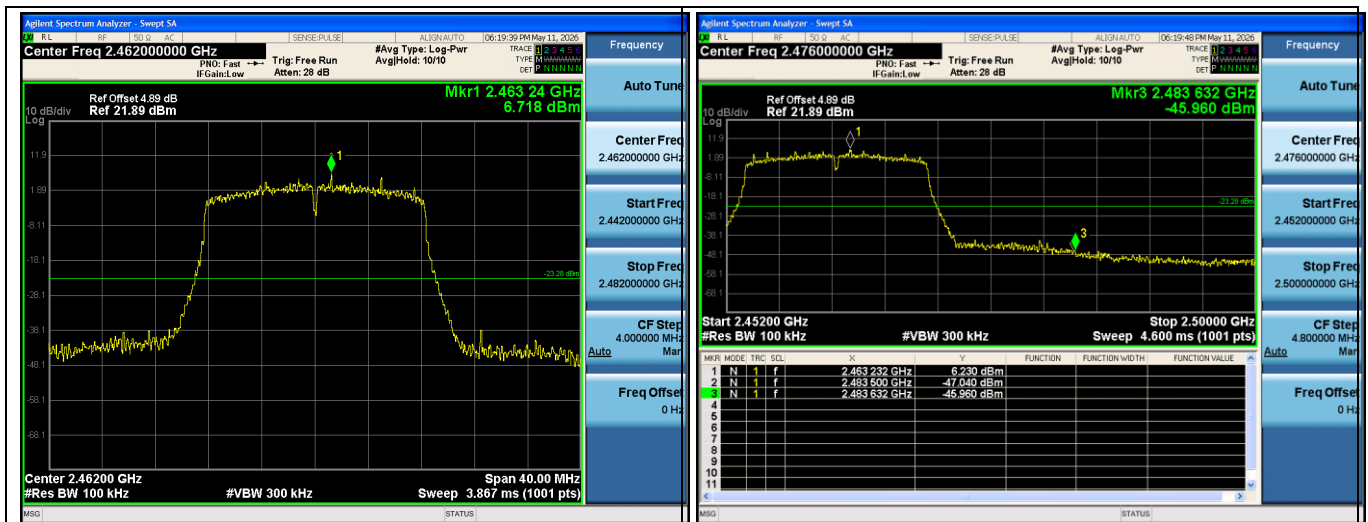
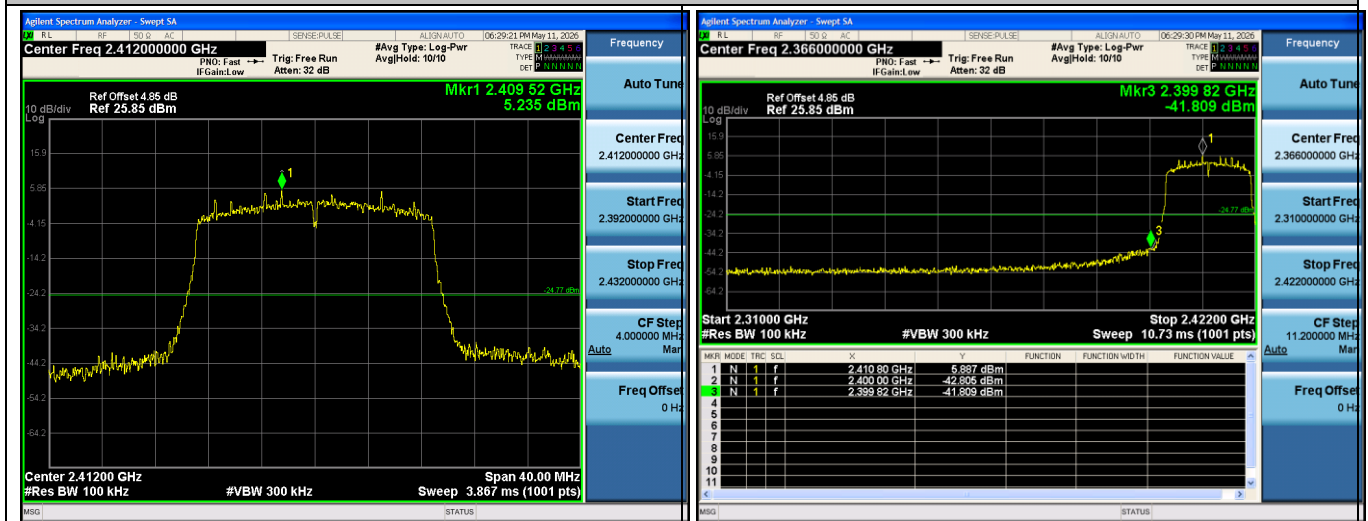




