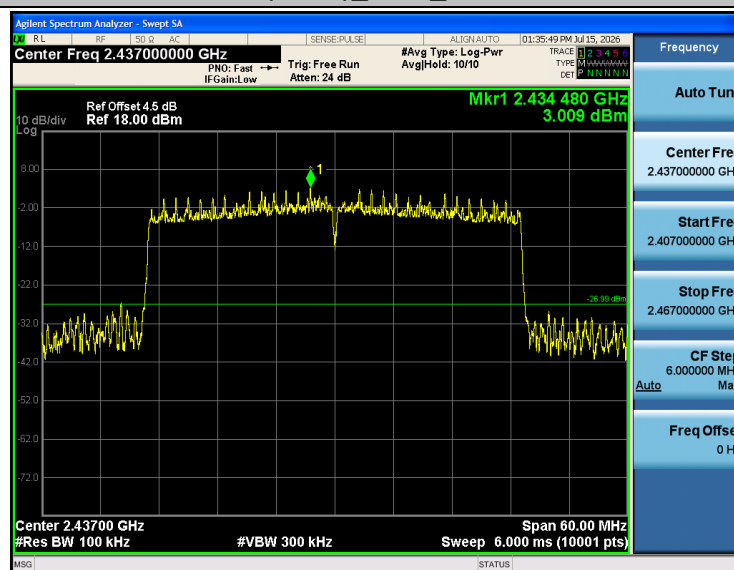
802.11ax(HE40)_2422_0~Reference



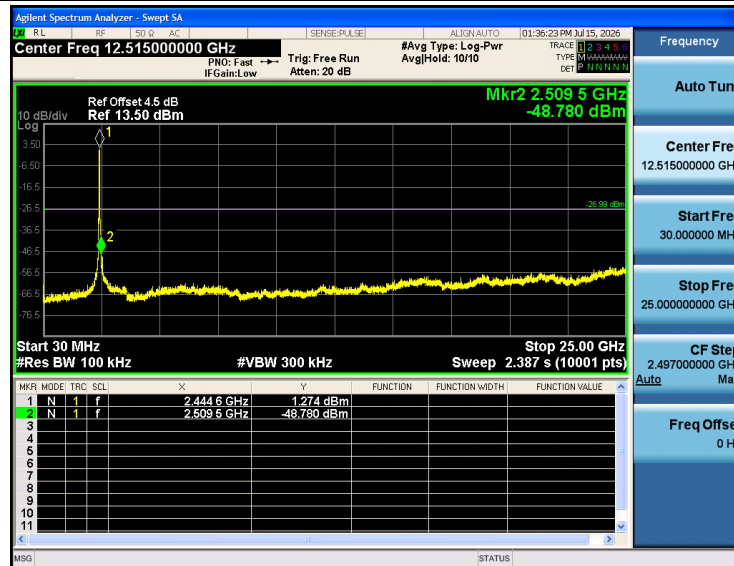
802.11ax(HE40)_2422_30~25000



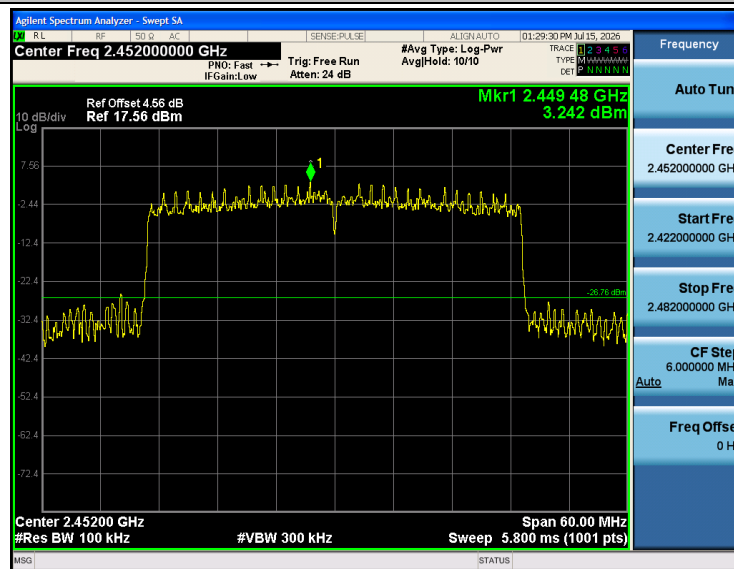
802.11ax(HE40)_2437_0~Reference



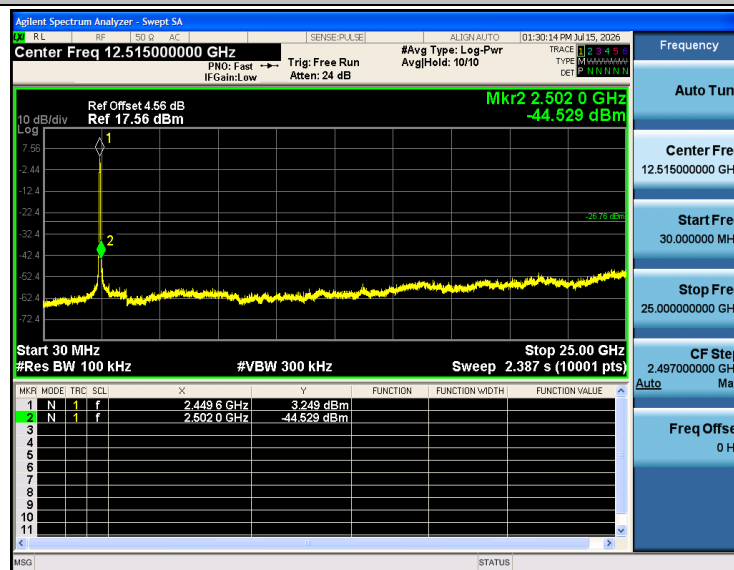
802.11ax(HE40)_2437_30~25000



802.11ax(HE40)_2452_0~Reference



802.11ax(HE40)_2452_30~25000





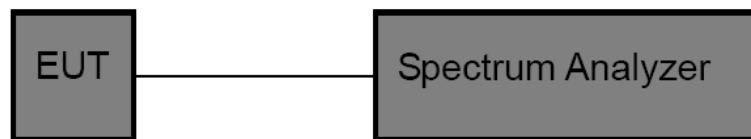
3.5. DTS Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2)/ RSS-247 6.3.1 (a):

Test Item	Limit	Frequency Range(MHz)
DTS Bandwidth	≥ 500 KHz (6dB bandwidth)	2400~2483.5

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. DTS Spectrum Setting:
 - (1) Set RBW = Shall be in the range of 1%to 5% of the OB W but not less than 100 kHz.
 - (2) Set the video bandwidth (VBW) ≥ 3 RBW.
 - (3) Detector = Peak.
 - (4) Trace mode = Max hold.
 - (5) Sweep = Auto couple.

OCB Spectrum Setting:

- (1) Set RBW = 1% ~ 5% occupied bandwidth.
- (2) Set the video bandwidth (VBW) ≥ 3 RBW.
- (3) Detector = Peak.
- (4) Trace mode = Max hold.
- (5) Sweep = Auto couple.

NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

Test Mode

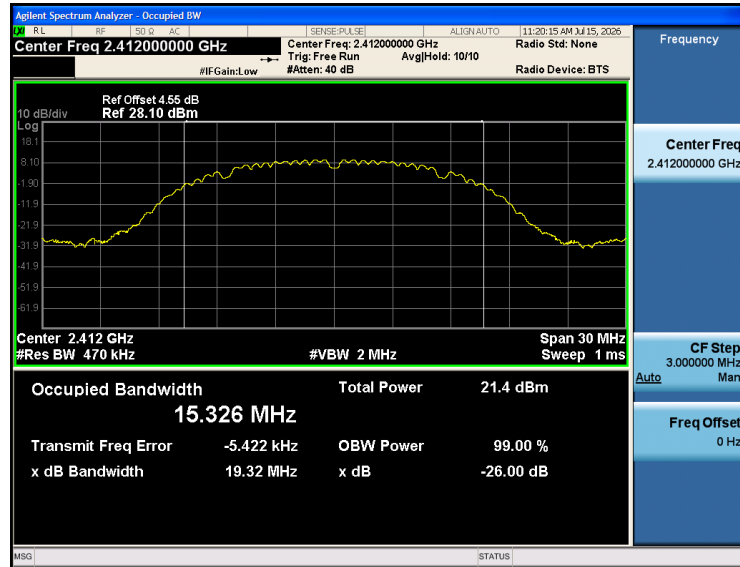
Please refer to the clause 2.4.