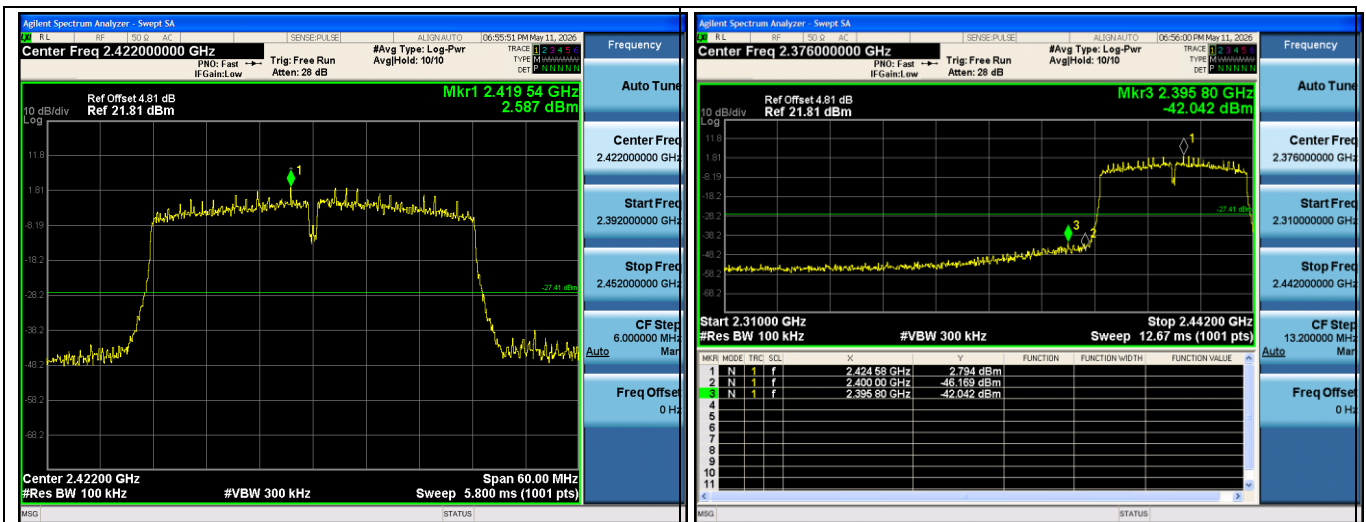
802.11n(HT20)_2412



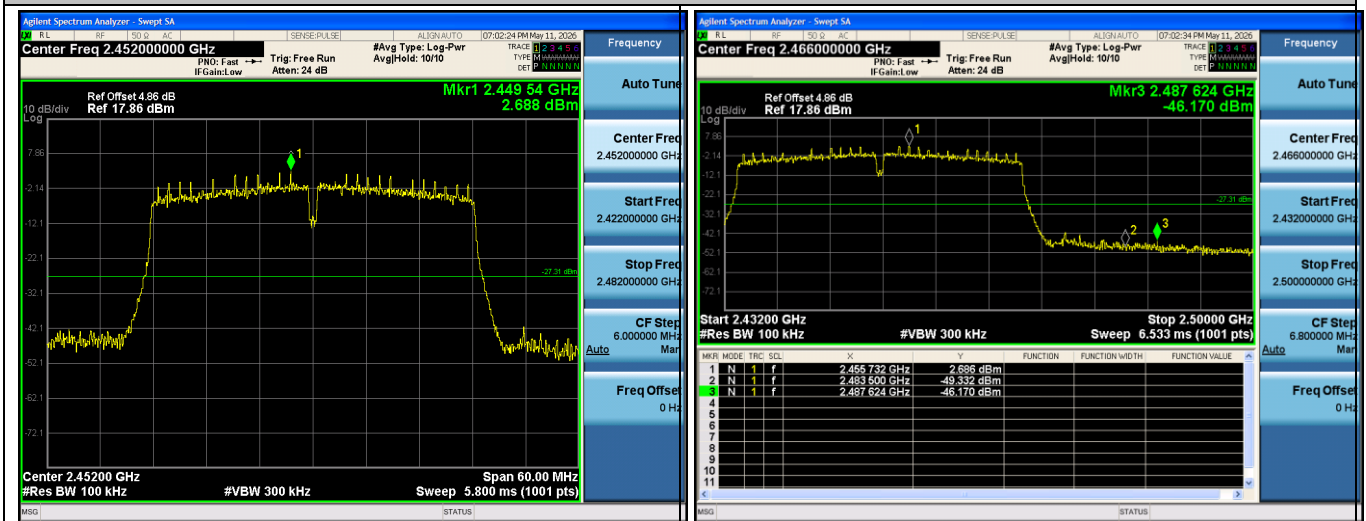
802.11n(HT20)_2462



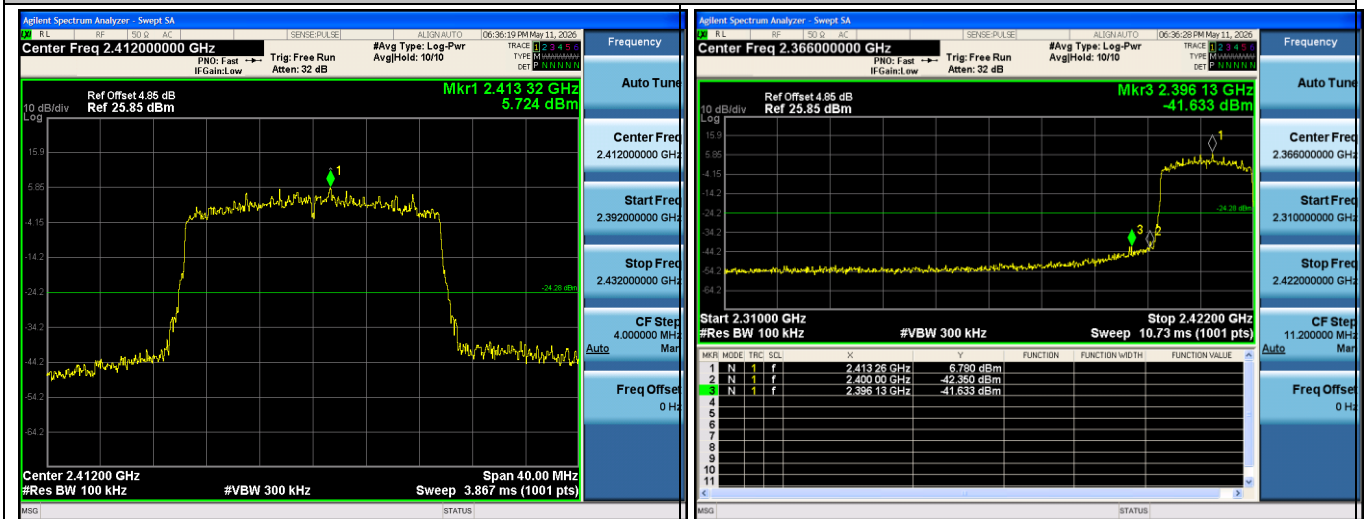
802.11n(HT40)_2422



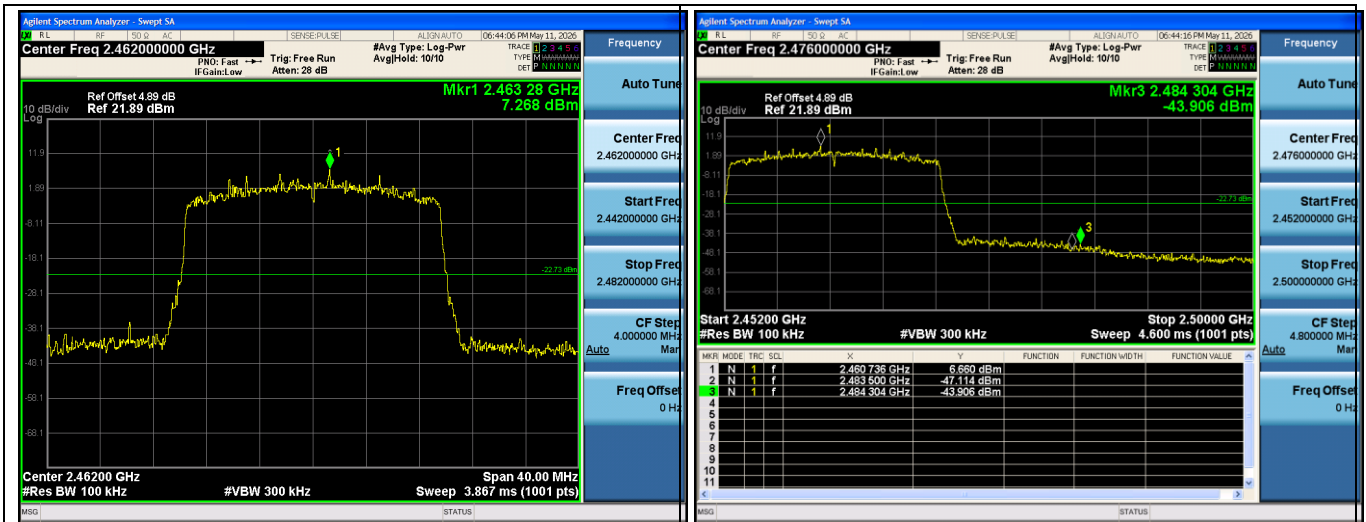
802.11n(HT40)_2452



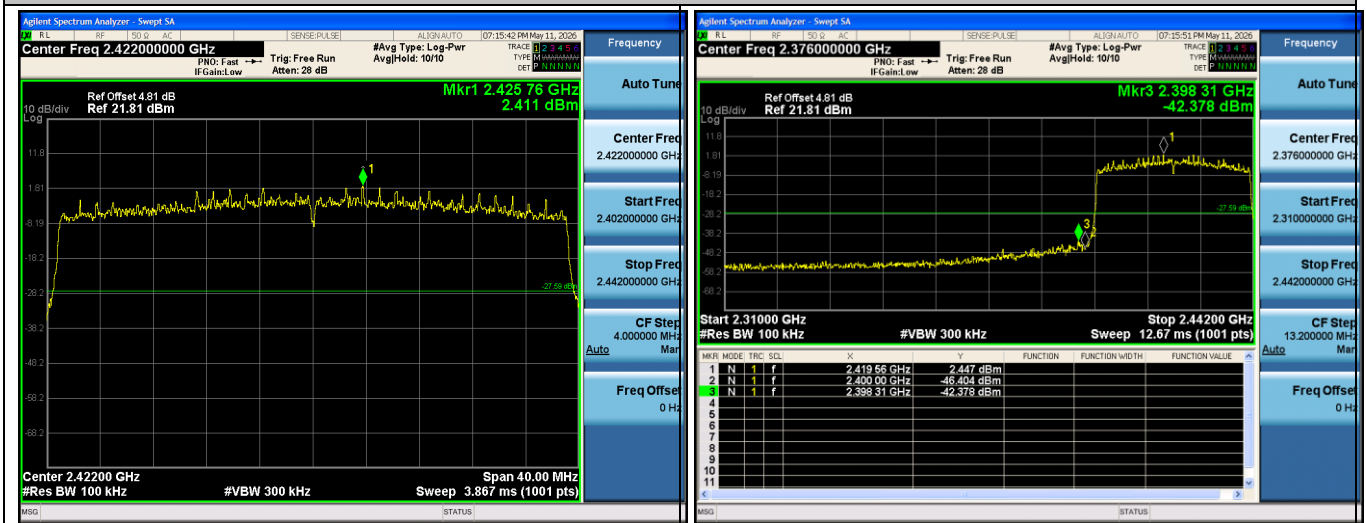
802.11ax(HE20)_2412



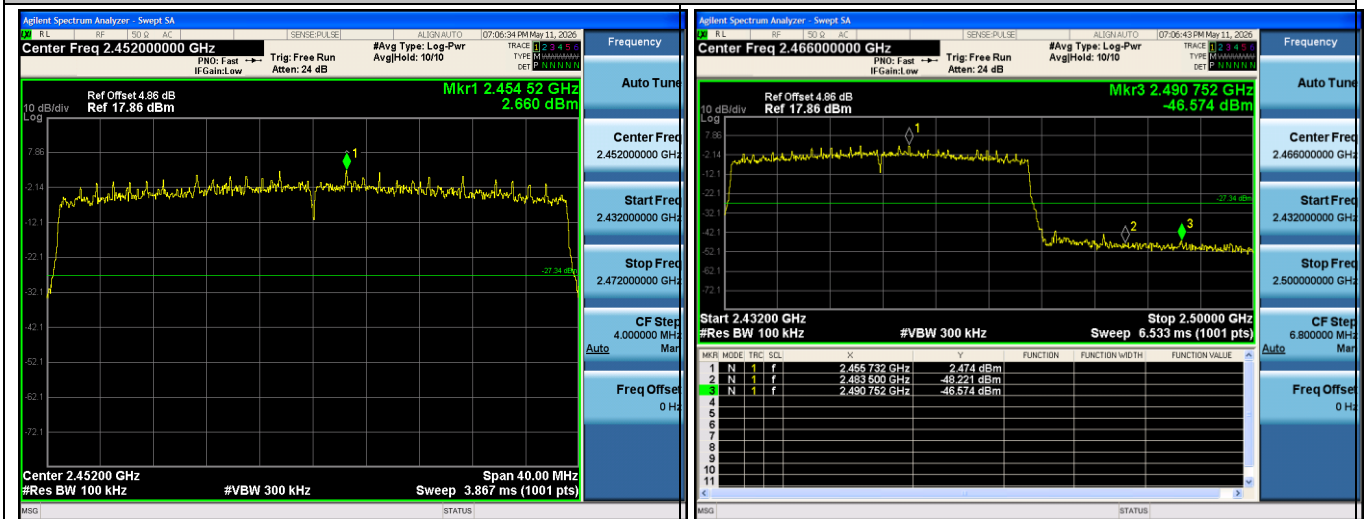
802.11ax(HE20)_2462



802.11ax(HE40)_2422



802.11ax(HE40)_2452



**(2) Conducted Spurious Emissions Test**

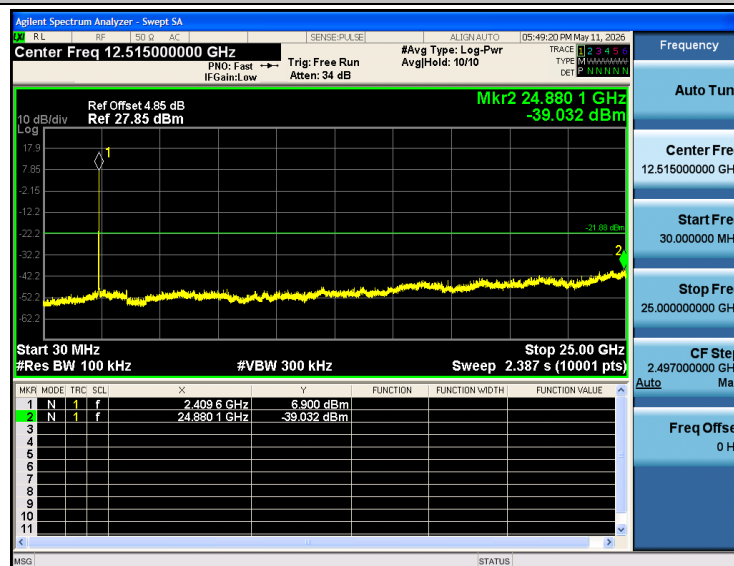
Test Mode	Frequency [MHz]	Ref Level [dBm]	Spurious level[dBm]	Limit[dBm]	Verdict
802.11b	2412	8.116	-39.032	-21.884	PASS
	2437	8.262	-42.778	-21.738	PASS
	2462	8.133	-43.298	-21.867	PASS
802.11g	2412	4.801	-40.982	-25.199	PASS
	2437	6.253	-38.103	-23.747	PASS
	2462	6.718	-44.505	-23.282	PASS
802.11n(HT20)	2412	5.235	-40.966	-24.765	PASS
	2437	6.197	-41.304	-23.803	PASS
	2462	5.351	-38.428	-24.649	PASS
802.11n(HT40)	2422	2.587	-44.318	-27.413	PASS
	2437	2.436	-43.706	-27.564	PASS
	2452	2.688	-48.016	-27.312	PASS
802.11ax(HE20)	2412	5.724	-40.849	-24.276	PASS
	2437	5.625	-40.972	-24.375	PASS
	2462	7.268	-43.839	-22.732	PASS
802.11ax(HE40)	2422	2.411	-43.925	-27.589	PASS
	2437	1.625	-43.601	-28.375	PASS
	2452	2.660	-48.104	-27.340	PASS