**Test Results**

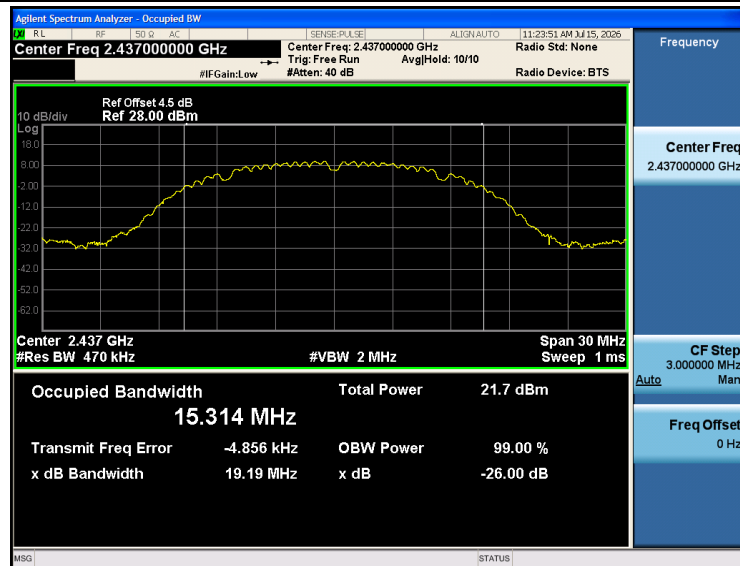
Test Mode	Frequency [MHz]	OBW [MHz]	DTS BW [MHz]	Limit [MHz]	Verdict
802.11b	2412	15.326	12.12	≥ 0.5	PASS
	2437	15.314	12.11	≥ 0.5	PASS
	2462	15.338	12.13	≥ 0.5	PASS
802.11g	2412	16.559	16.36	≥ 0.5	PASS
	2437	16.719	16.35	≥ 0.5	PASS
	2462	16.680	16.36	≥ 0.5	PASS
802.11n(HT20)	2412	17.697	17.30	≥ 0.5	PASS
	2437	17.723	17.30	≥ 0.5	PASS
	2462	17.699	17.31	≥ 0.5	PASS
802.11ax(HE20)	2412	18.914	19.12	≥ 0.5	PASS
	2437	19.031	19.12	≥ 0.5	PASS
	2462	19.032	19.12	≥ 0.5	PASS
802.11n(HT40)	2422	36.042	36.25	≥ 0.5	PASS
	2437	36.079	36.17	≥ 0.5	PASS
	2452	36.041	36.25	≥ 0.5	PASS
802.11ax(HE40)	2422	37.792	37.84	≥ 0.5	PASS
	2437	37.800	37.84	≥ 0.5	PASS
	2452	37.816	37.84	≥ 0.5	PASS