802.11b_2412_0~Reference



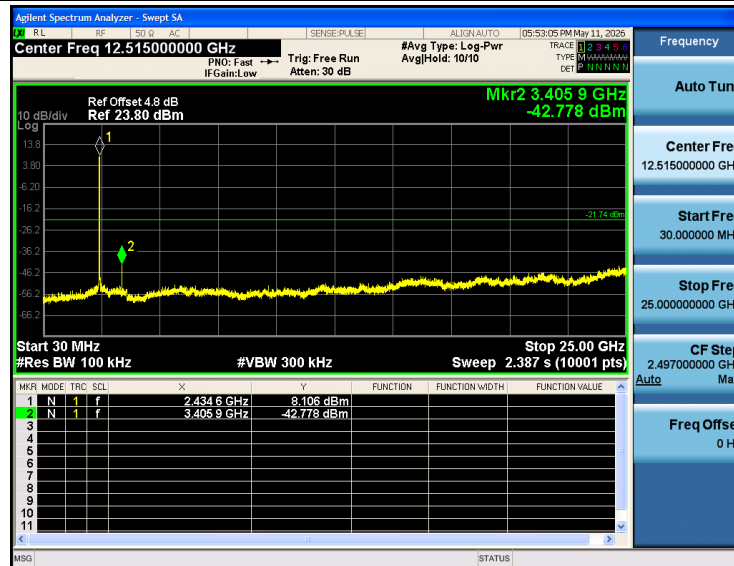
802.11b_2412_30~25000



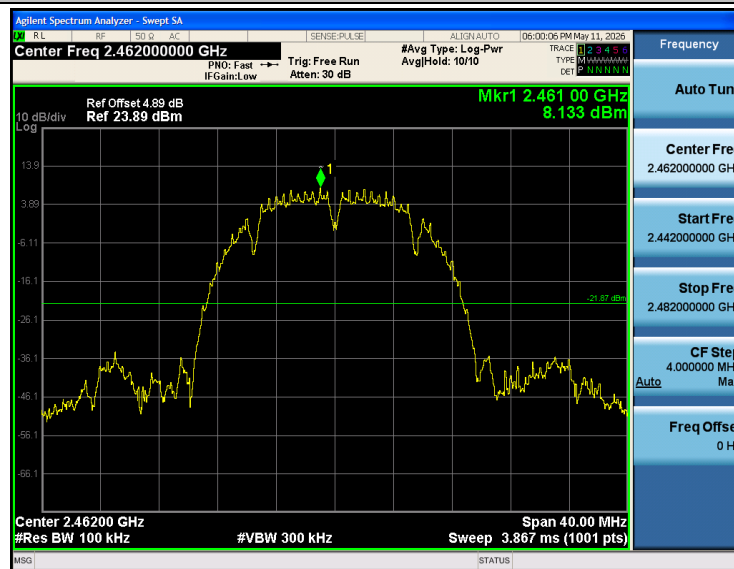
802.11b_2437_0~Reference



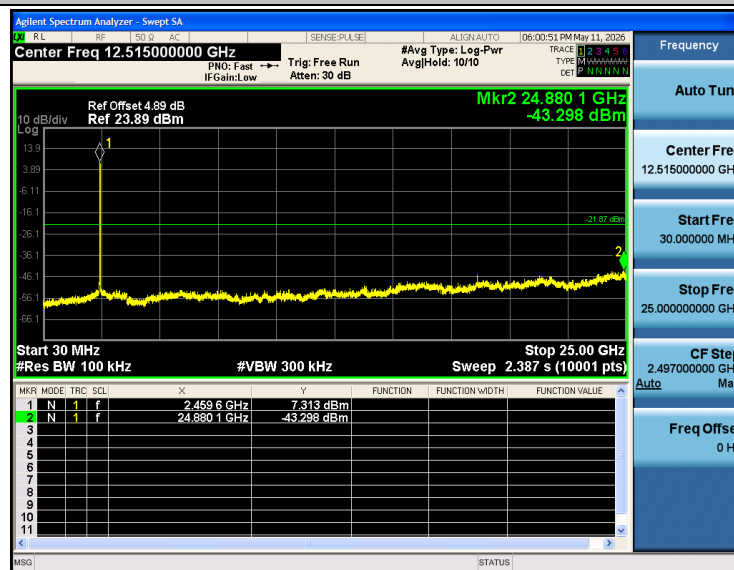
802.11b_2437_30~25000



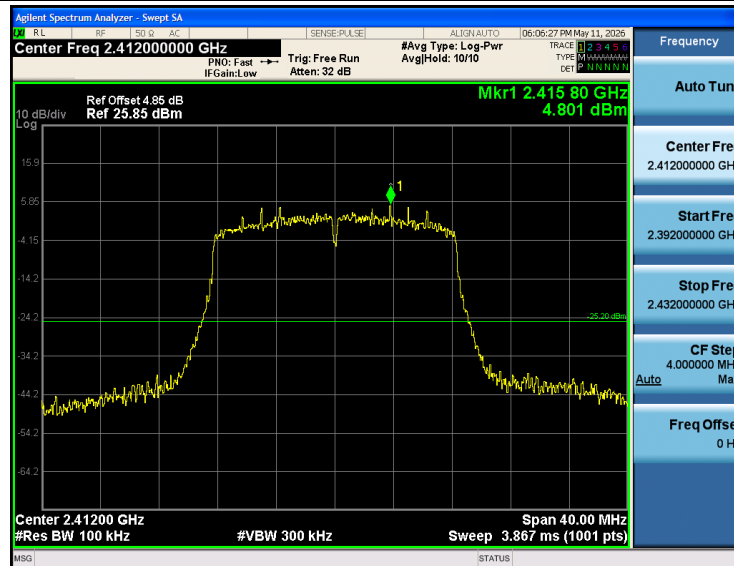
802.11b_2462_0~Reference



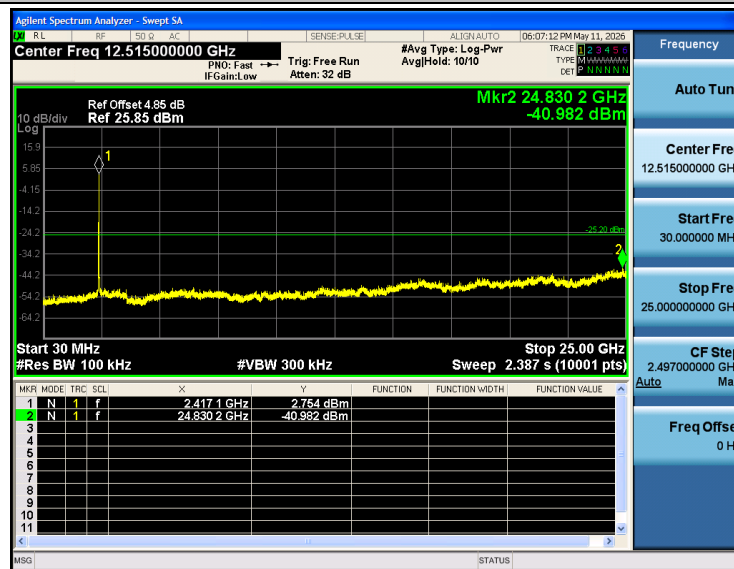
802.11b_2462_30~25000



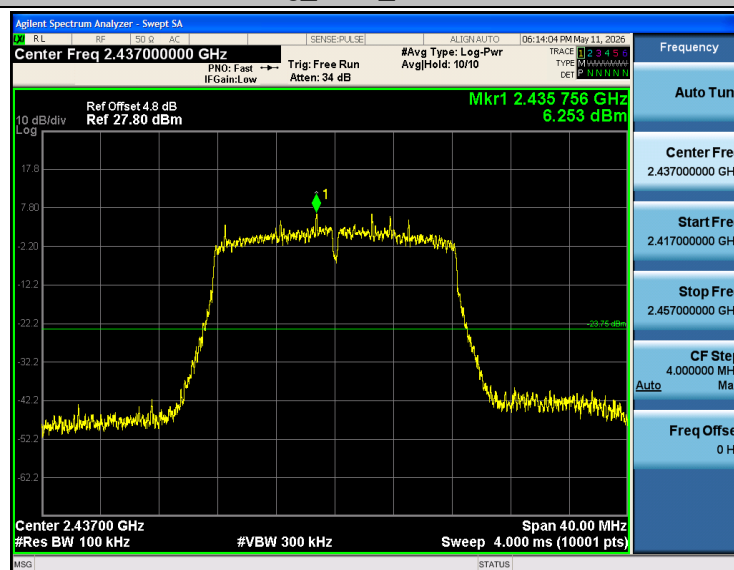
802.11g_2412_0~Reference



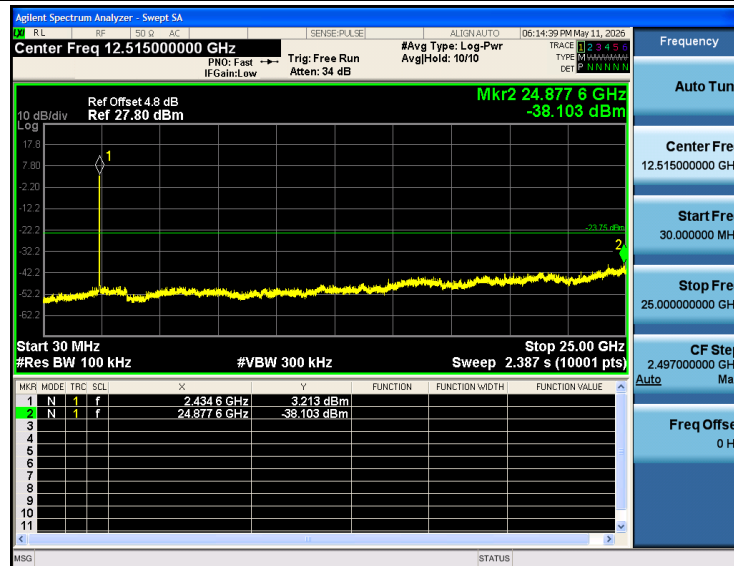
802.11g_2412_30~25000



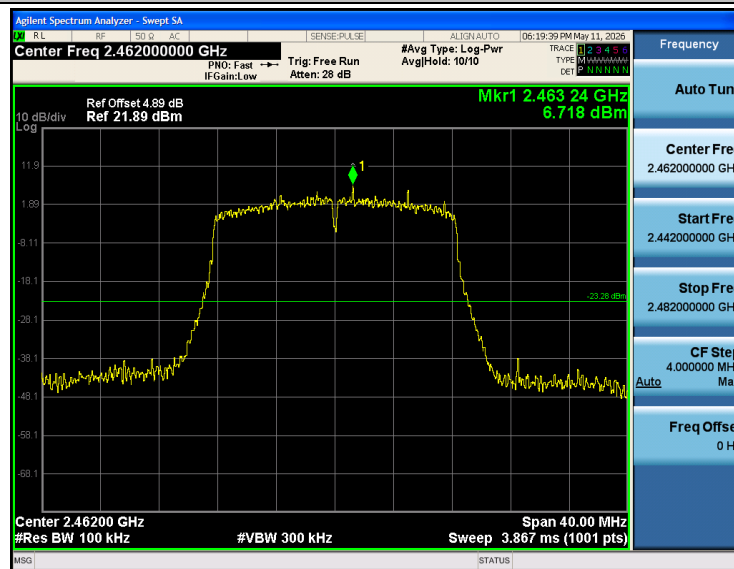
802.11g_2437_0~Reference



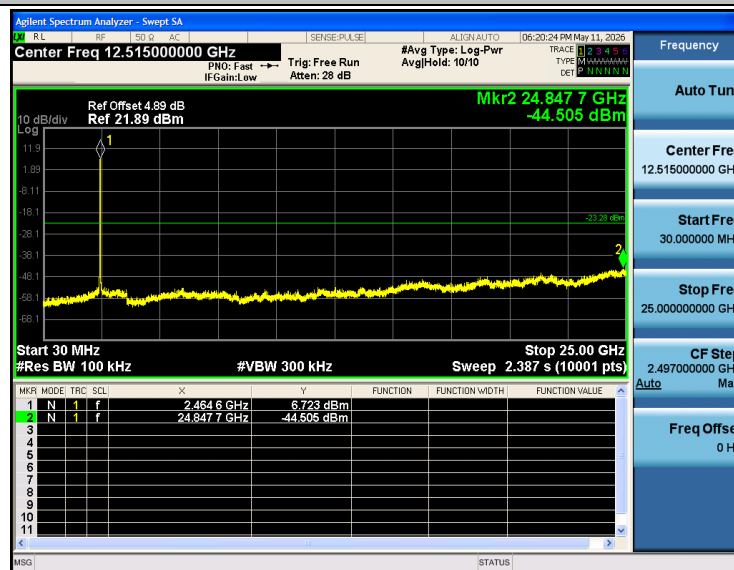
802.11g_2437_30~25000



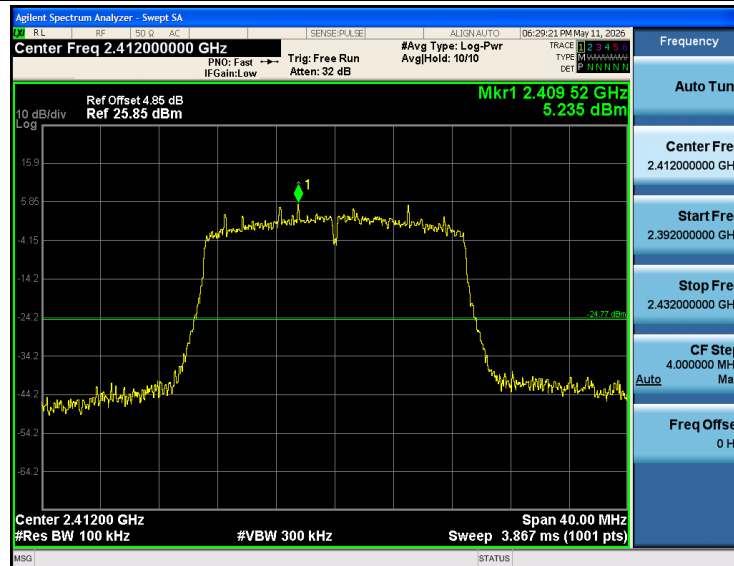
802.11g_2462_0~Reference



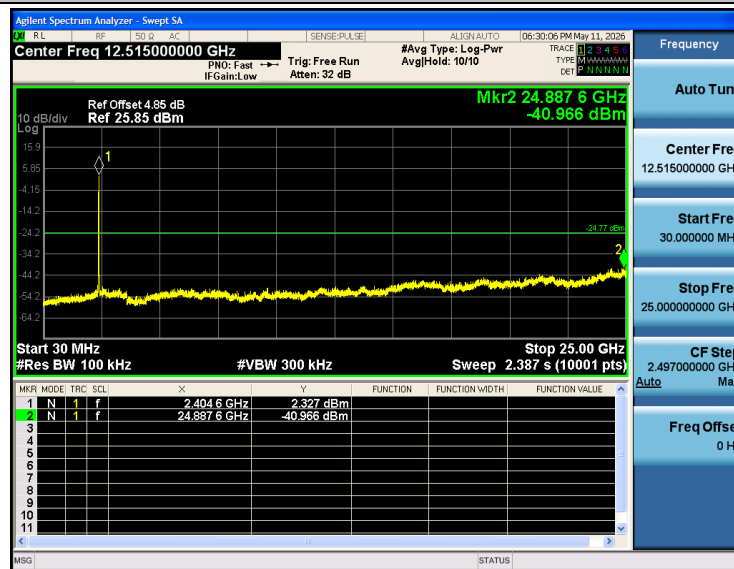
802.11g_2462_30~25000



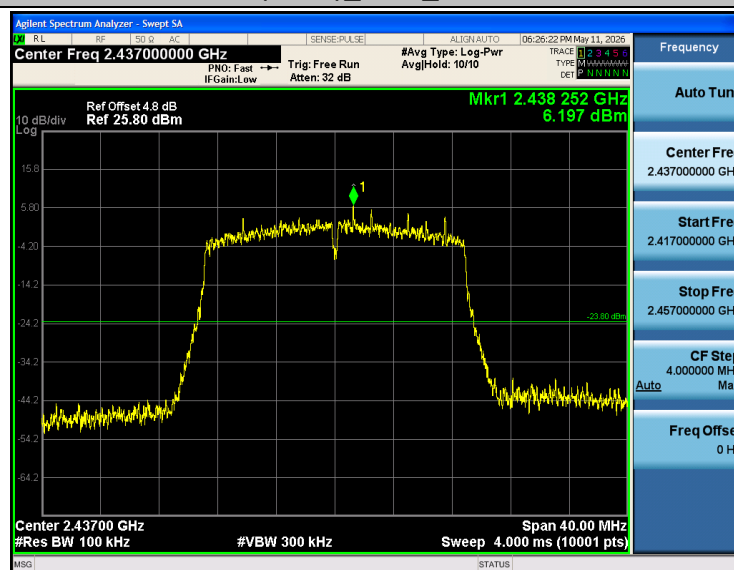
802.11n(HT20)_2412_0~Reference



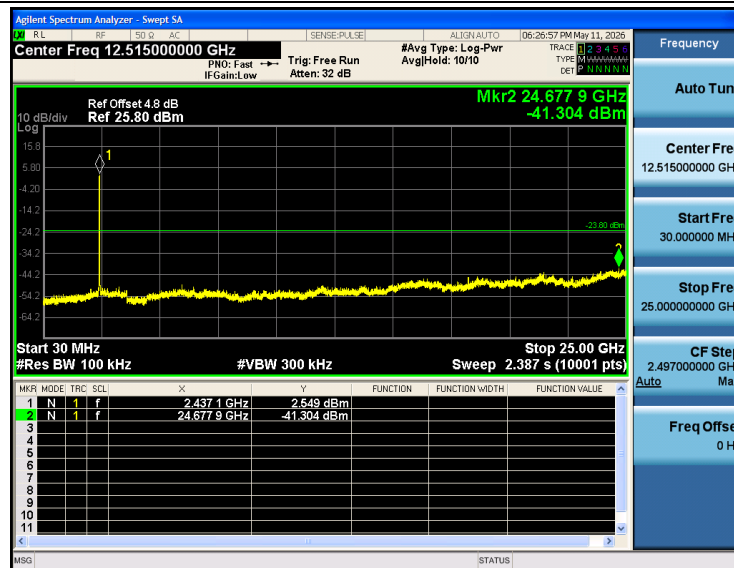
802.11n(HT20)_2412_30~25000



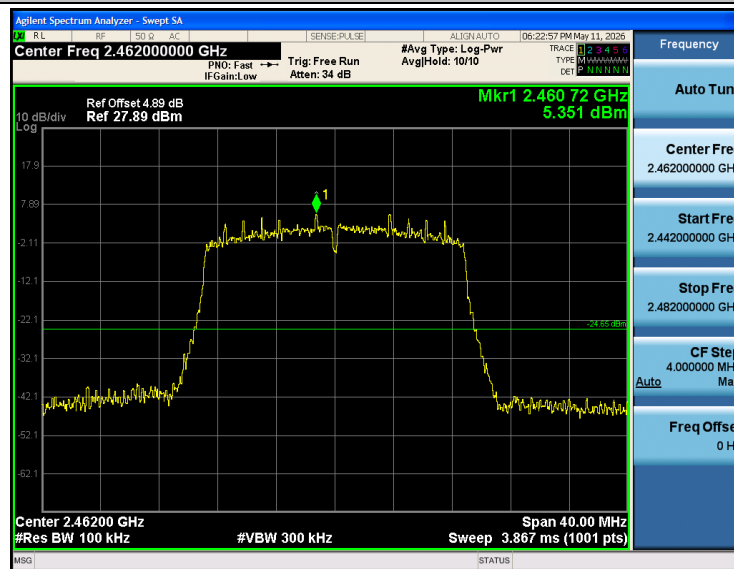
802.11n(HT20)_2437_0~Reference



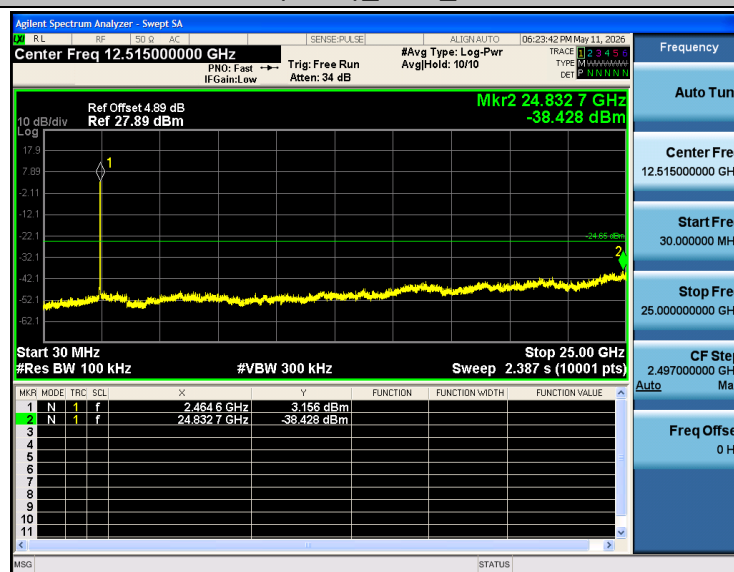
802.11n(HT20)_2437_30~25000



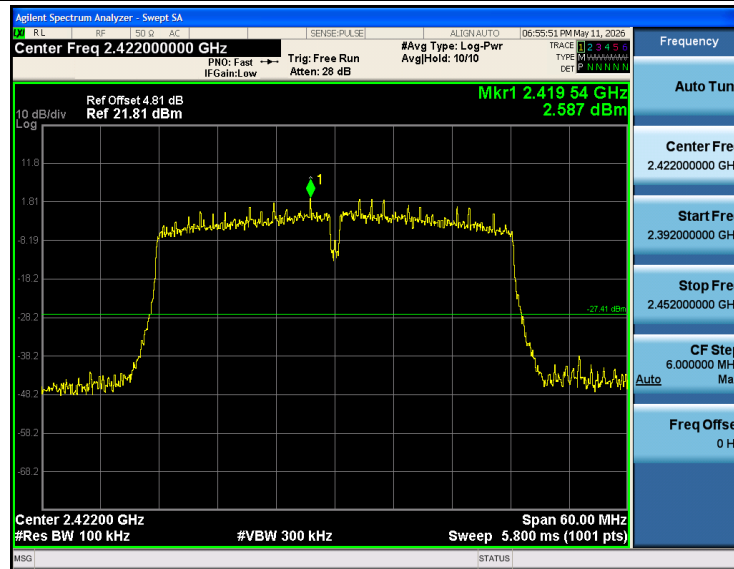
802.11n(HT20)_2462_0~Reference



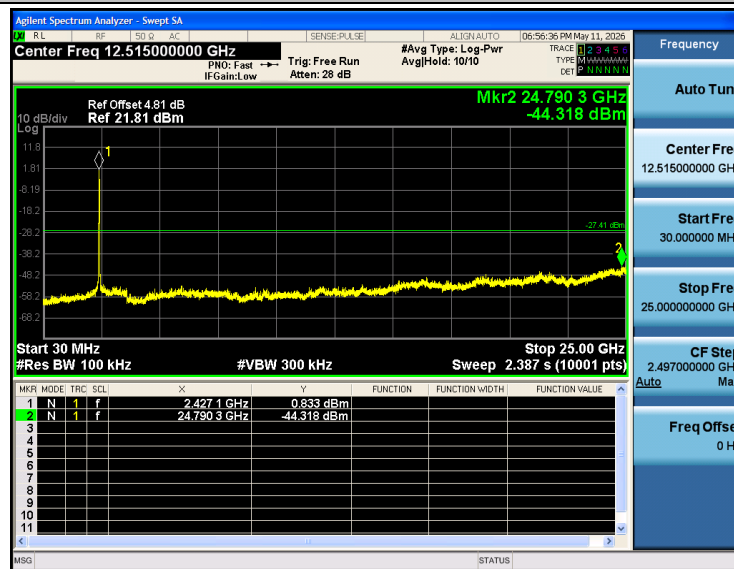
802.11n(HT20)_2462_30~25000



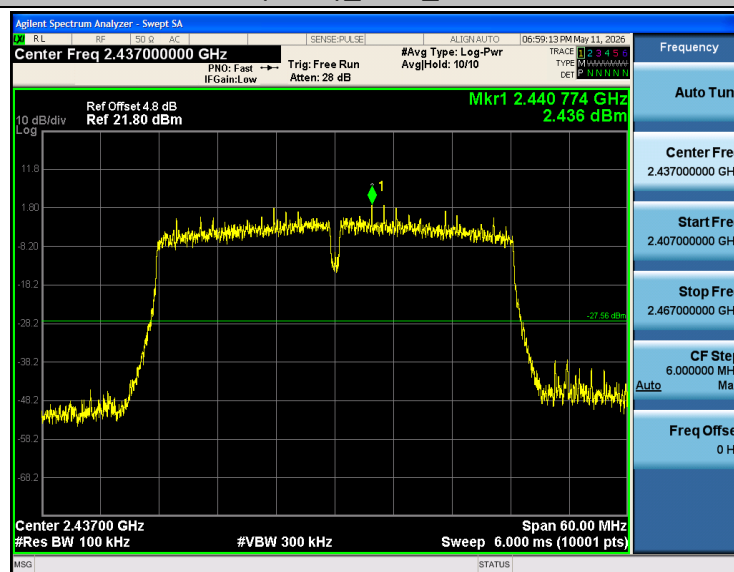
802.11n(HT40)_2422_0~Reference



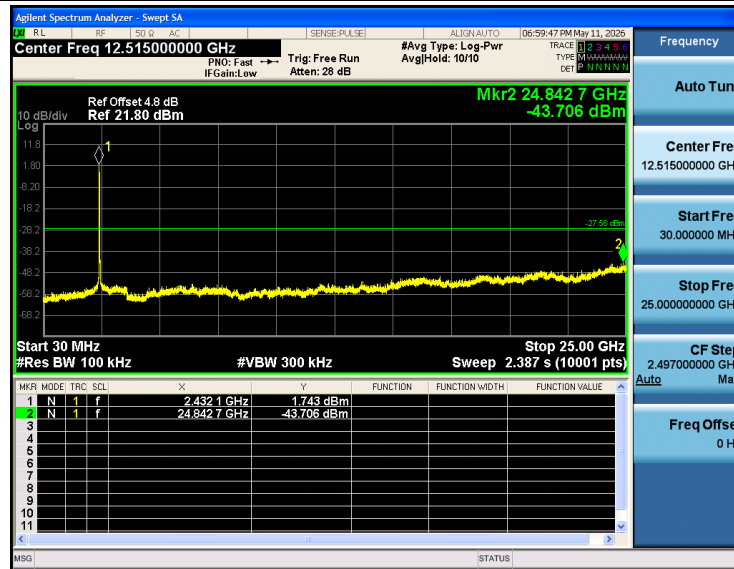
802.11n(HT40)_2422_30~25000



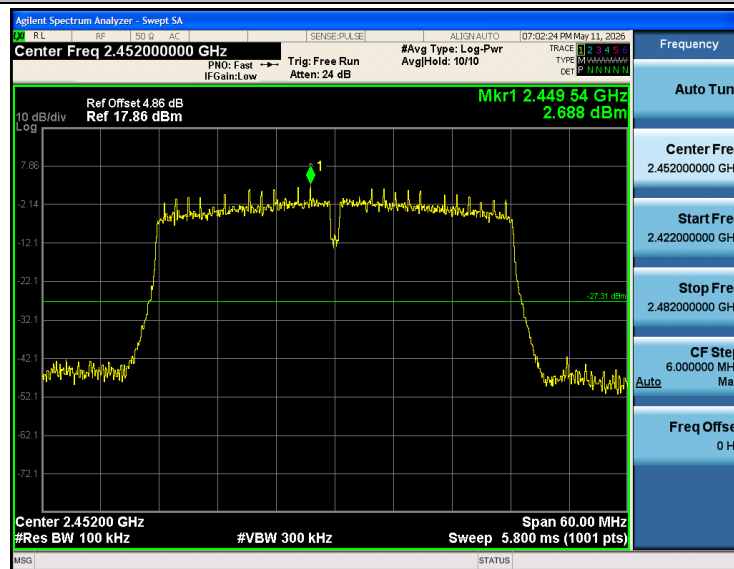
802.11n(HT40)_2437_0~Reference



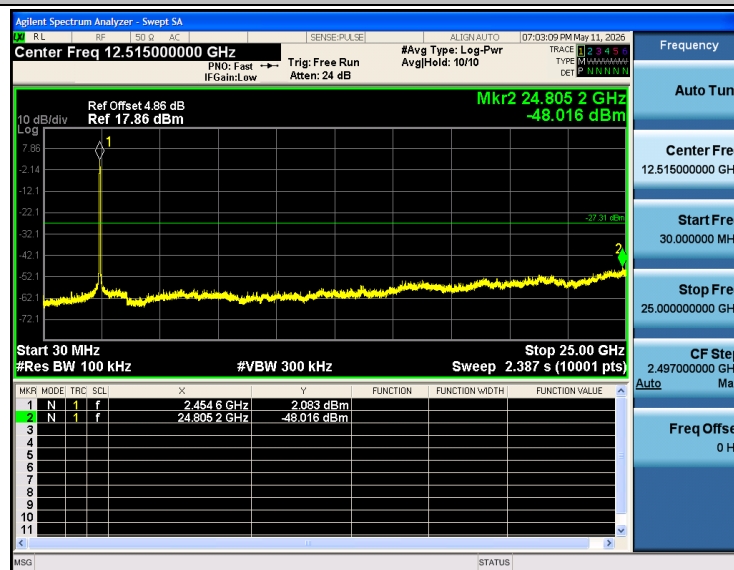
802.11n(HT40)_2437_30~25000



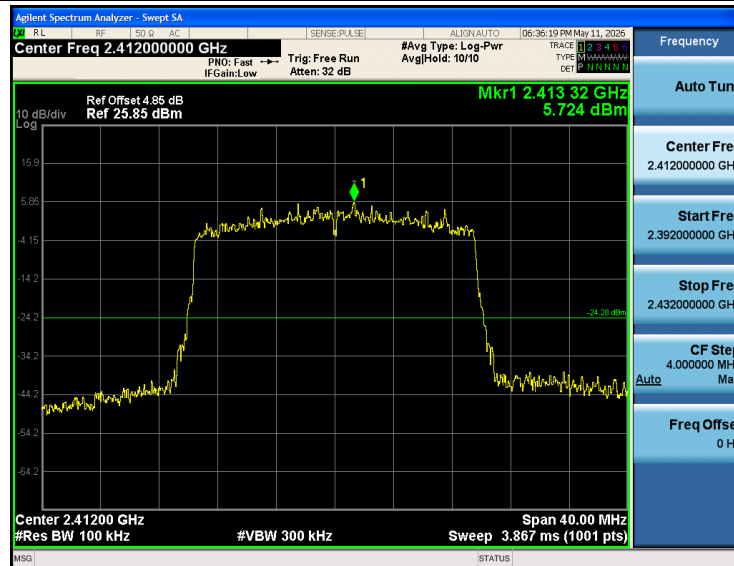
802.11n(HT40)_2452_0~Reference



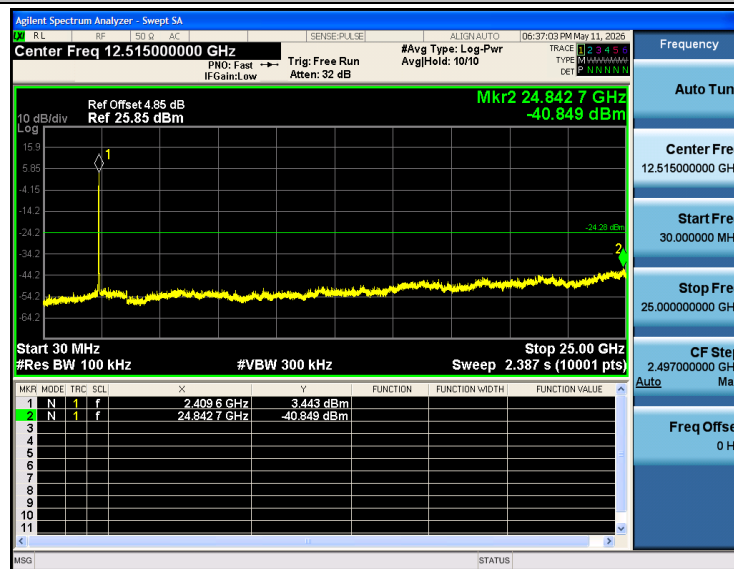
802.11n(HT40)_2452_30~25000



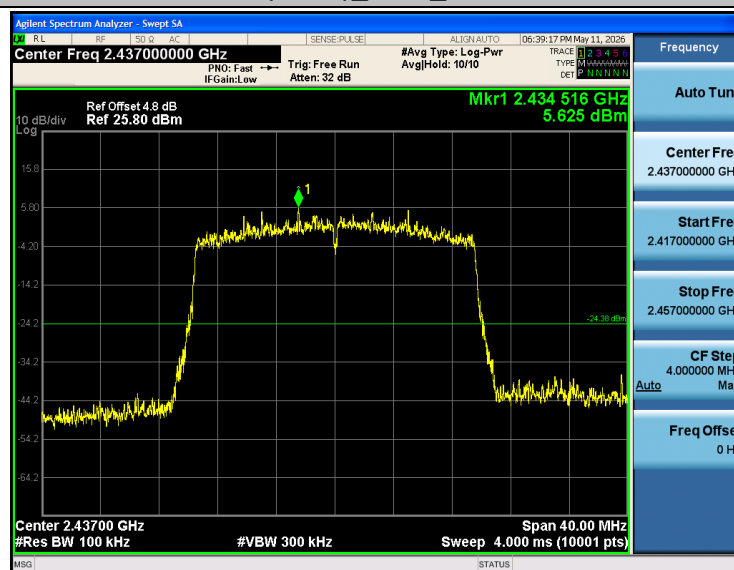
802.11ax(HE20)_2412_0~Reference



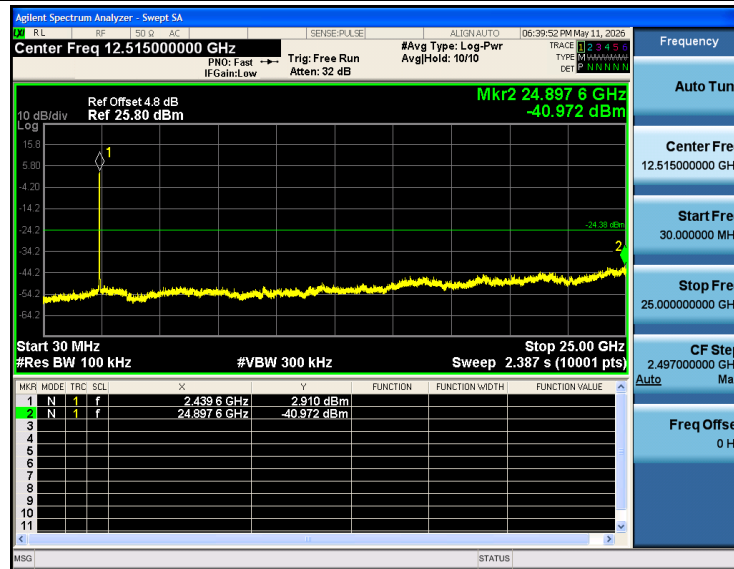
802.11ax(HE20)_2412_30~25000



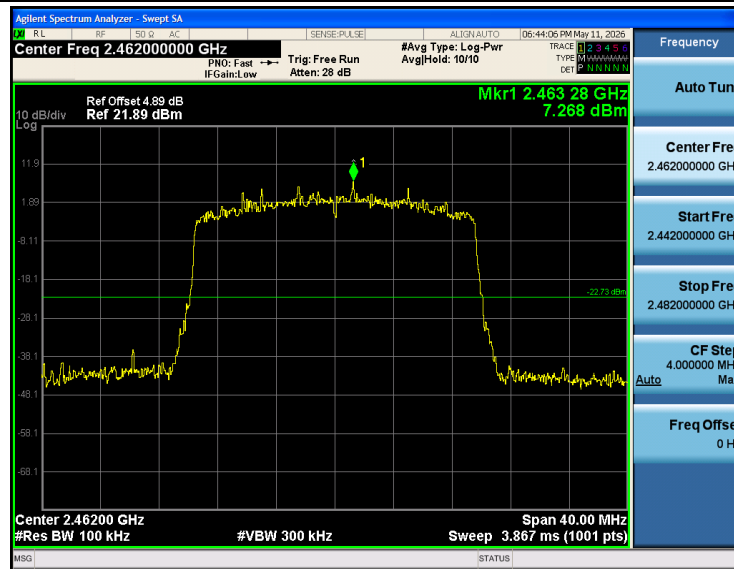
802.11ax(HE20)_2437_0~Reference



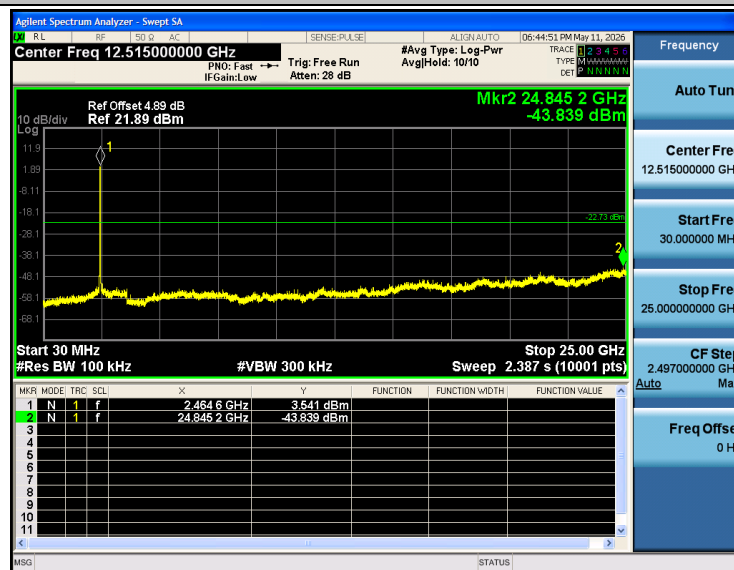
802.11ax(HE20)_2437_30~25000



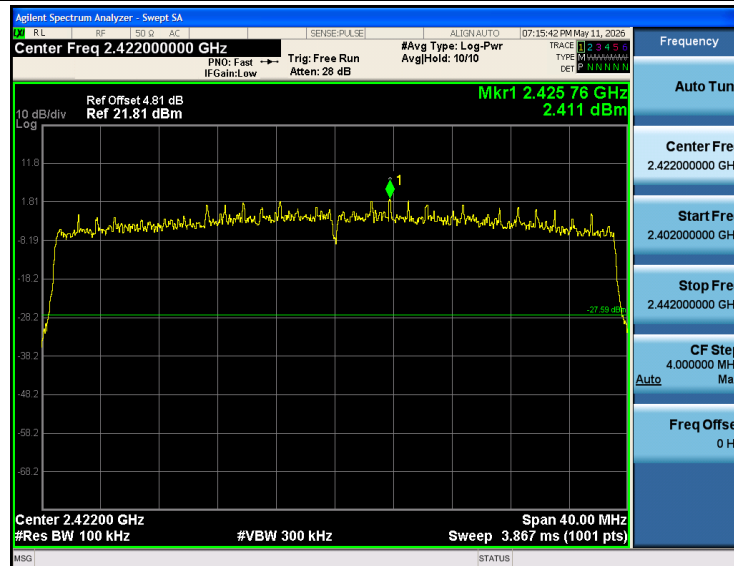
802.11ax(HE20)_2462_0~Reference



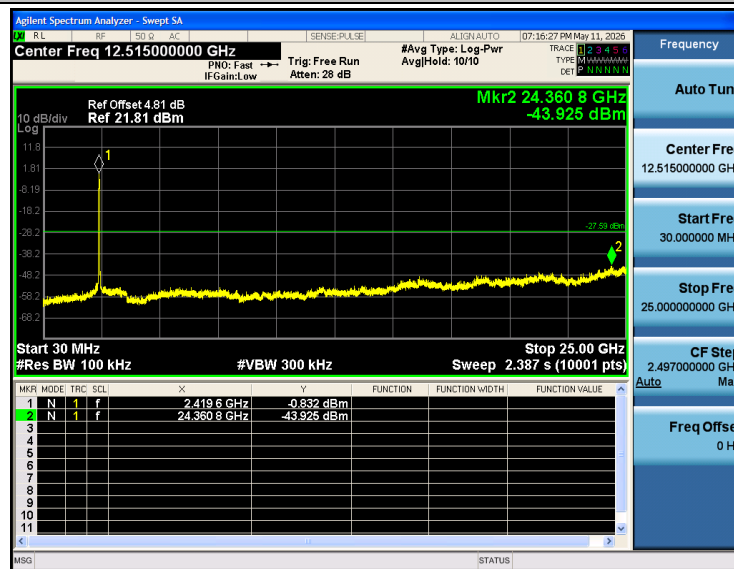
802.11ax(HE20)_2462_30~25000



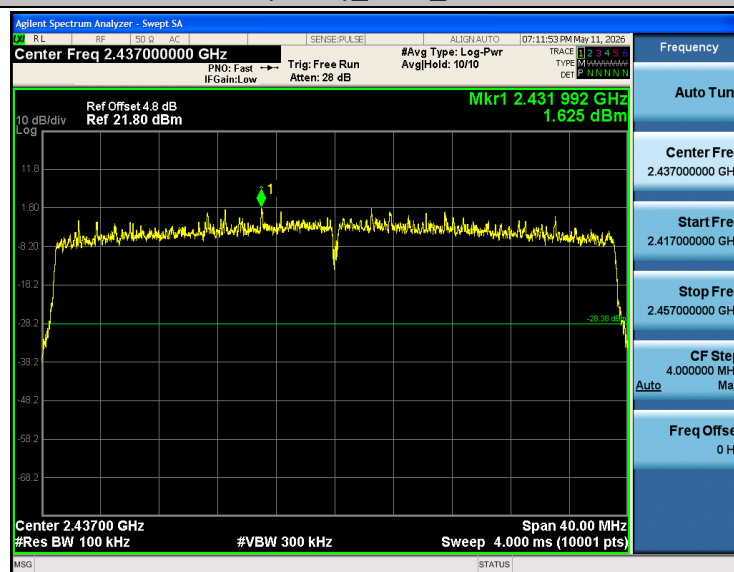
802.11ax(HE40)_2422_0~Reference



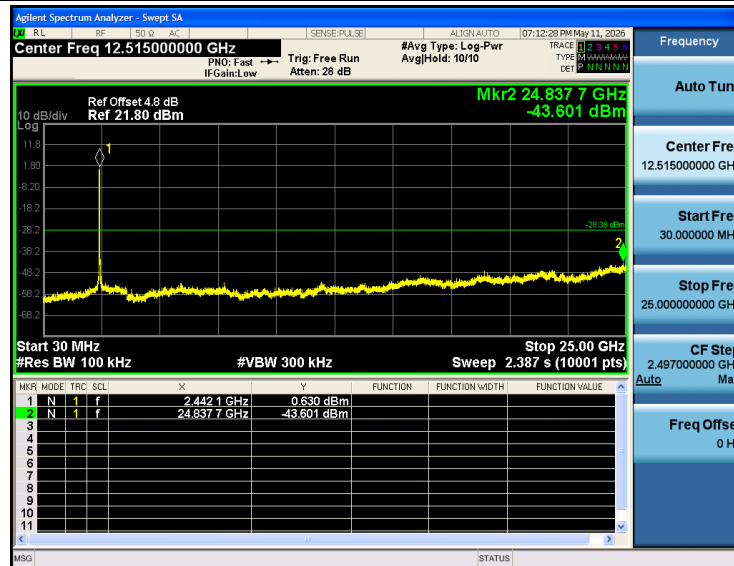
802.11ax(HE40)_2422_30~25000



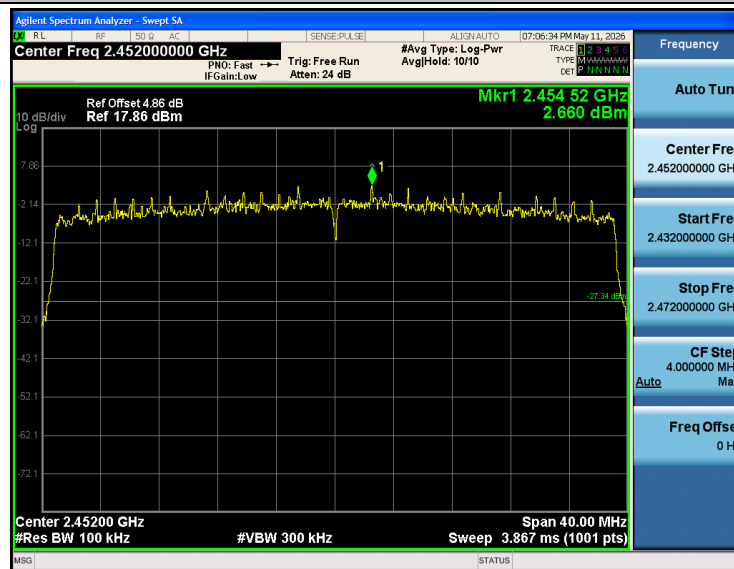