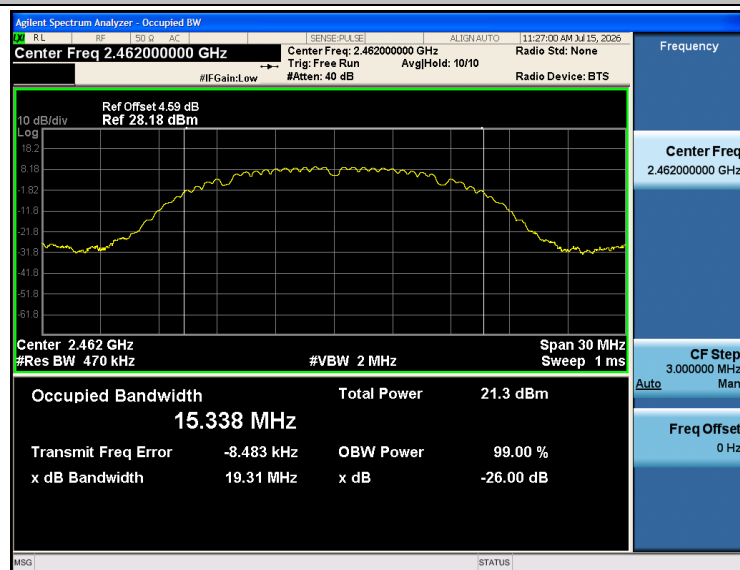
802.11b_OBW_2412



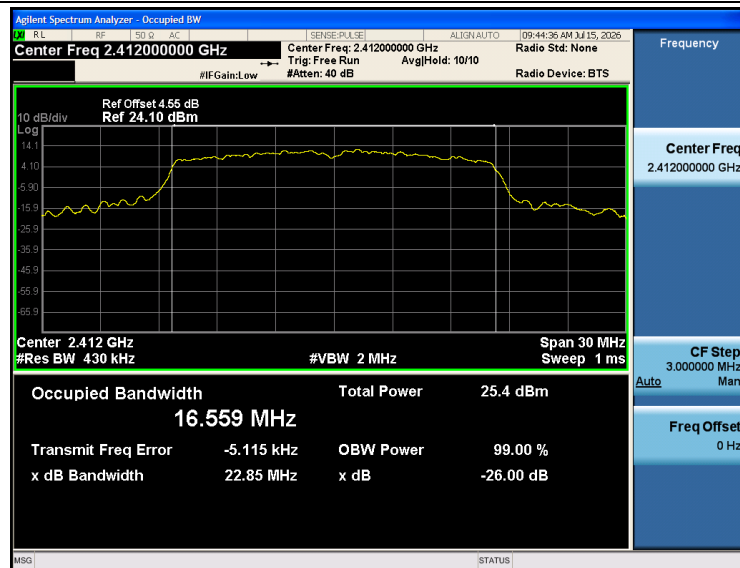
802.11b_OBW_2437



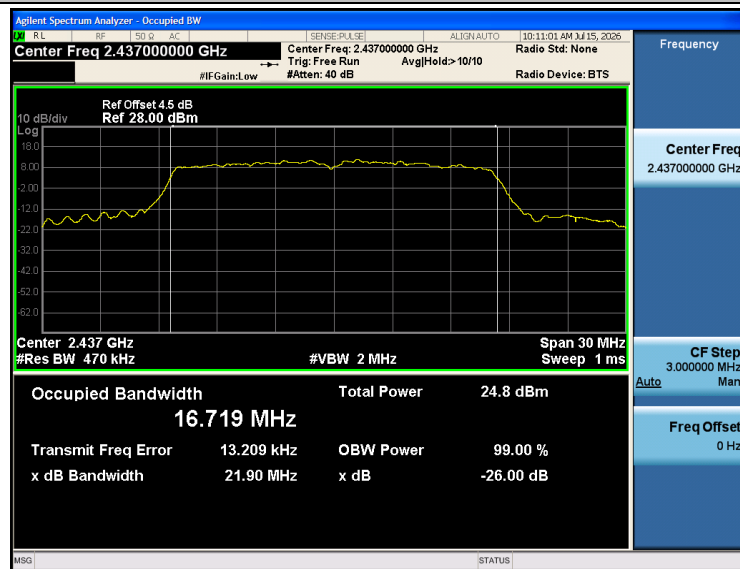
802.11b_OBW_2462



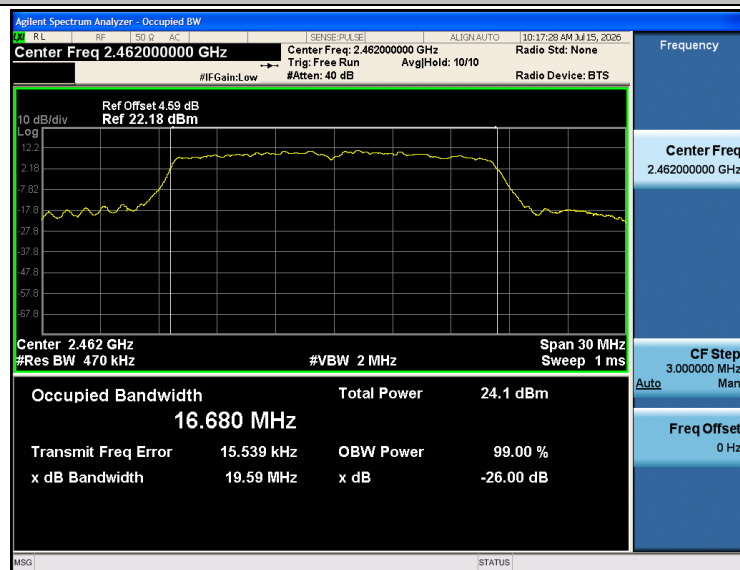
802.11g_OBW_2412



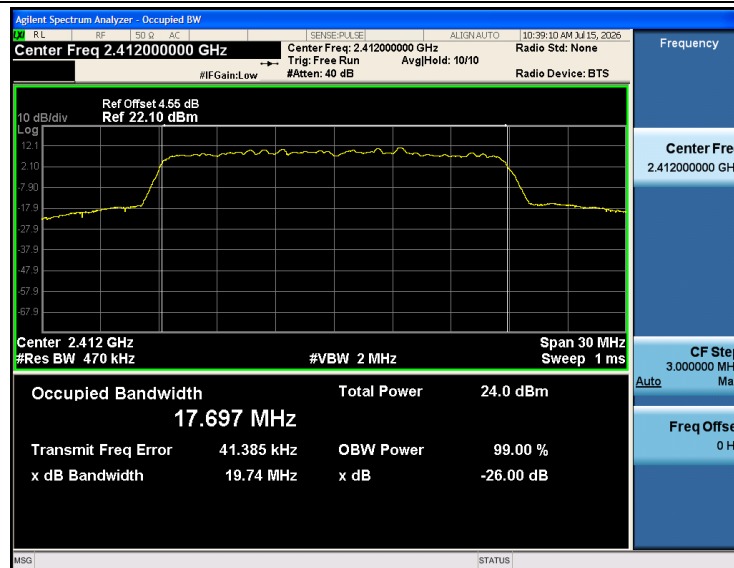
802.11g_OBW_2437



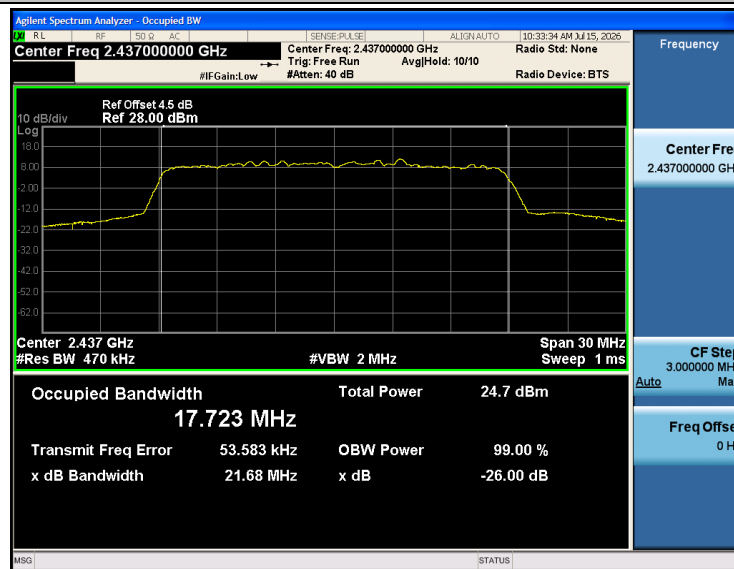
802.11g_OBW_2462



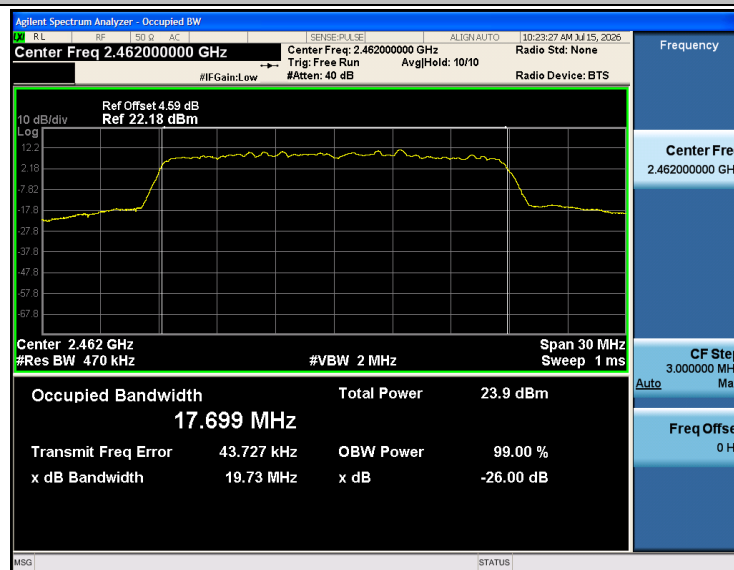
802.11n(HT20)_OBW_2412



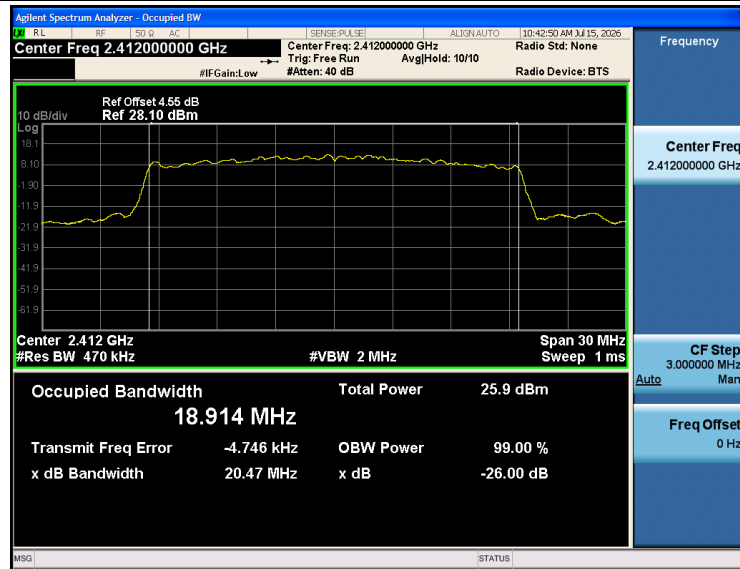
802.11n(HT20)_OBW_2437



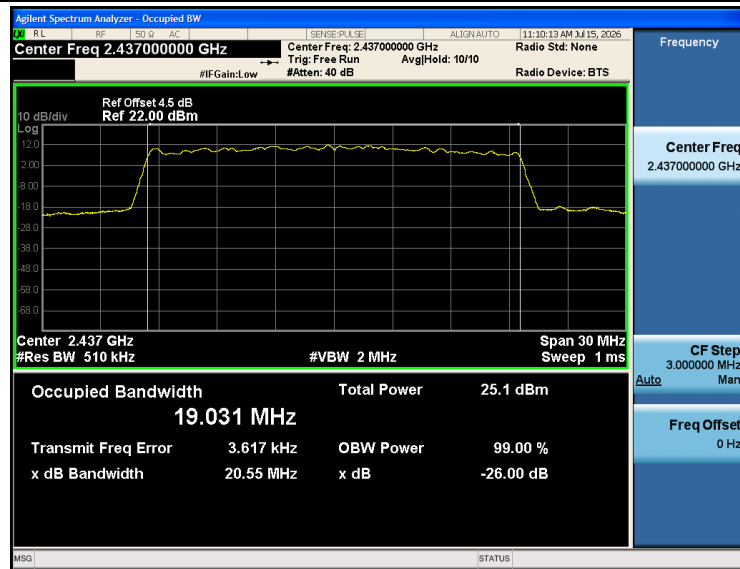
802.11n(HT20)_OBW_2462