802.11ax(HE40)_2437_0~Reference



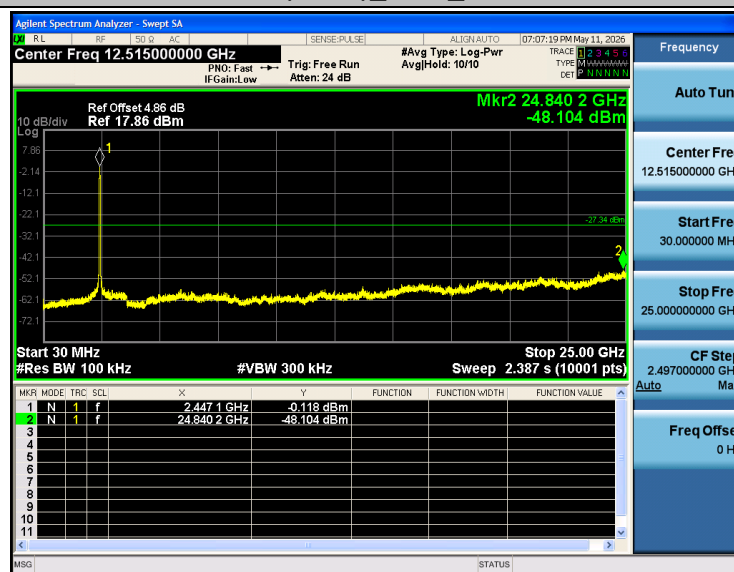
802.11ax(HE40)_2437_30~25000



802.11ax(HE40)_2452_0~Reference



802.11ax(HE40)_2452_30~25000





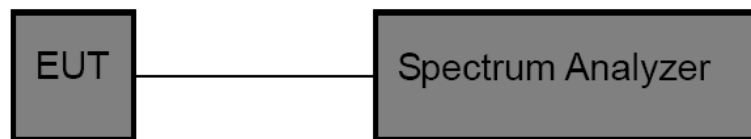
3.5. DTS Bandwidth

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 = 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

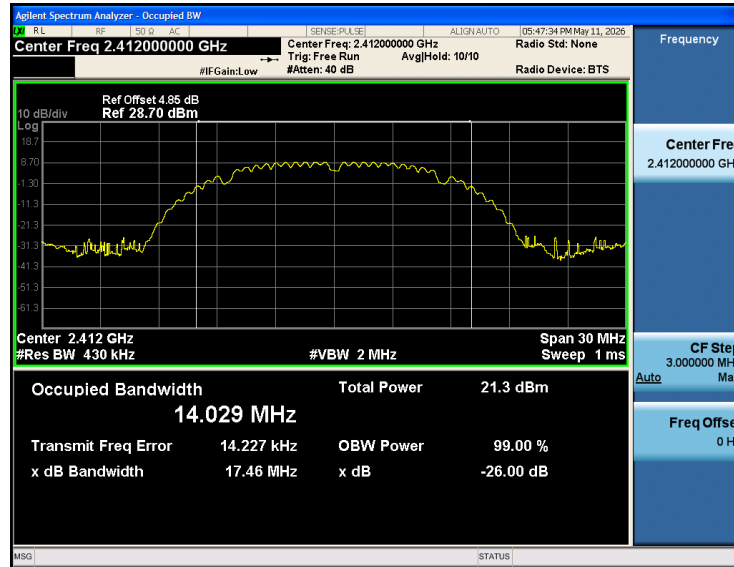
Please refer to the clause 2.4.

**Test Results**

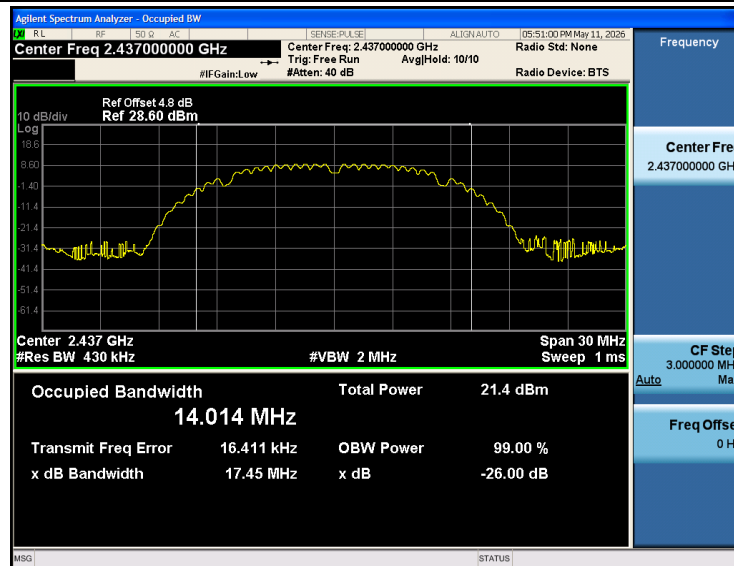
Test Mode	Frequency [MHz]	OBW [MHz]	DTS BW [MHz]	Limit [MHz]	Verdict
802.11b	2412	14.029	10.34	≥ 0.5	PASS
	2437	14.014	10.34	≥ 0.5	PASS
	2462	14.008	10.34	≥ 0.5	PASS
802.11g	2412	16.326	15.73	≥ 0.5	PASS
	2437	16.324	15.76	≥ 0.5	PASS
	2462	16.329	15.89	≥ 0.5	PASS
802.11n(HT20)	2412	17.449	17.10	≥ 0.5	PASS
	2437	17.431	16.99	≥ 0.5	PASS
	2462	17.448	17.05	≥ 0.5	PASS
802.11n(HT40)	2422	35.761	17.72	≥ 0.5	PASS
	2437	35.796	17.71	≥ 0.5	PASS
	2452	35.809	17.76	≥ 0.5	PASS
802.11ax(HE20)	2412	18.644	35.48	≥ 0.5	PASS
	2437	18.603	35.64	≥ 0.5	PASS
	2462	18.608	35.61	≥ 0.5	PASS
802.11ax(HE40)	2422	37.340	36.49	≥ 0.5	PASS
	2437	37.377	36.83	≥ 0.5	PASS
	2452	37.377	36.78	≥ 0.5	PASS



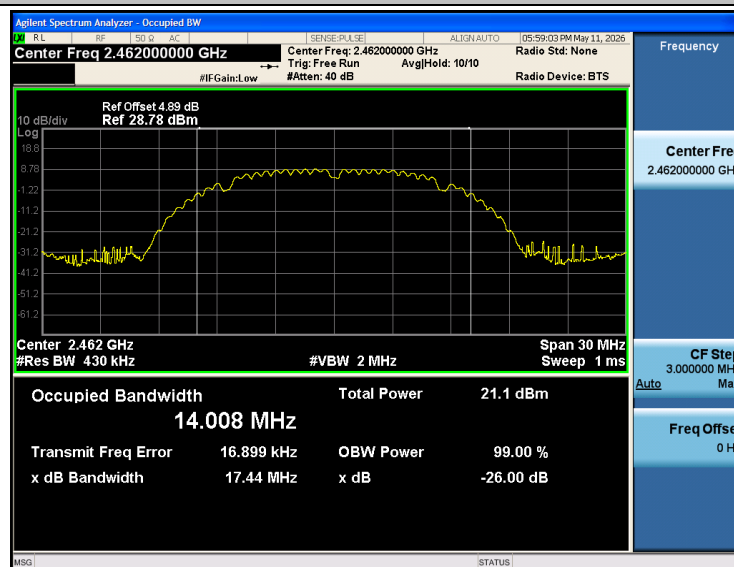
802.11b_OBW_2412



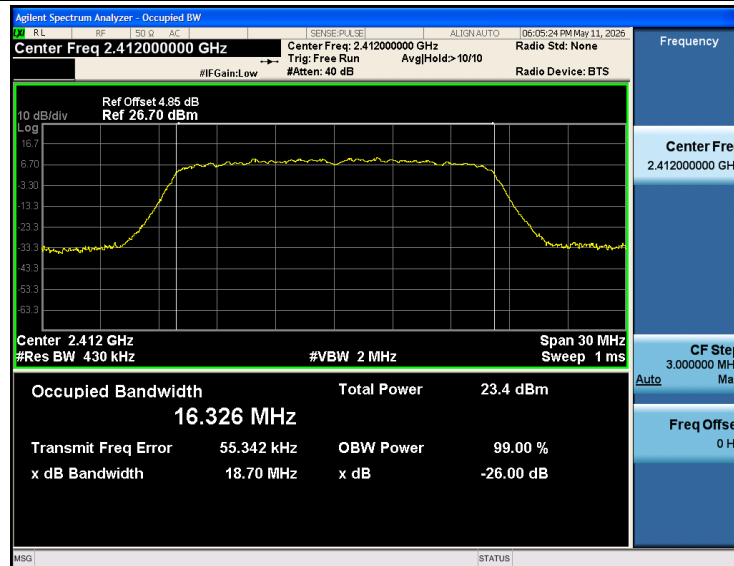
802.11b_OBW_2437



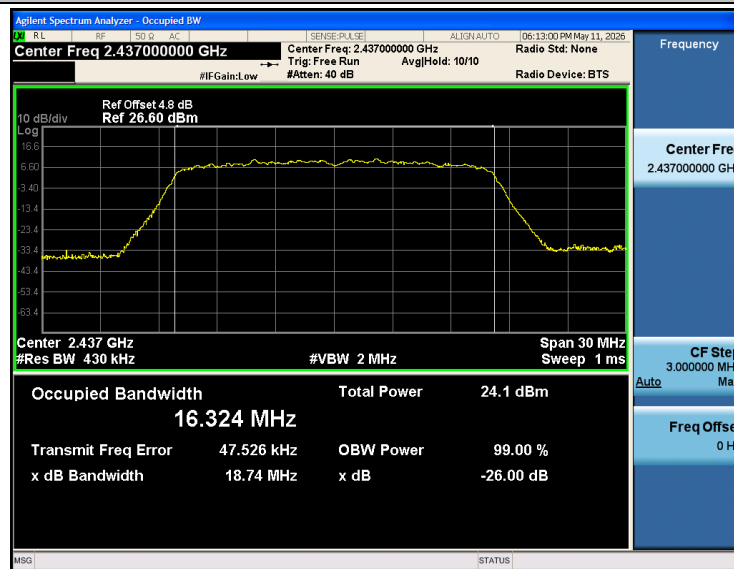
802.11b_OBW_2462



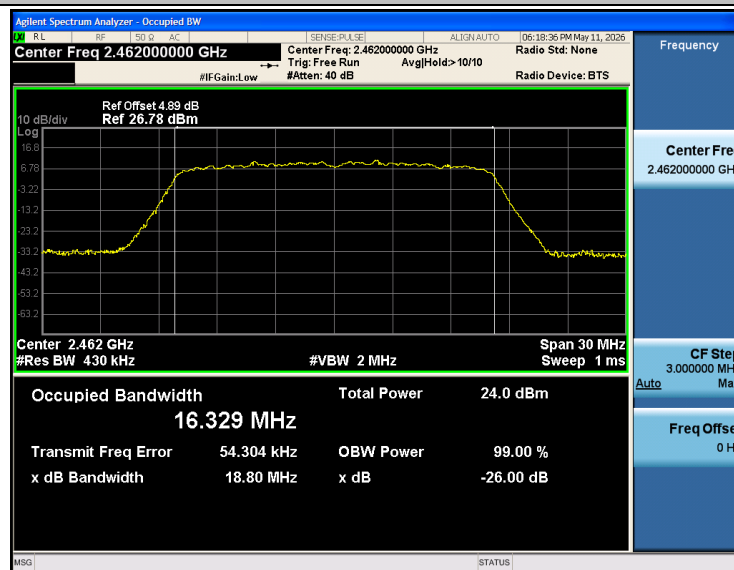
802.11g_OBW_2412



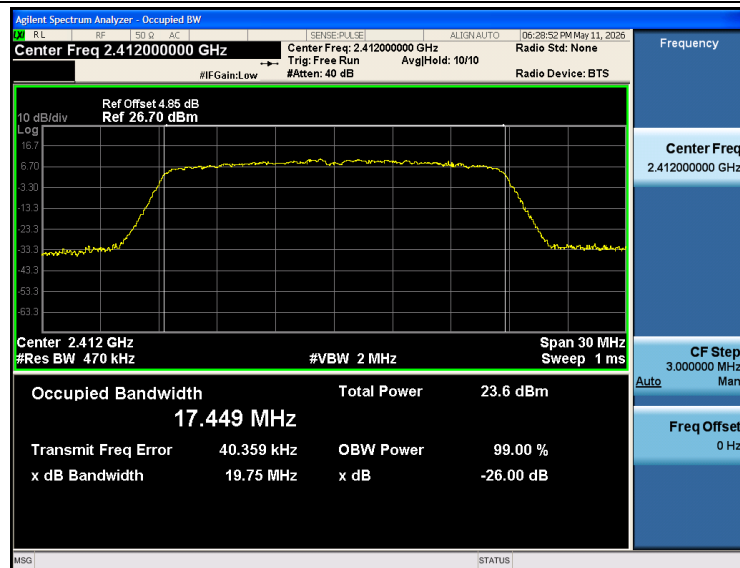
802.11g_OBW_2437



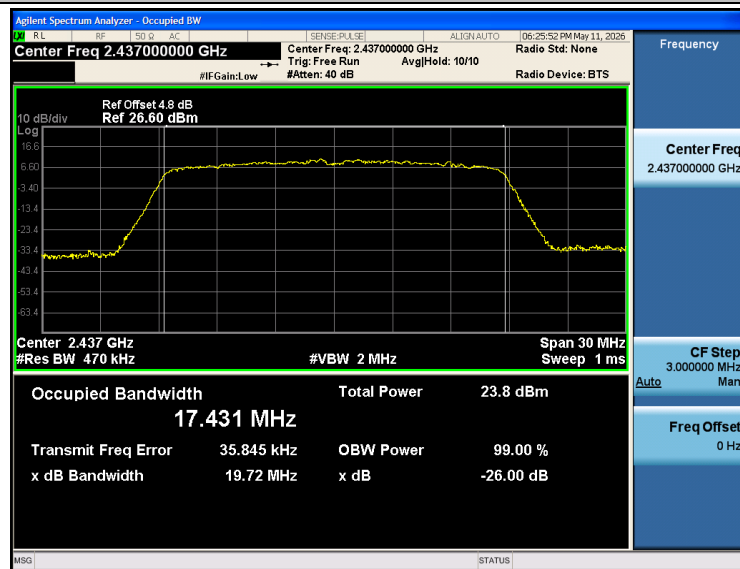
802.11g_OBW_2462



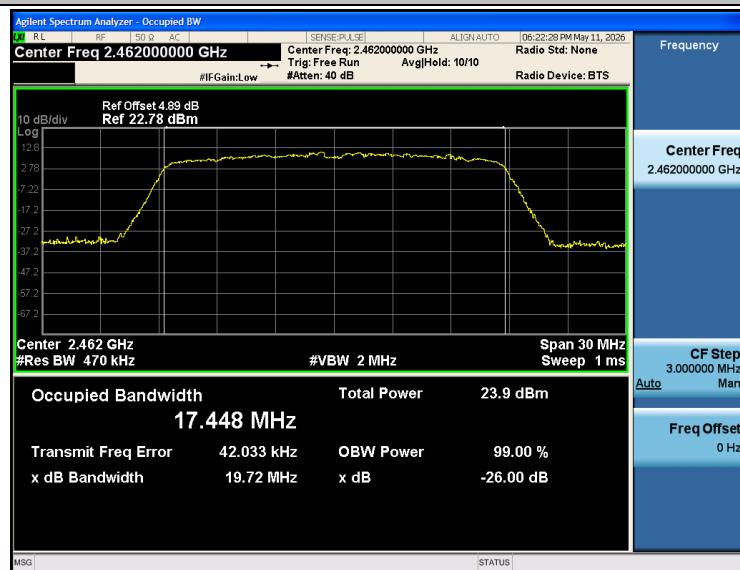
802.11n(HT20)_OBW_2412



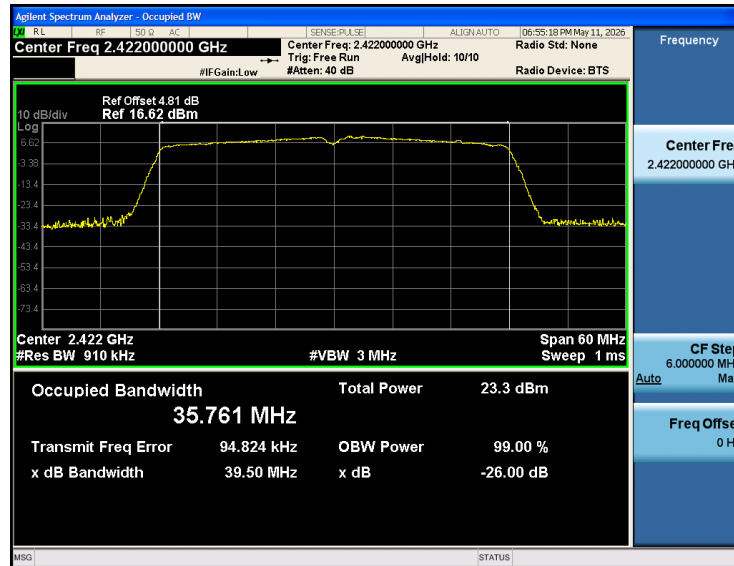
802.11n(HT20)_OBW_2437



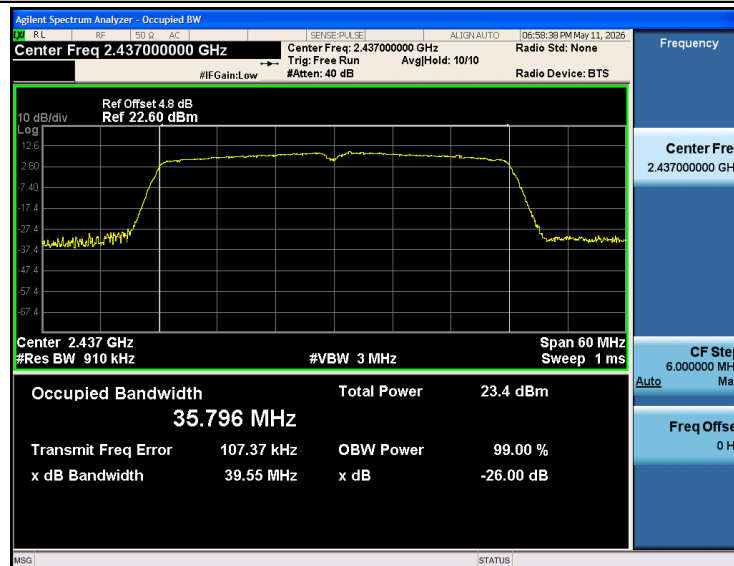
802.11n(HT20)_OBW_2462



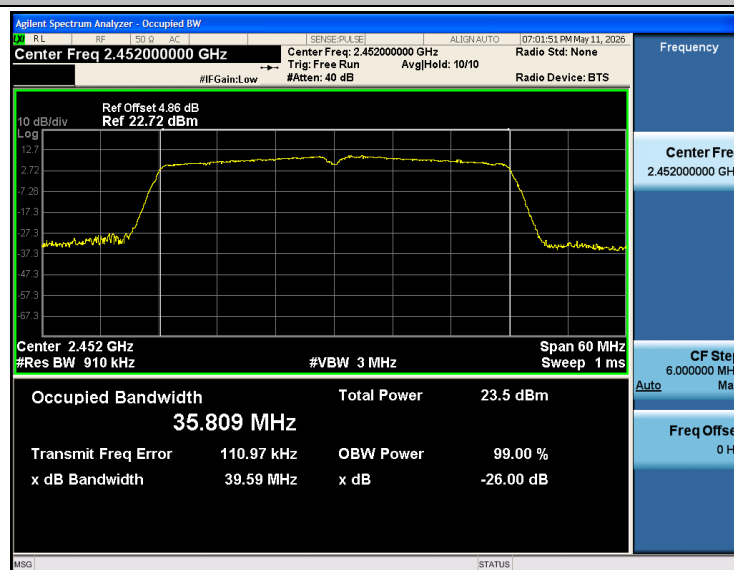
802.11n(HT40)_OBW_2422



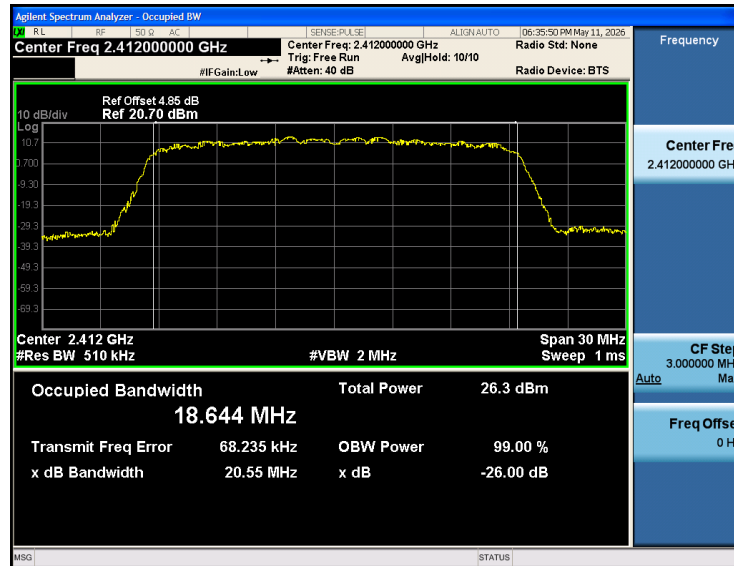
802.11n(HT40)_OBW_2437



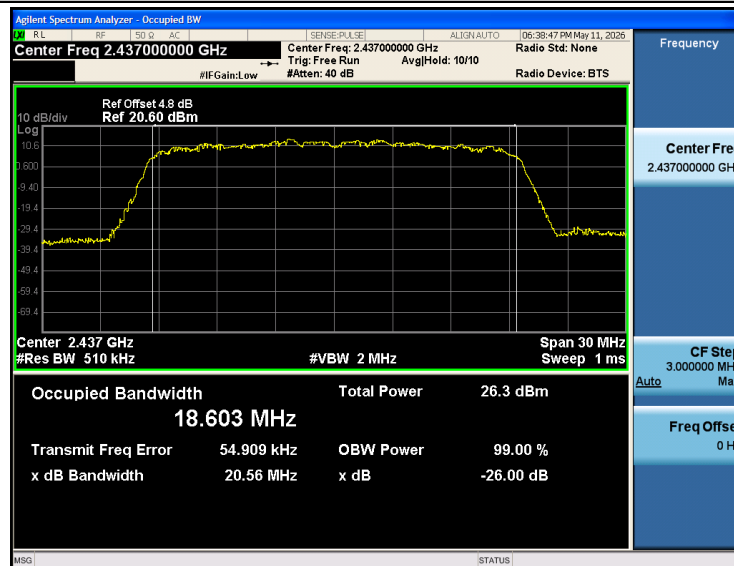
802.11n(HT40)_OBW_2452



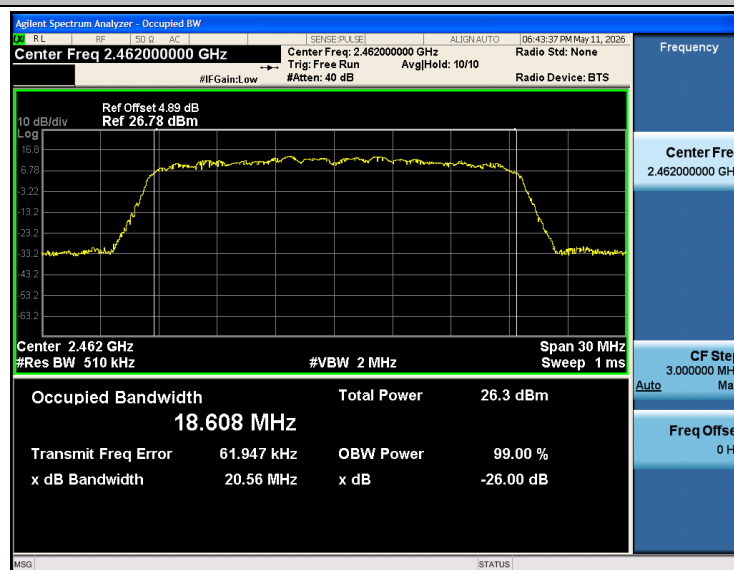
802.11ax(HE20)_OBW_2412



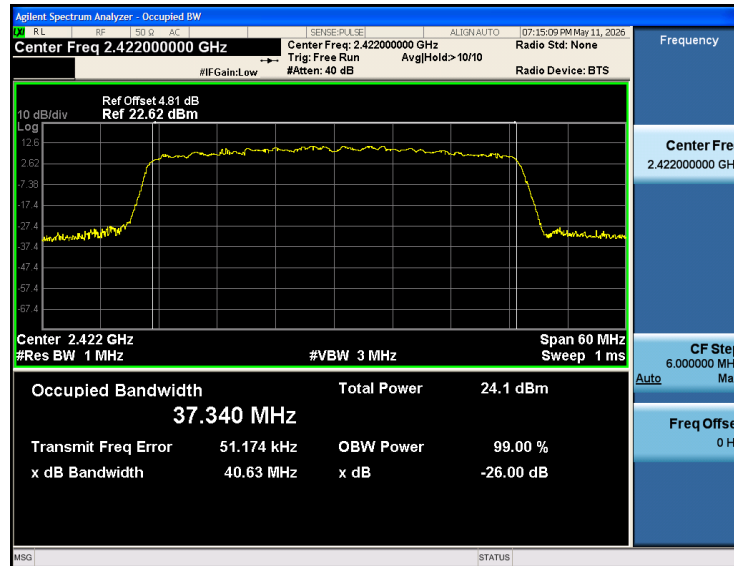
802.11ax(HE20)_OBW_2437



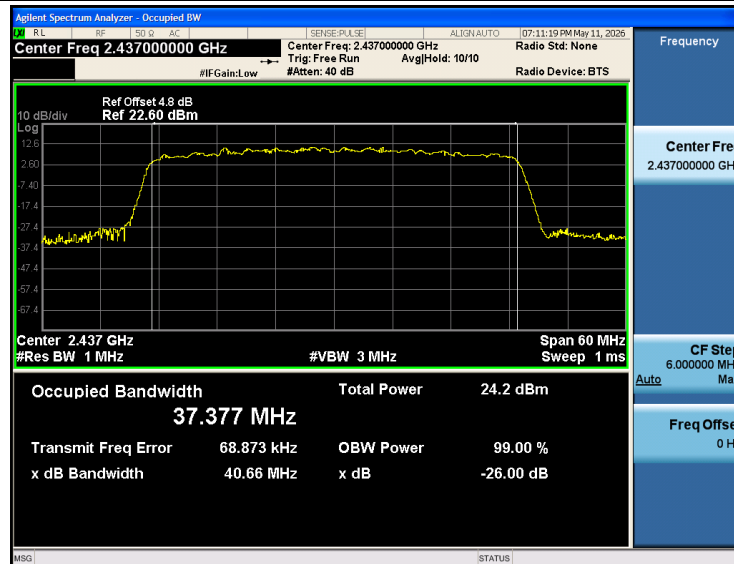
802.11ax(HE20)_OBW_2462



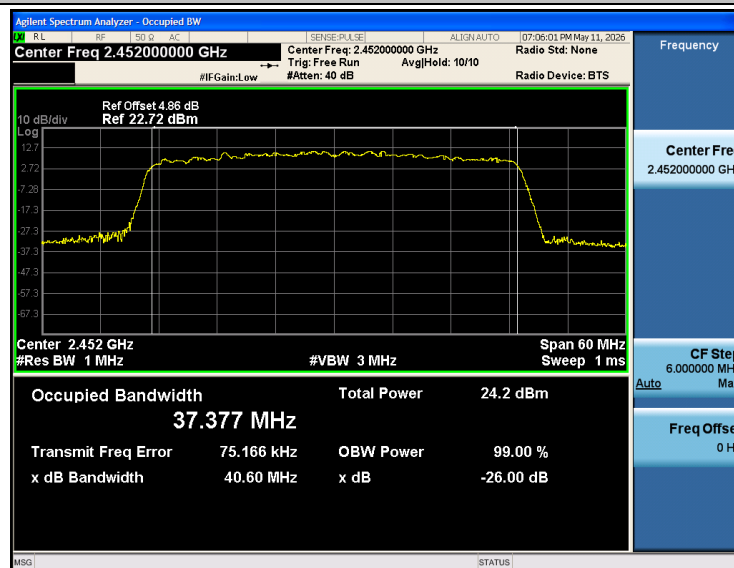
802.11ax(HE40)_OBW_2422



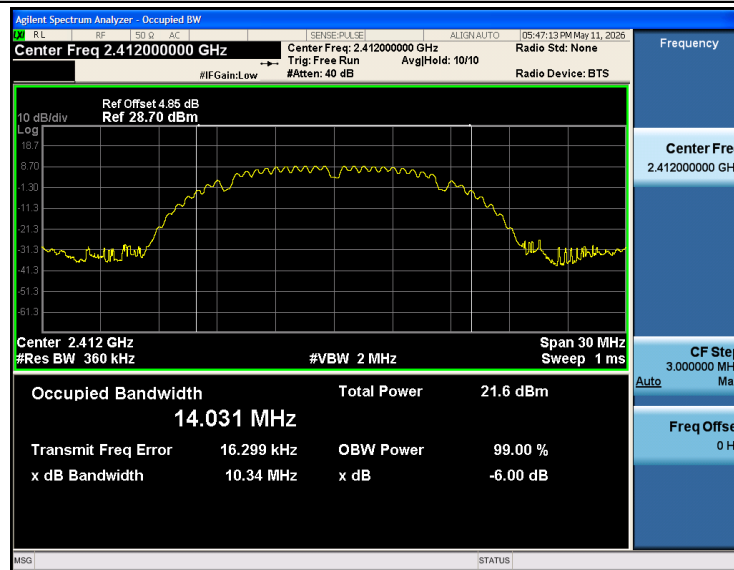
802.11ax(HE40)_OBW_2437



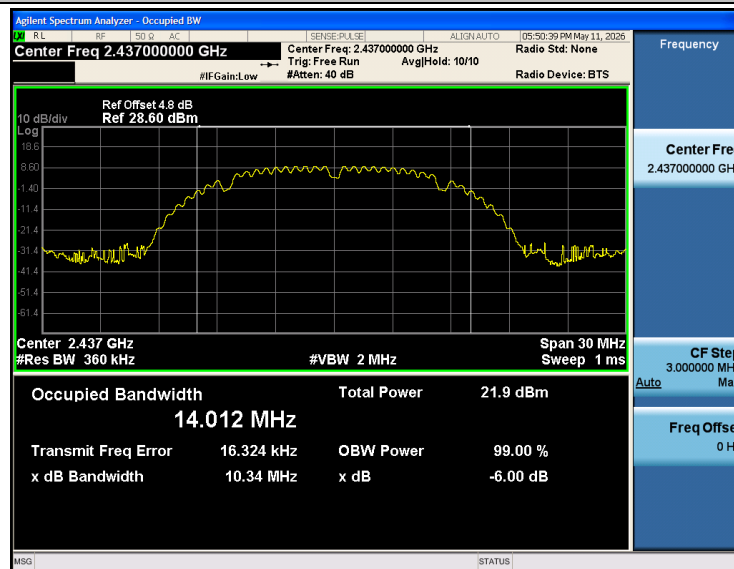
802.11ax(HE40)_OBW_2452



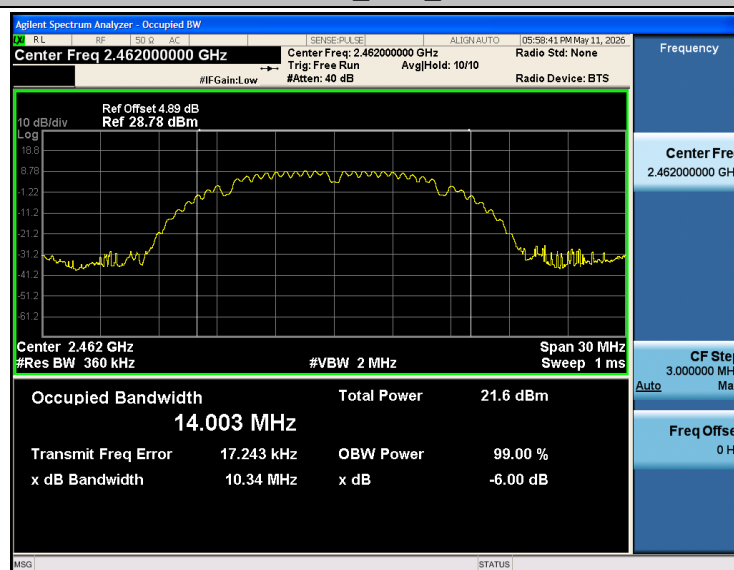
802.11b_DTS_2412



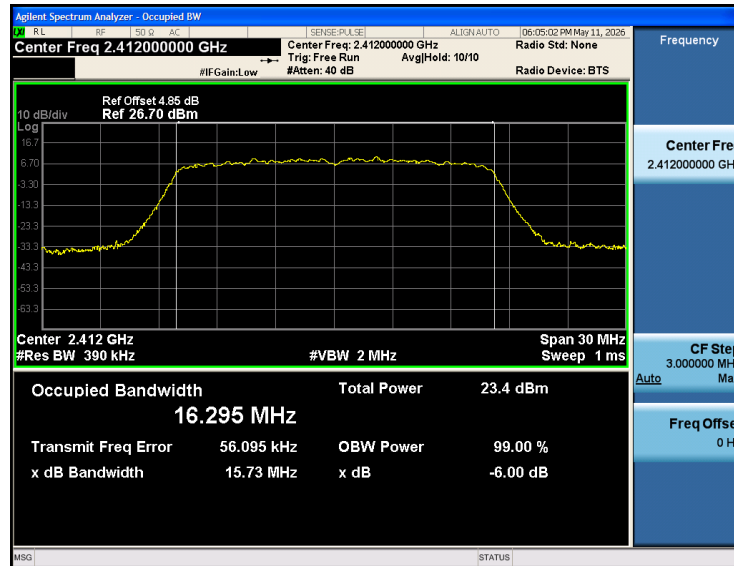
802.11b_DTS_2437



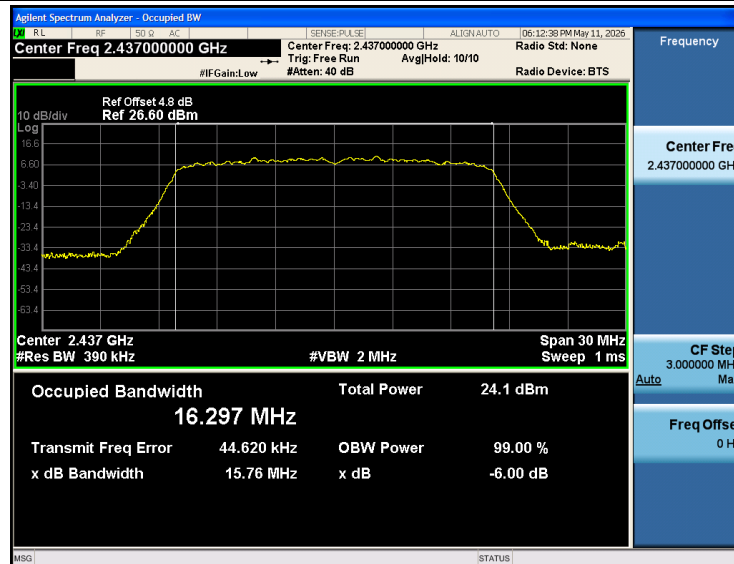
802.11b_DTS_2462



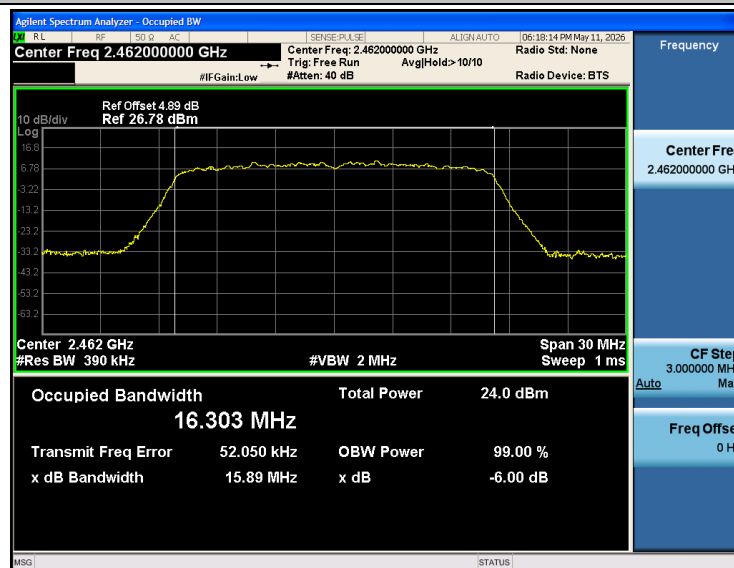
802.11g_DTS_2412



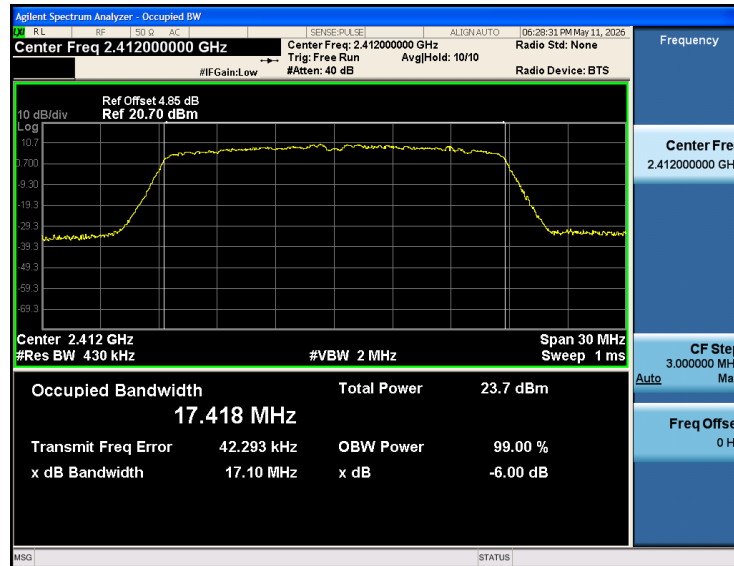