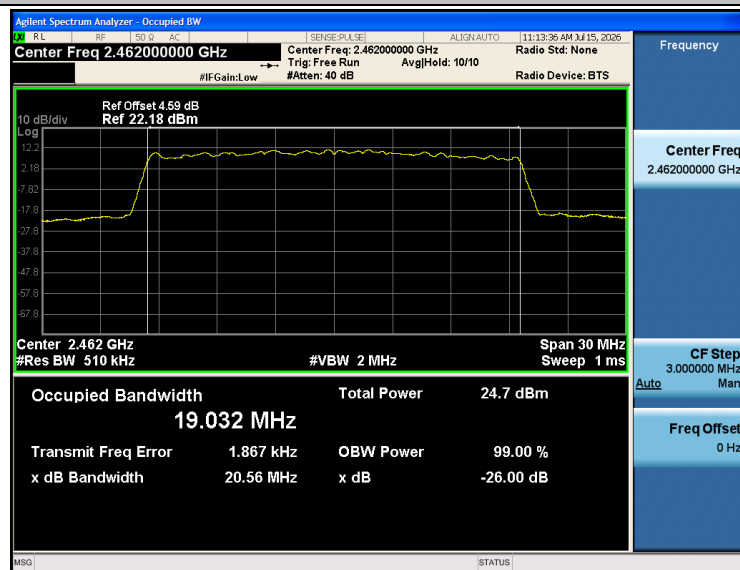
802.11ax(HE20)_OBW_2412



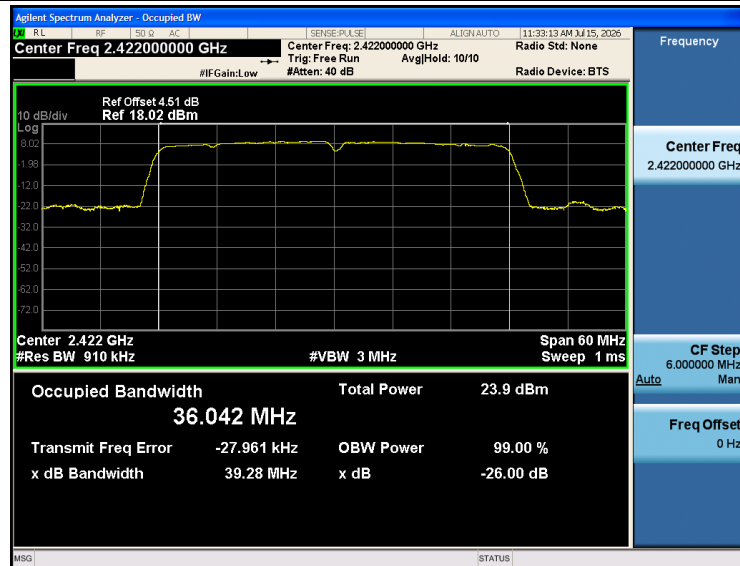
802.11ax(HE20)_OBW_2437



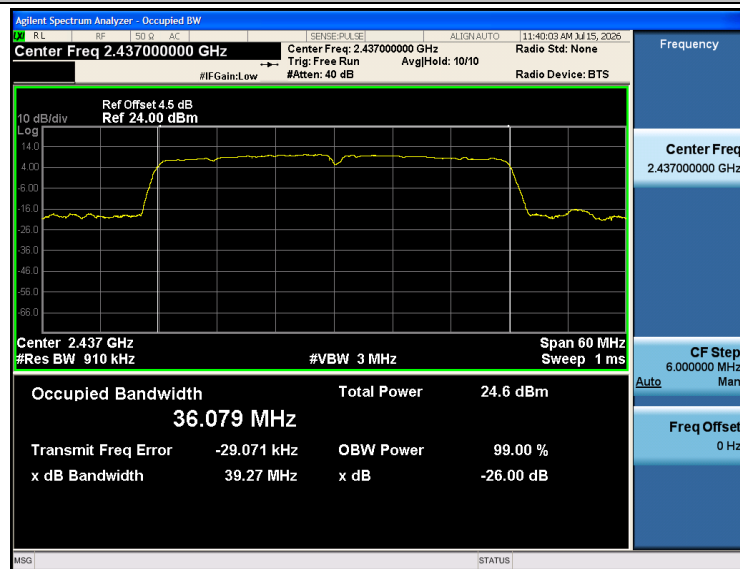
802.11ax(HE20)_OBW_2462



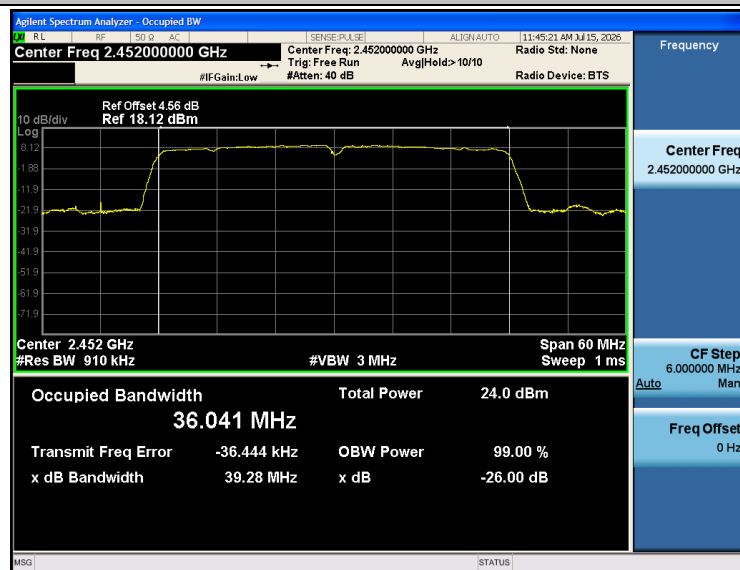
802.11n(HT40)_OBW_2422



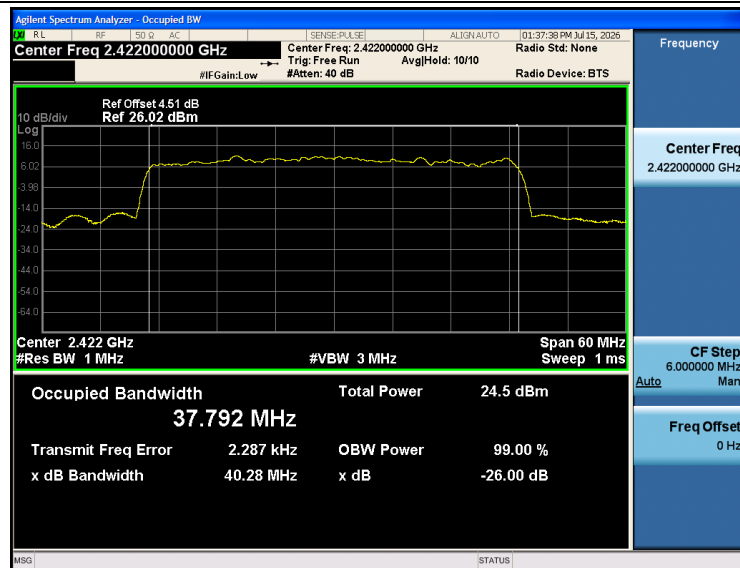
802.11n(HT40)_OBW_2437



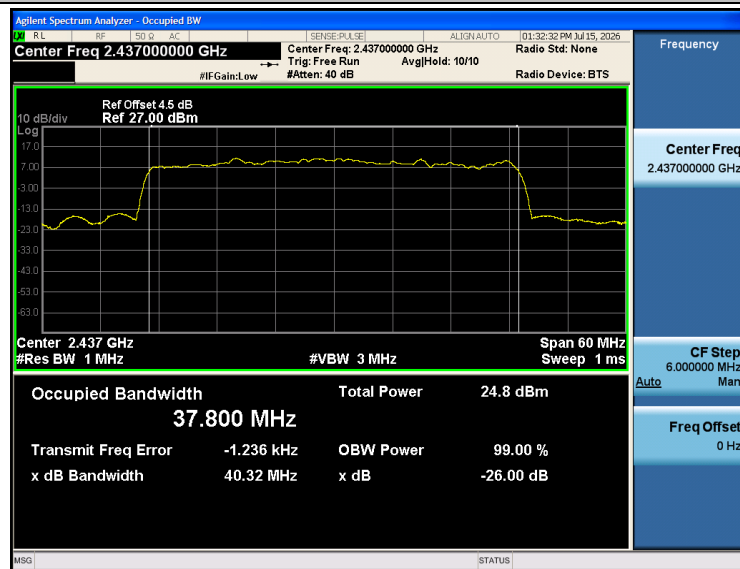
802.11n(HT40)_OBW_2452



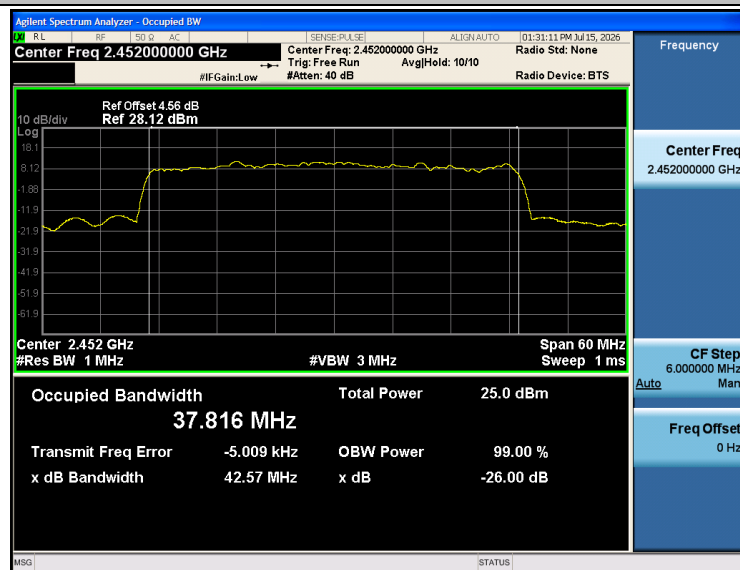
802.11ax(HE40)_OBW_2422



802.11ax(HE40)_OBW_2437

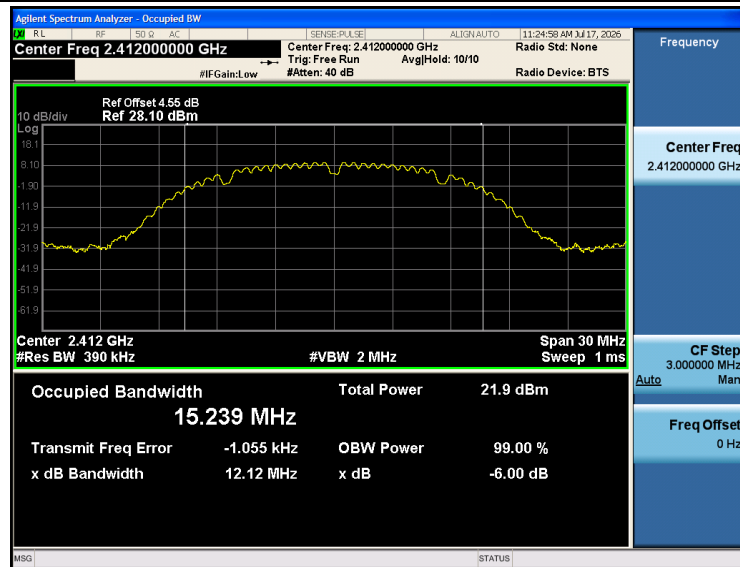


802.11ax(HE40)_OBW_2452

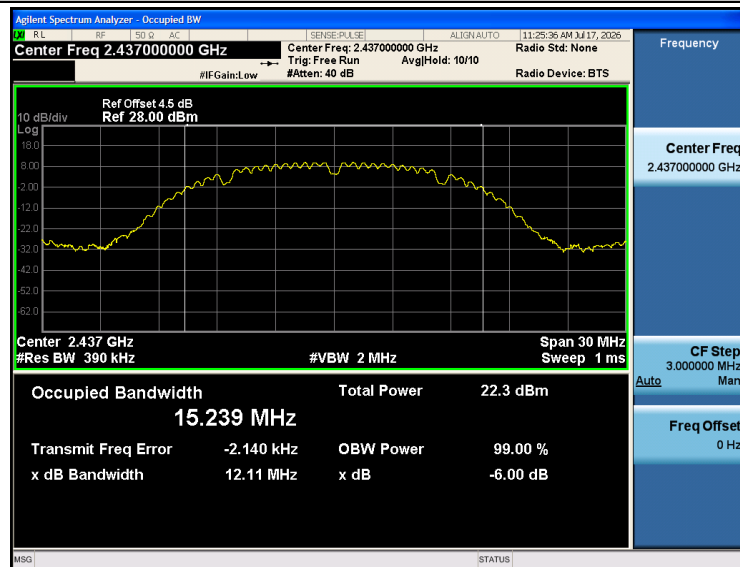




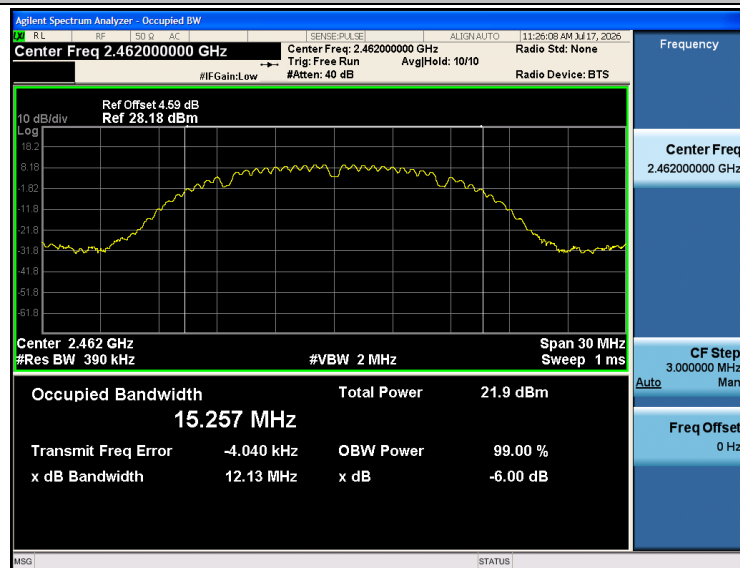
802.11b_DTS_2412



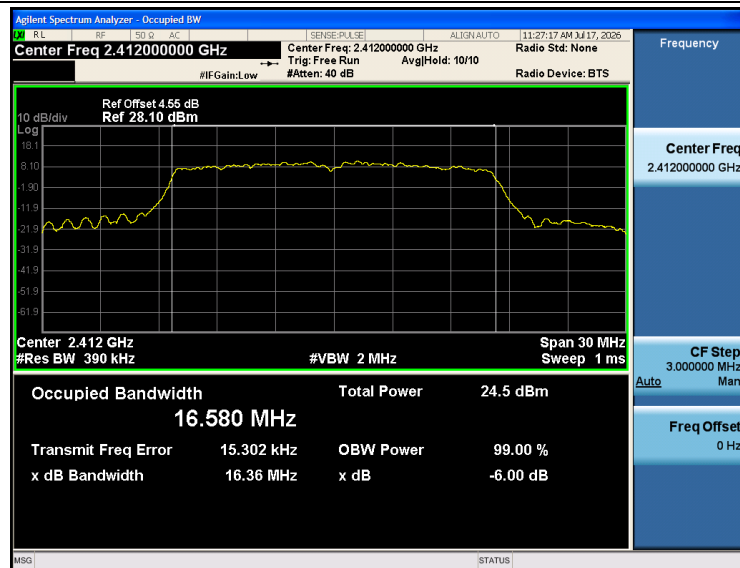
802.11b_DTS_2437



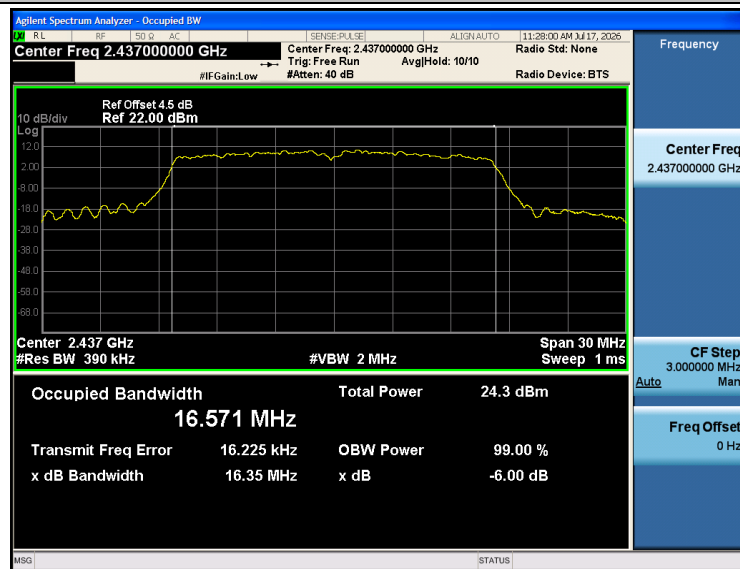
802.11b_DTS_2462



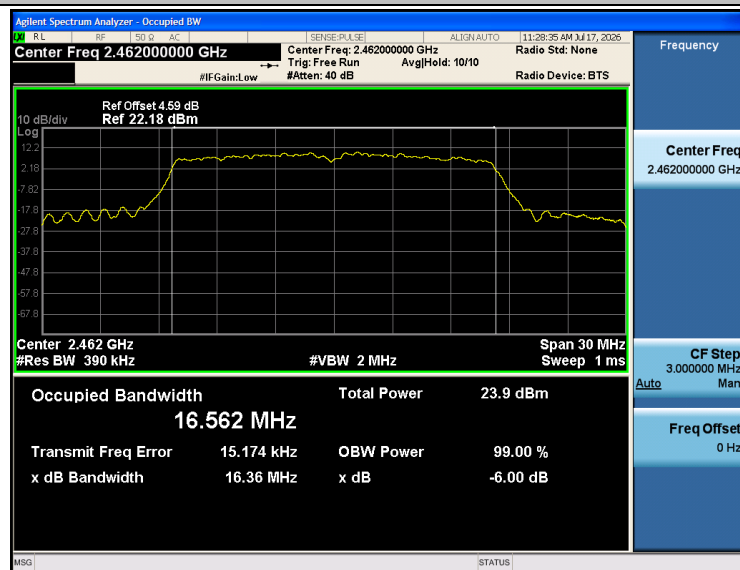
802.11g_DTS_2412



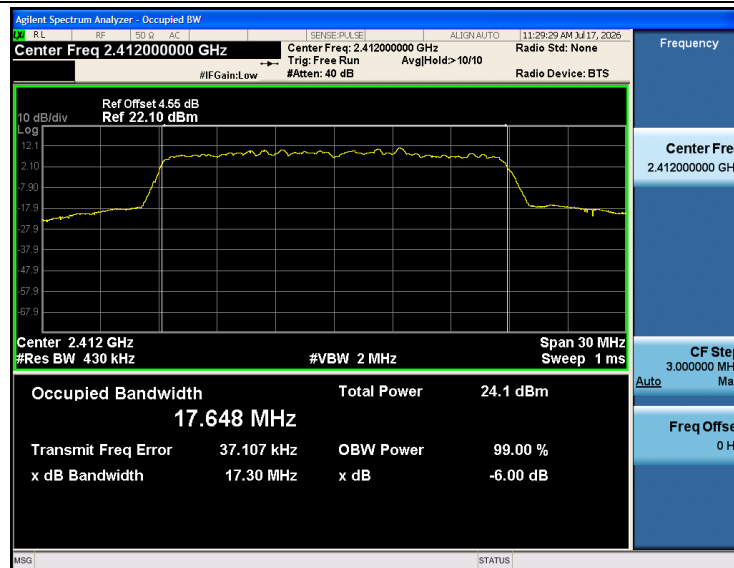
802.11g_DTS_2437



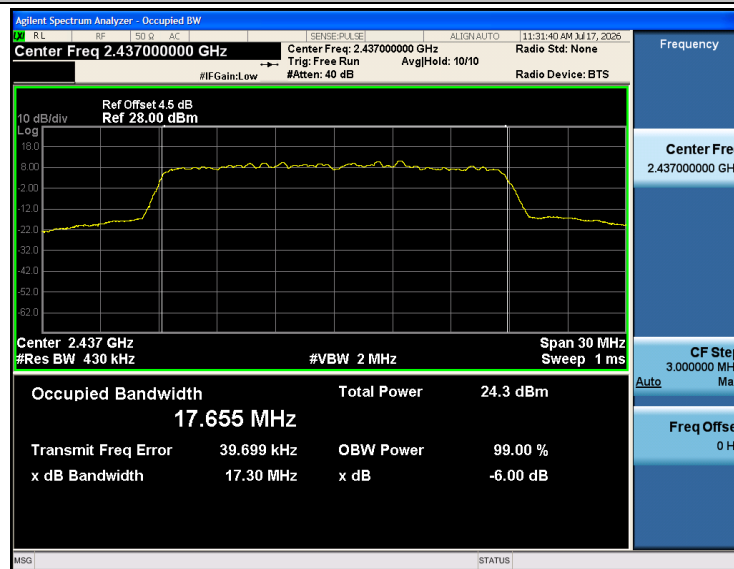
802.11g_DTS_2462



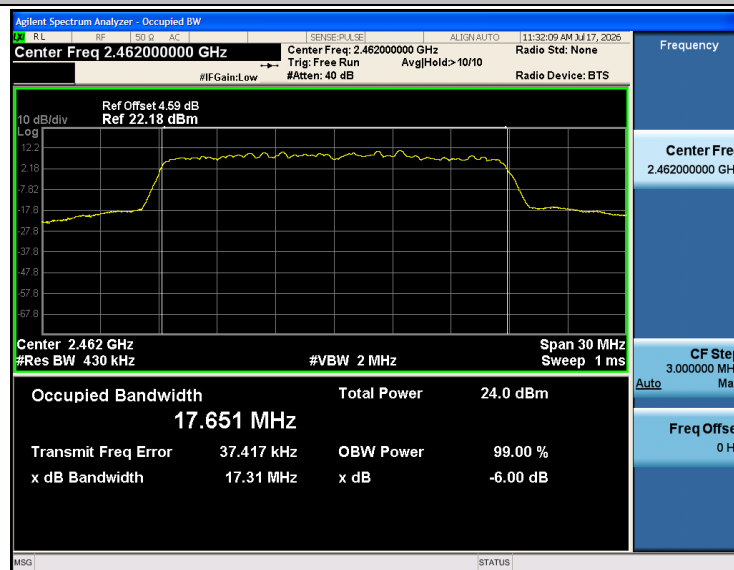
802.11n(HT20)_DTS_2412



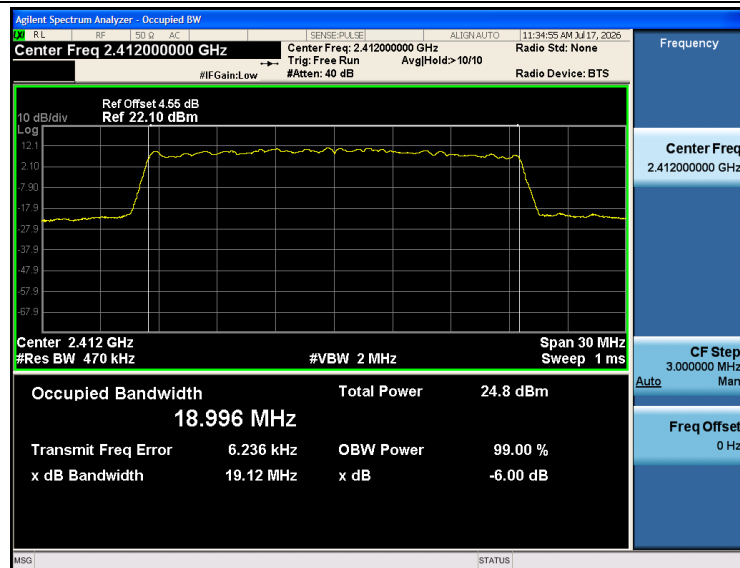
802.11n(HT20)_DTS_2437