802.11g_DTS_2437



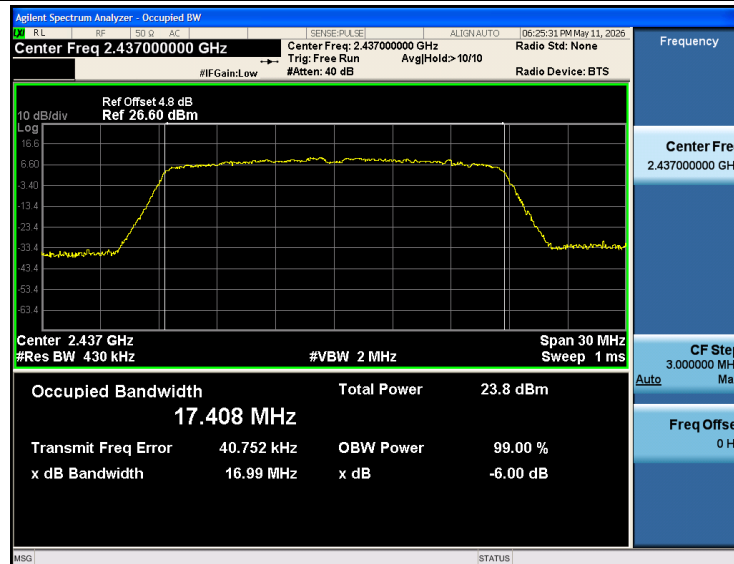
802.11g_DTS_2462



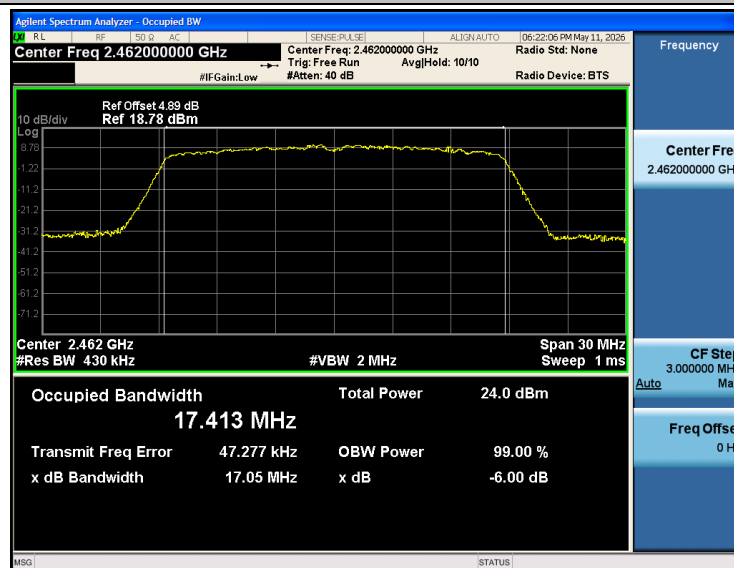
802.11n(HT20)_DTS_2412



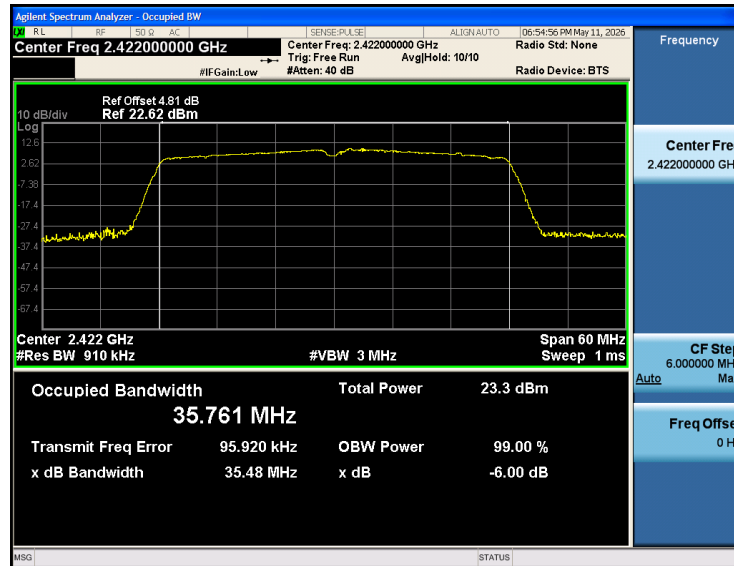
802.11n(HT20)_DTS_2437



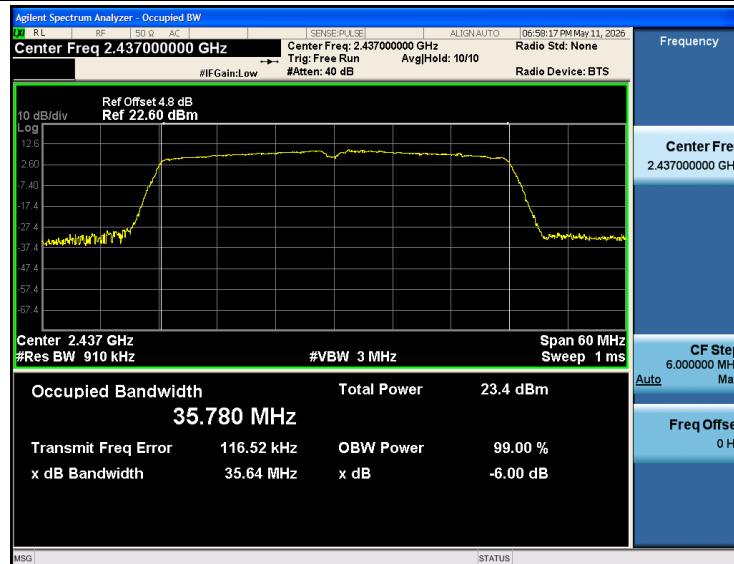
802.11n(HT20)_DTS_2462



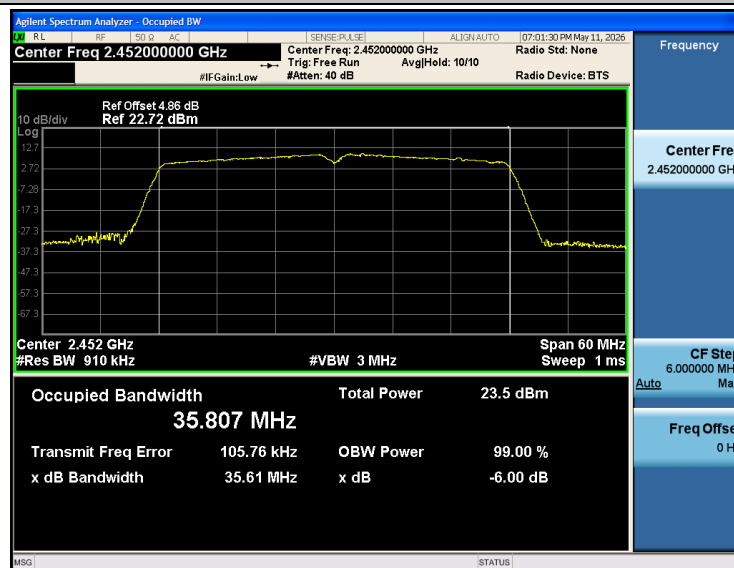
802.11n(HT40)_DTS_2422



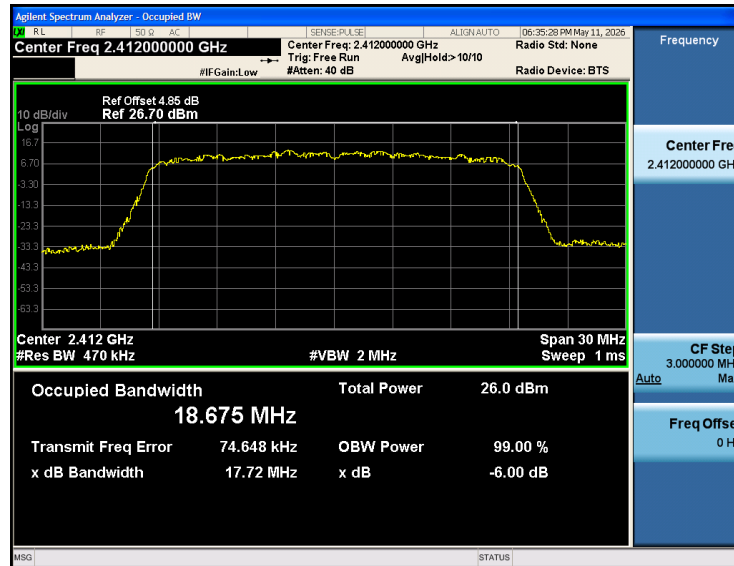
802.11n(HT40)_DTS_2437



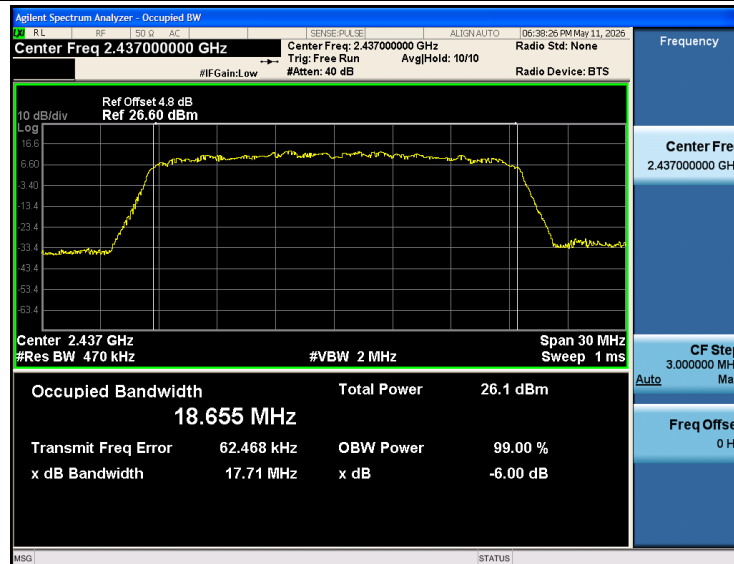
802.11n(HT40)_DTS_2452



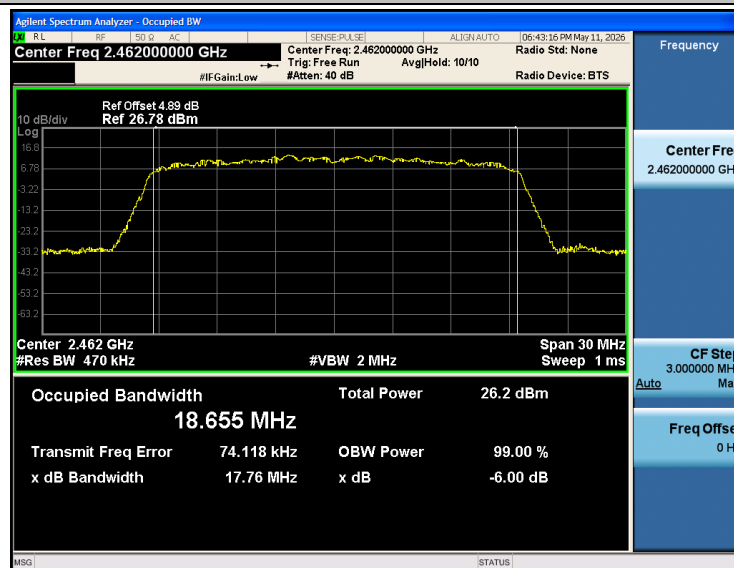
802.11ax(HE20)_DTS_2412



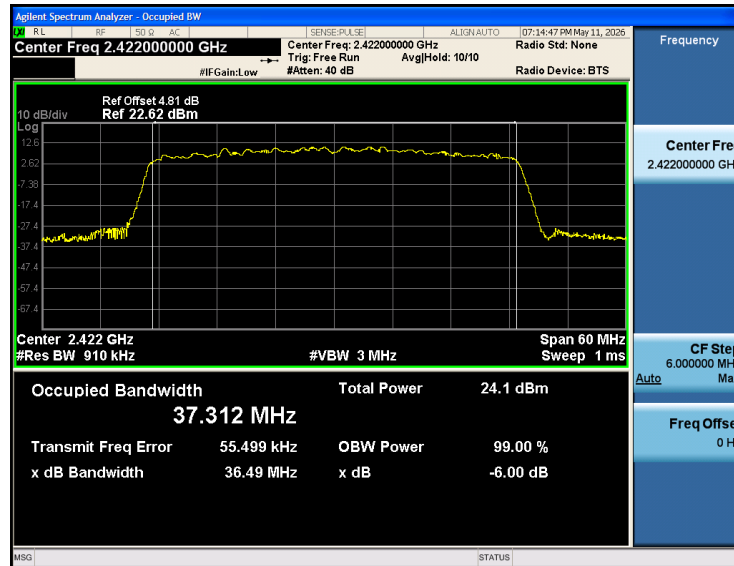
802.11ax(HE20)_DTS_2437



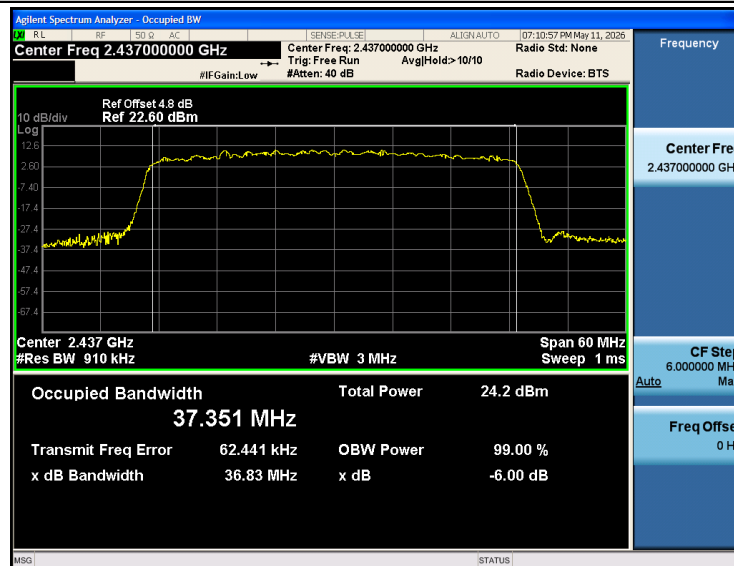
802.11ax(HE20)_DTS_2462



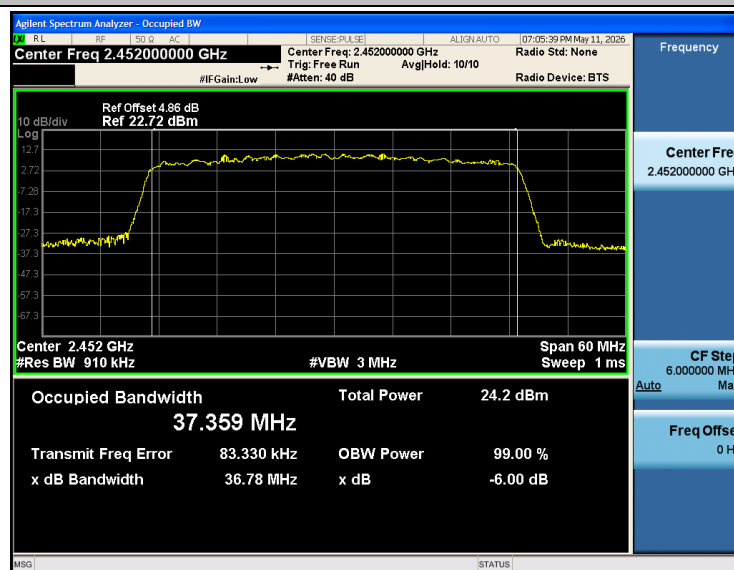
802.11ax(HE40)_DTS_2422



802.11ax(HE40)_DTS_2437



802.11ax(HE40)_DTS_2452



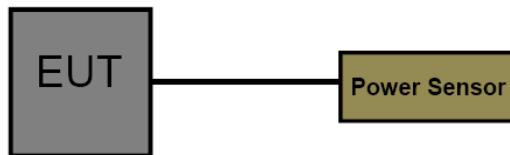
3.6. Maximum Conducted Output Power

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 output power [dBm]	E.I.R.P Result[dBm]	FCC Limit [MHz]	E.I.R.P Limit[dBm]	Verdict
802.11b	2412	17.83	23.02	<=30	<=36	PASS
	2437	18.01	23.20	<=30	<=36	PASS
	2462	17.93	23.12	<=30	<=36	PASS
802.11g	2412	16.47	21.66	<=30	<=36	PASS
	2437	16.98	22.17	<=30	<=36	PASS
	2462	16.41	21.60	<=30	<=36	PASS
802.11n(HT20)	2412	16.41	21.60	<=30	<=36	PASS
	2437	16.54	21.73	<=30	<=36	PASS
	2462	16.58	21.77	<=30	<=36	PASS
802.11n(HT40)	2422	16.55	21.74	<=30	<=36	PASS
	2437	16.67	21.86	<=30	<=36	PASS
	2452	16.57	21.76	<=30	<=36	PASS