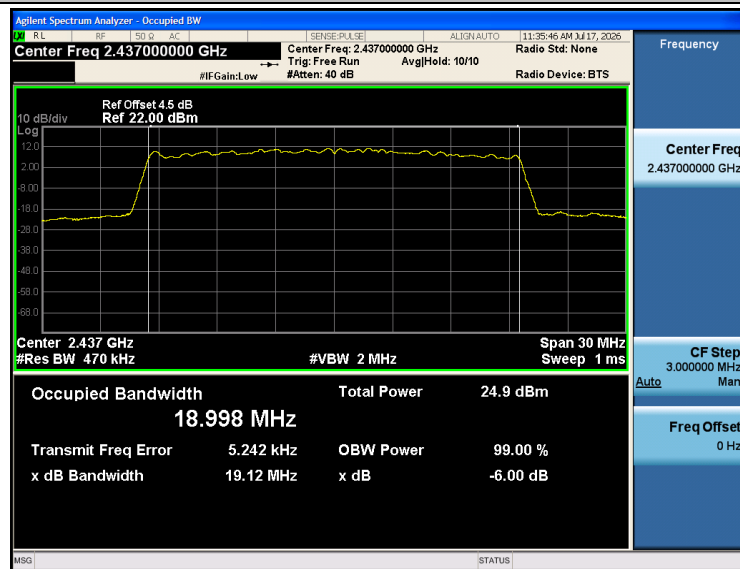
802.11n(HT20)_DTS_2462



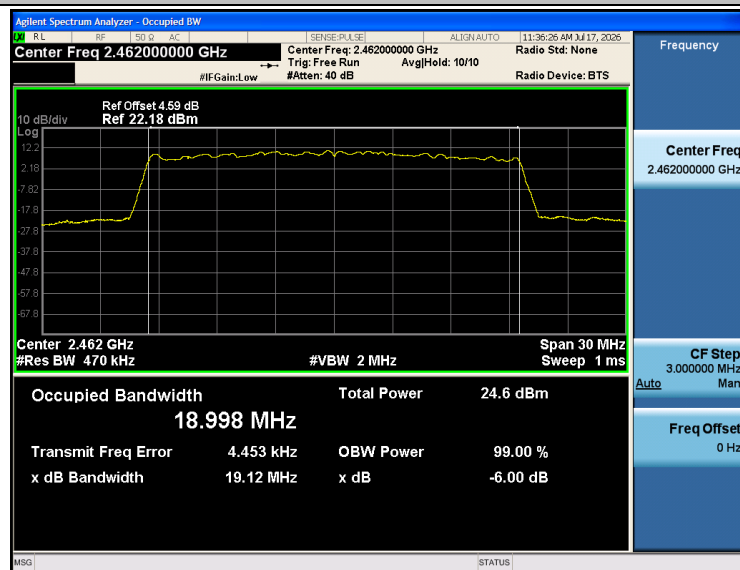
802.11ax(HE20)_DTS_2412



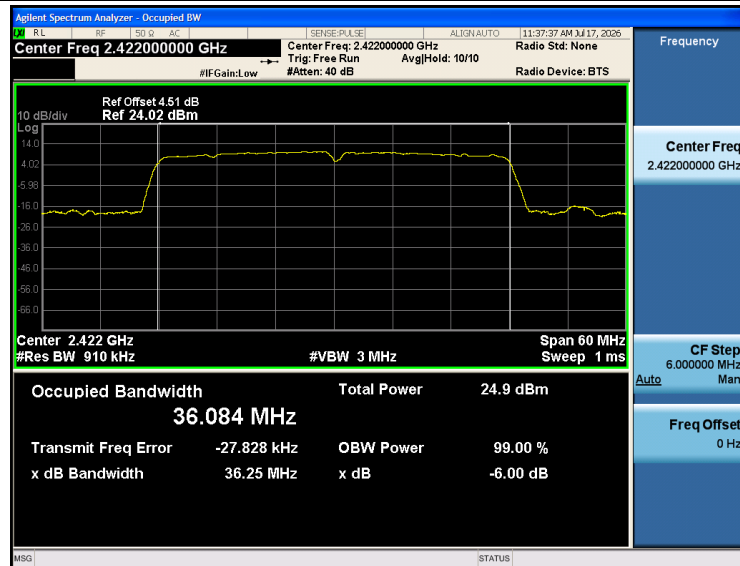
802.11ax(HE20)_DTS_2437



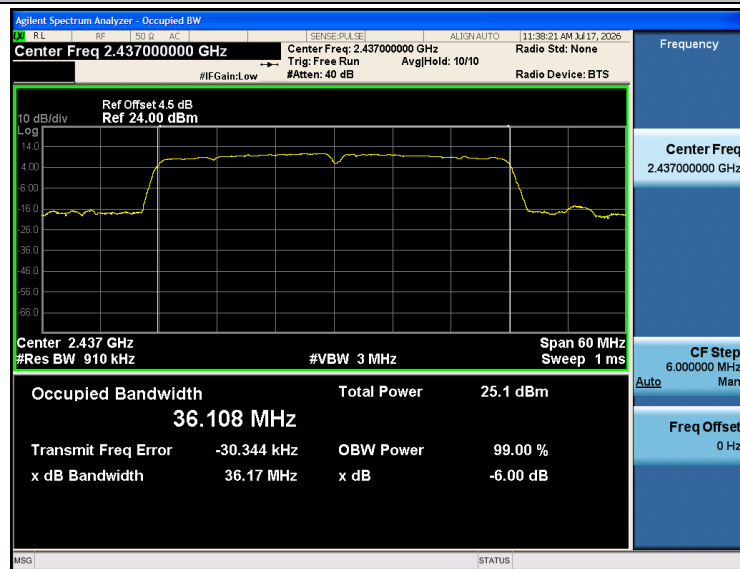
802.11ax(HE20)_DTS_2462



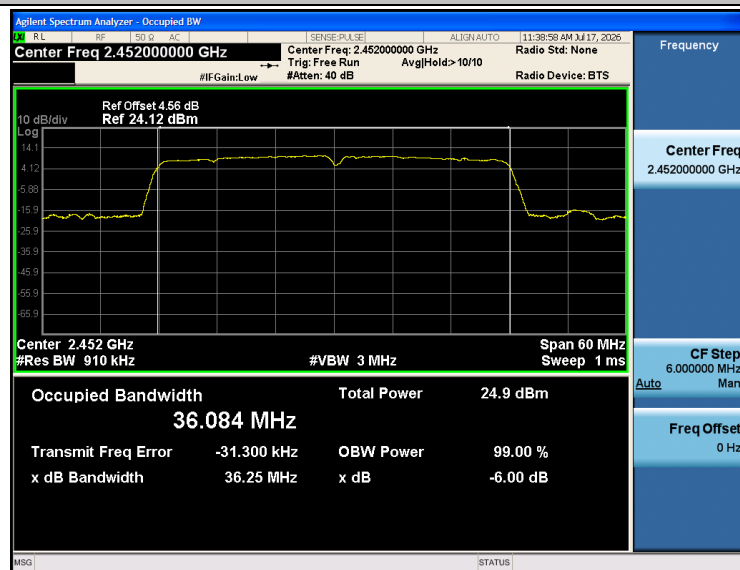
802.11n(HT40)_DTS_2422



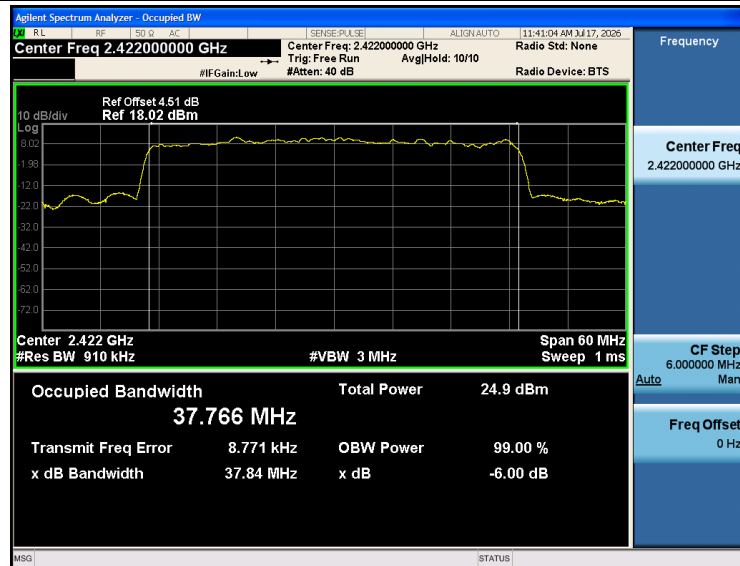
802.11n(HT40)_DTS_2437



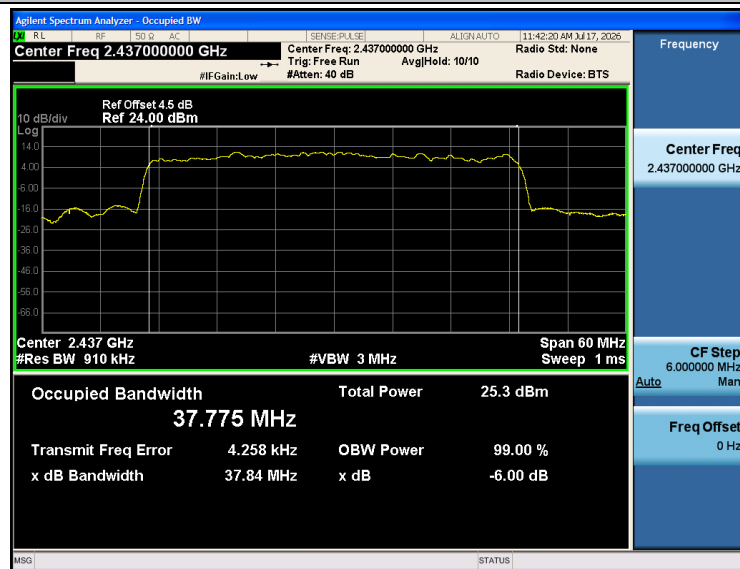
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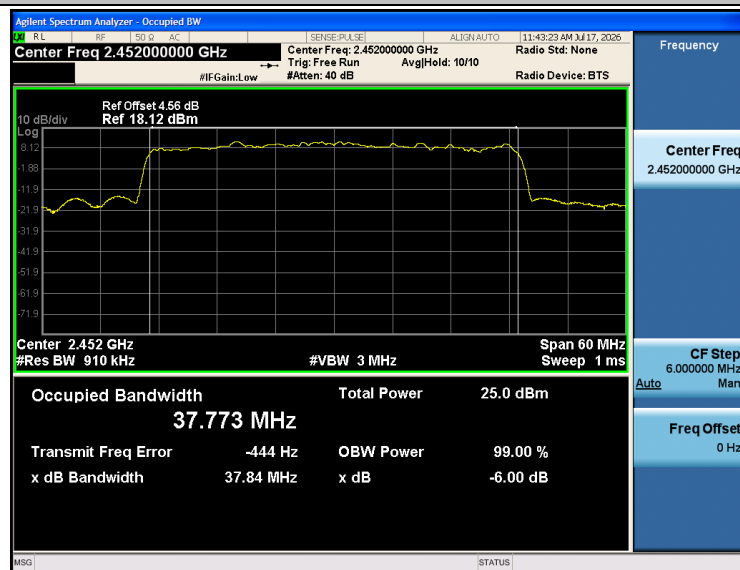
802.11ax(HE40)_DTS_2422