802.11ax(HE20)	2412	15.24	20.43	<=30	<=36	PASS
	2437	15.54	20.73	<=30	<=36	PASS
	2462	15.52	20.71	<=30	<=36	PASS
802.11ax(HE40)	2422	15.42	20.61	<=30	<=36	PASS
	2437	15.13	20.32	<=30	<=36	PASS
	2452	15.34	20.53	<=30	<=36	PASS

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

Note2: E.I.R.P output power = Conducted output power +Antenna gain

Antenna gain=5.19dBi

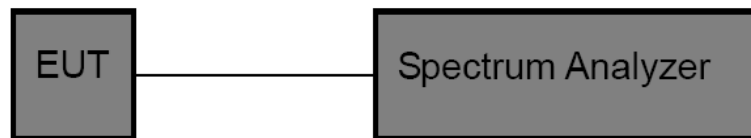
3.7. Power Spectral Density

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: PK
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	-8.31	-10.00	0.27	-18.04	<=8	PASS
	2437	-7.72	-10.00	0.26	-17.46	<=8	PASS
	2462	-8.98	-10.00	0.26	-18.72	<=8	PASS
802.11g	2412	-22.39	-10.00	1.36	-31.03	<=8	PASS
	2437	-22.33	-10.00	1.36	-30.97	<=8	PASS
	2462	-23.37	-10.00	1.36	-32.01	<=8	PASS
802.11n(HT20)	2412	-21.49	-10.00	1.45	-30.04	<=8	PASS
	2437	-25.50	-10.00	1.45	-34.05	<=8	PASS
	2462	-23.78	-10.00	1.45	-32.33	<=8	PASS
802.11n(HT40)	2422	-25.75	-10.00	1.61	-34.14	<=8	PASS
	2437	-26.52	-10.00	1.61	-34.91	<=8	PASS
	2452	-26.14	-10.00	1.56	-34.58	<=8	PASS
802.11ax(HE20)	2412	-37.49	-10.00	0.86	-46.63	<=8	PASS
	2437	-37.09	-10.00	0.85	-46.24	<=8	PASS
	2462	-36.57	-10.00	0.85	-45.72	<=8	PASS
802.11ax(HE40)	2422	-39.15	-10.00	1.61	-47.54	<=8	PASS
	2437	-40.33	-10.00	1.61	-48.72	<=8	PASS
	2452	-41.34	-10.00	1.67	-49.67	<=8	PASS

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

802.11b_2412



802.11b_2437



802.11b_2462



802.11g_2412