802.11ax(HE40)_DTS_2437



802.11ax(HE40)_DTS_2452





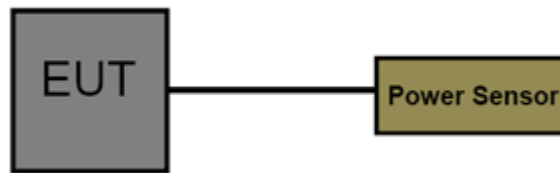
3.6. Maximum Conducted Output Power

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3)/ RSS-247 6.3.2:

Section	Test Item	Limit	Frequency Range(MHz)
CFR 47 FCC 15.247(b)(3)	Maximum conducted output power	1 Watt or 30dBm	2400~2483.5
ISED RSS-247 6.3.2	Maximum conducted output power	1 Watt or 30dBm	2400~2483.5
ISED RSS-247 6.3.2	EIRP	4 Watt or 36dBm	2400~2483.5

Test Configuration



Test Procedure

1. The maximum conducted output power may be measured using a broadband RF power meter.
2. Power measurements were performed only when the EUT was transmitting at its AVG power control level using a broadband power meter with a pulse sensor.
3. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.
4. Record the measurement data.

Test Mode

Please refer to the clause 2.4.

Test Result



Test Mode	Frequency [MHz]	Conducted power [dBm]	Ant. gain [dBi]	E.I.R.P Result [dBm]	Conducted output power Limit[dBm]	E.I.R.P Limit[dBm]	Verdict
802.11b	2412	18.26	4.87	23.13	<=30	<=36	PASS
	2437	18.42	4.87	23.29	<=30	<=36	PASS
	2462	18.15	4.87	23.02	<=30	<=36	PASS
802.11g	2412	17.52	4.87	22.39	<=30	<=36	PASS
	2437	17.43	4.87	22.3	<=30	<=36	PASS
	2462	17.11	4.87	21.98	<=30	<=36	PASS
802.11n(HT20)	2412	17.07	4.87	21.94	<=30	<=36	PASS
	2437	17.33	4.87	22.2	<=30	<=36	PASS
	2462	17.33	4.87	22.2	<=30	<=36	PASS
802.11ax(HE20)	2412	17.05	4.87	21.92	<=30	<=36	PASS
	2437	17.24	4.87	22.11	<=30	<=36	PASS
	2462	17.39	4.87	22.26	<=30	<=36	PASS
802.11n(HT20)	2422	16.25	4.87	21.12	<=30	<=36	PASS
	2437	16.14	4.87	21.01	<=30	<=36	PASS
	2452	16.23	4.87	21.1	<=30	<=36	PASS
802.11ax(HE40)	2422	16.27	4.87	21.14	<=30	<=36	PASS
	2437	16.08	4.87	20.95	<=30	<=36	PASS
	2452	16.32	4.87	21.19	<=30	<=36	PASS

Note 1: Test results increased RF cable loss by 0.7dB and Duty Cycle Factor.

Note 2: E.I.R.P output power = Conducted output power + Antenna gain



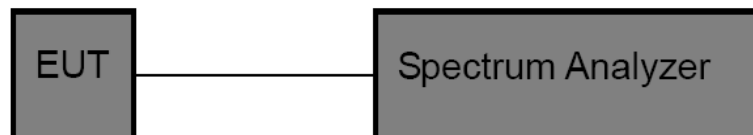
3.7. Power Spectral Density

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e)/ RSS-247 6.3.1 (b):

Test Item	Limit	Frequency Range(MHz)
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v05r02.
3. Spectrum Setting:
Set analyzer center frequency to DTS channel center frequency.
Set the span to 1.5 times the DTS bandwidth.
Set the RBW to: 3 kHz
Set the VBW to: 10 kHz
Detector: Peak
Sweep time: Auto
Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

Test Mode

Please refer to the clause 2.4.

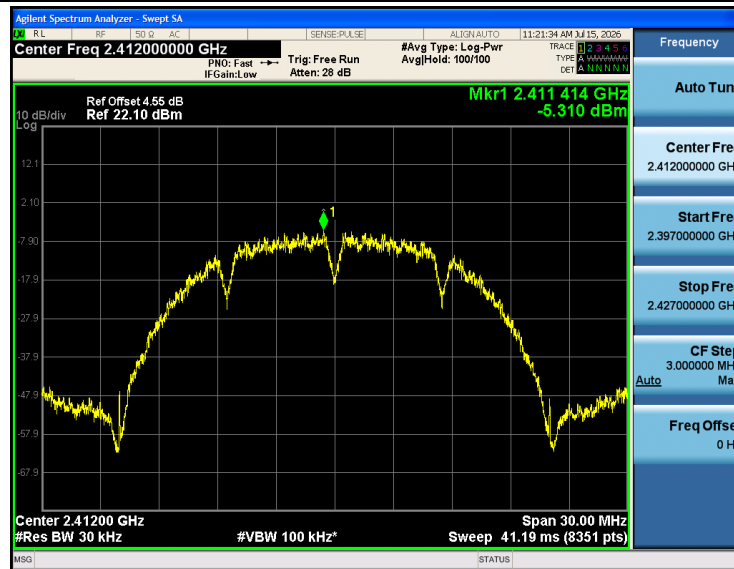
**Test Result**

Test Mode	Frequency [MHz]	SA_PSD [dBm/30kHz]	RB factor [dB]	Duty Cycle Factor	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
802.11b	2412	-5.31	-10.00	0	-15.31	<=8	PASS
	2437	-4.91	-10.00	0	-14.91	<=8	PASS
	2462	-5.20	-10.00	0	-15.20	<=8	PASS
802.11g	2412	-5.42	-10.00	0	-15.42	<=8	PASS
	2437	-5.50	-10.00	0	-15.50	<=8	PASS
	2462	-5.60	-10.00	0	-15.60	<=8	PASS
802.11n(HT20)	2412	-6.53	-10.00	0	-16.53	<=8	PASS
	2437	-6.56	-10.00	0	-16.56	<=8	PASS
	2462	-6.25	-10.00	0	-16.25	<=8	PASS
802.11ax(HE20)	2412	-7.10	-10.00	0	-17.10	<=8	PASS
	2437	-7.41	-10.00	0	-17.41	<=8	PASS
	2462	-6.84	-10.00	0	-16.84	<=8	PASS
802.11n(HT20)	2422	-10.37	-10.00	0	-20.37	<=8	PASS
	2437	-10.66	-10.00	0	-20.66	<=8	PASS
	2452	-10.73	-10.00	0	-20.73	<=8	PASS
802.11ax(HE40)	2422	-11.26	-10.00	0	-21.26	<=8	PASS
	2437	-11.45	-10.00	0	-21.45	<=8	PASS
	2452	-11.52	-10.00	0	-21.52	<=8	PASS

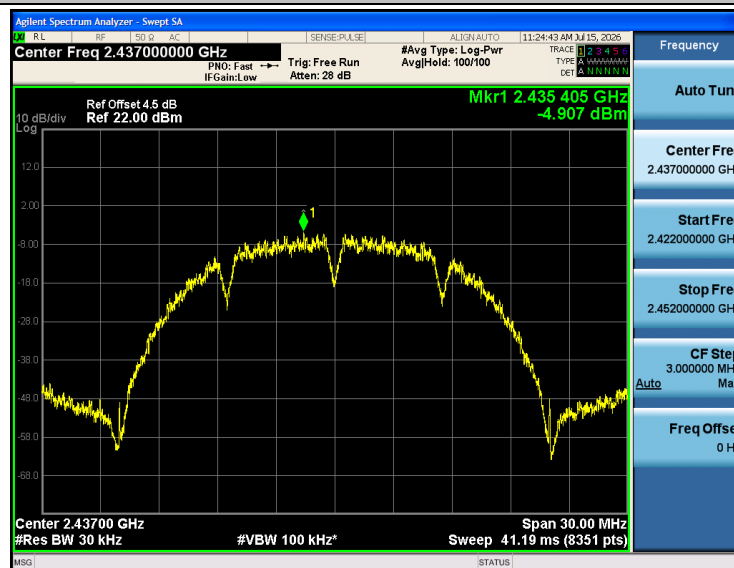
Note: Result = SA_PSD + RB factor + Duty Cycle Factor



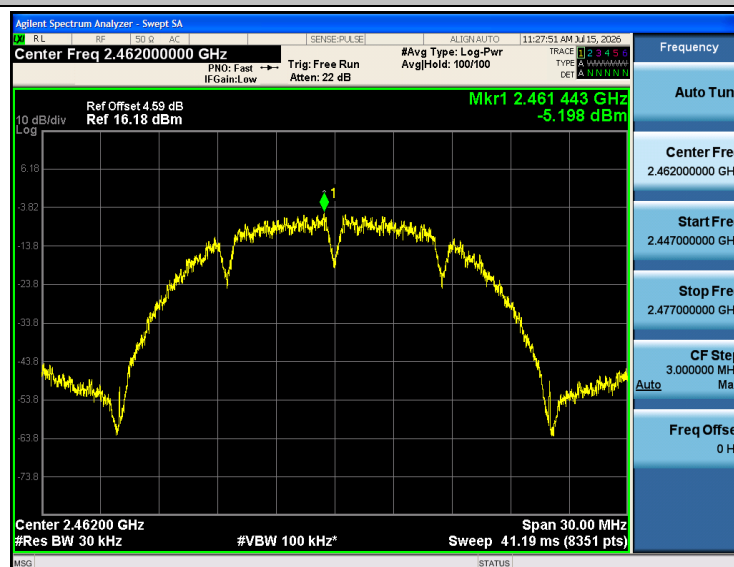
802.11b_2412



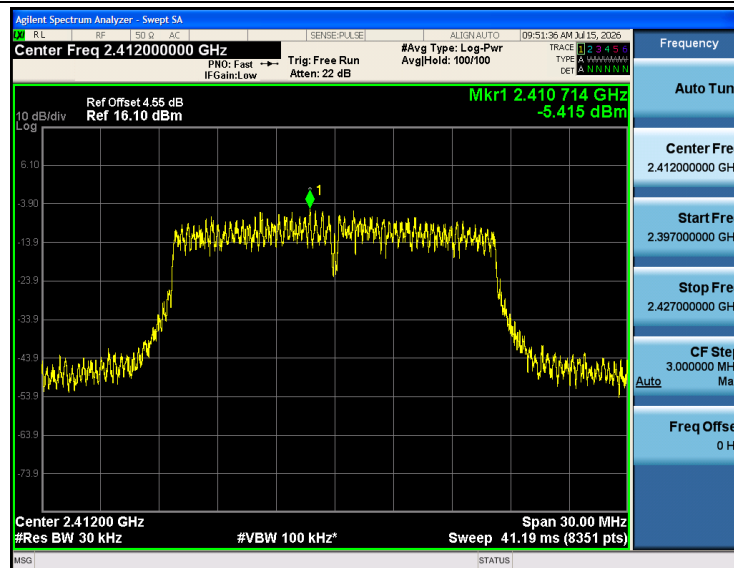
802.11b_2437



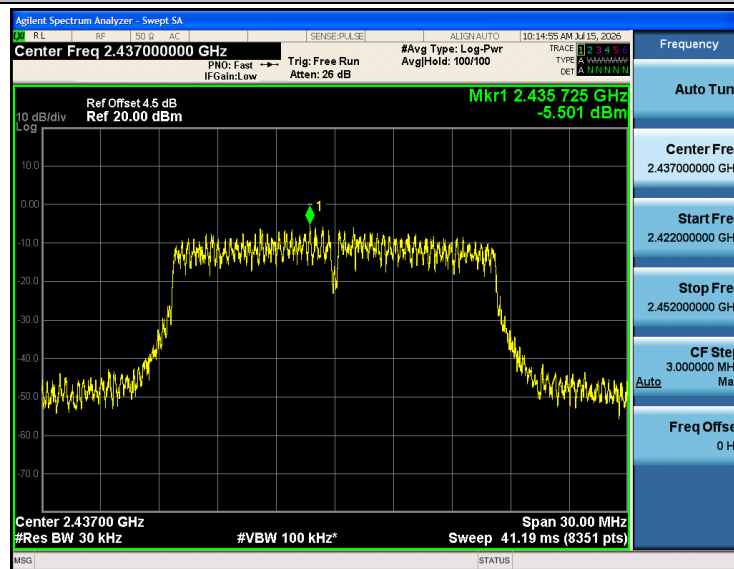
802.11b_2462



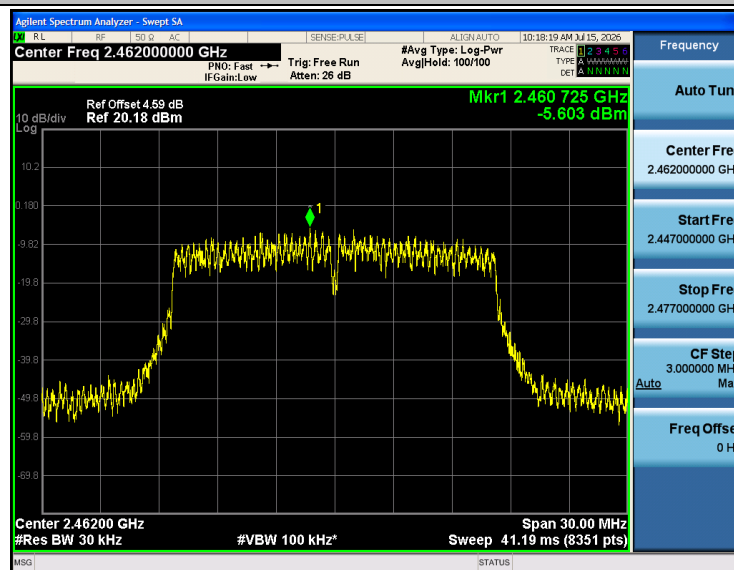
802.11g_2412



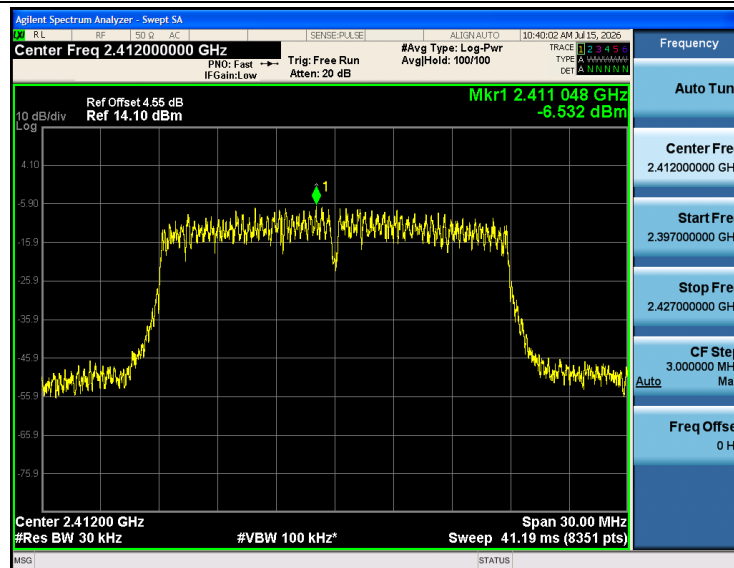
802.11g_2437



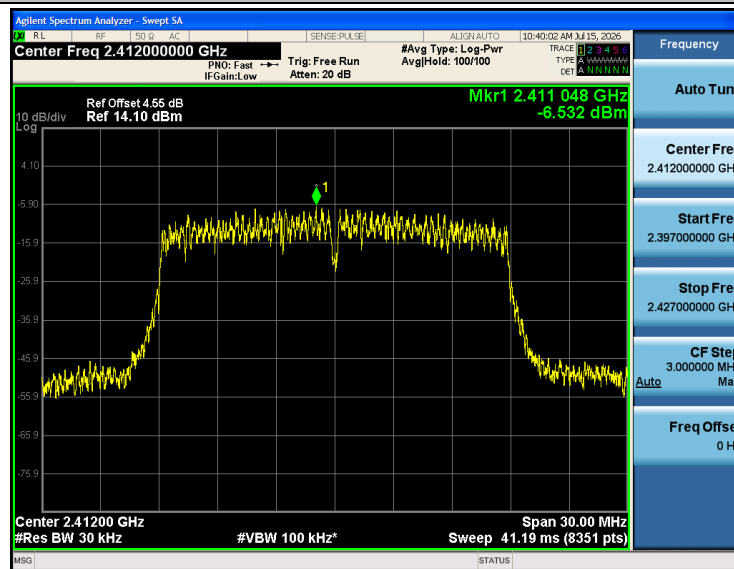
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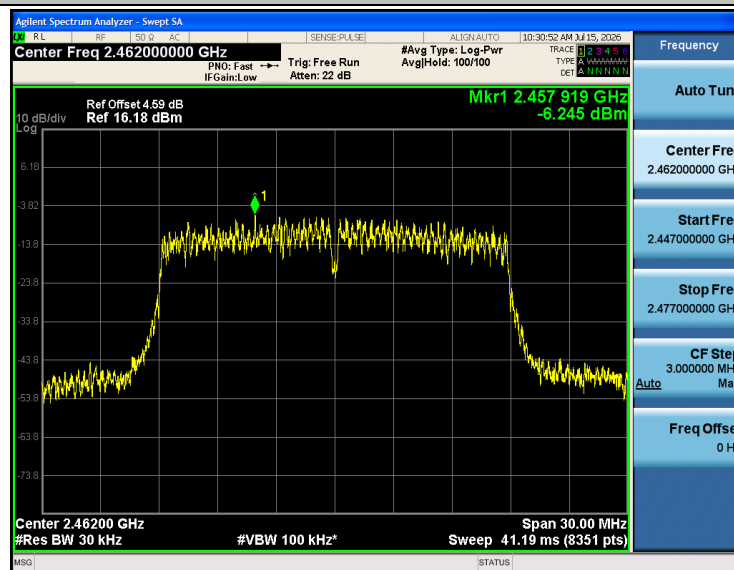
802.11n(HT20)_2412



802.11n(HT20)_2437



802.11n(HT20)_2462



802.11ax(HE20)_2412