

Appendix

Test Data

for BTEK241108034A01E03

Start date	2025/1/3	Finish date	2025/1/3
Temperature	22.2℃	Humidity	33%
RF specifications	2.4G WIFI	Test Engineer	Zora



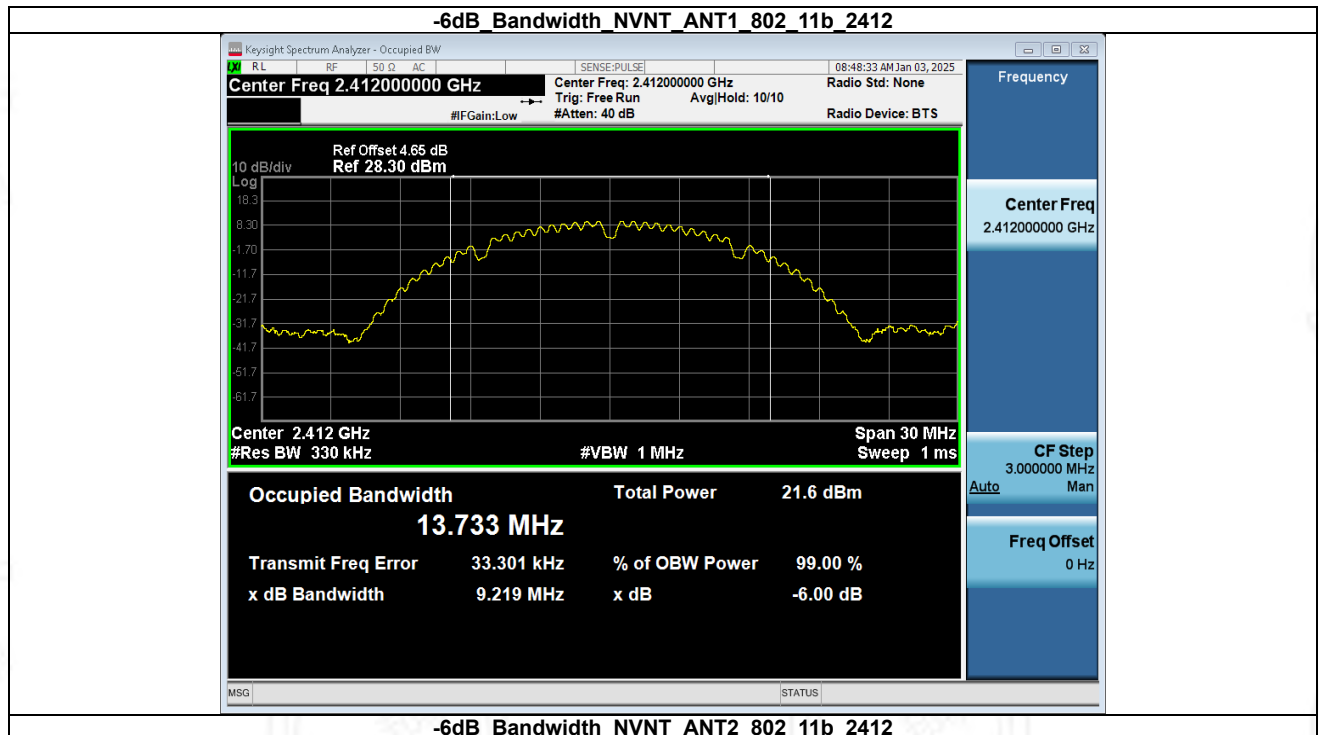
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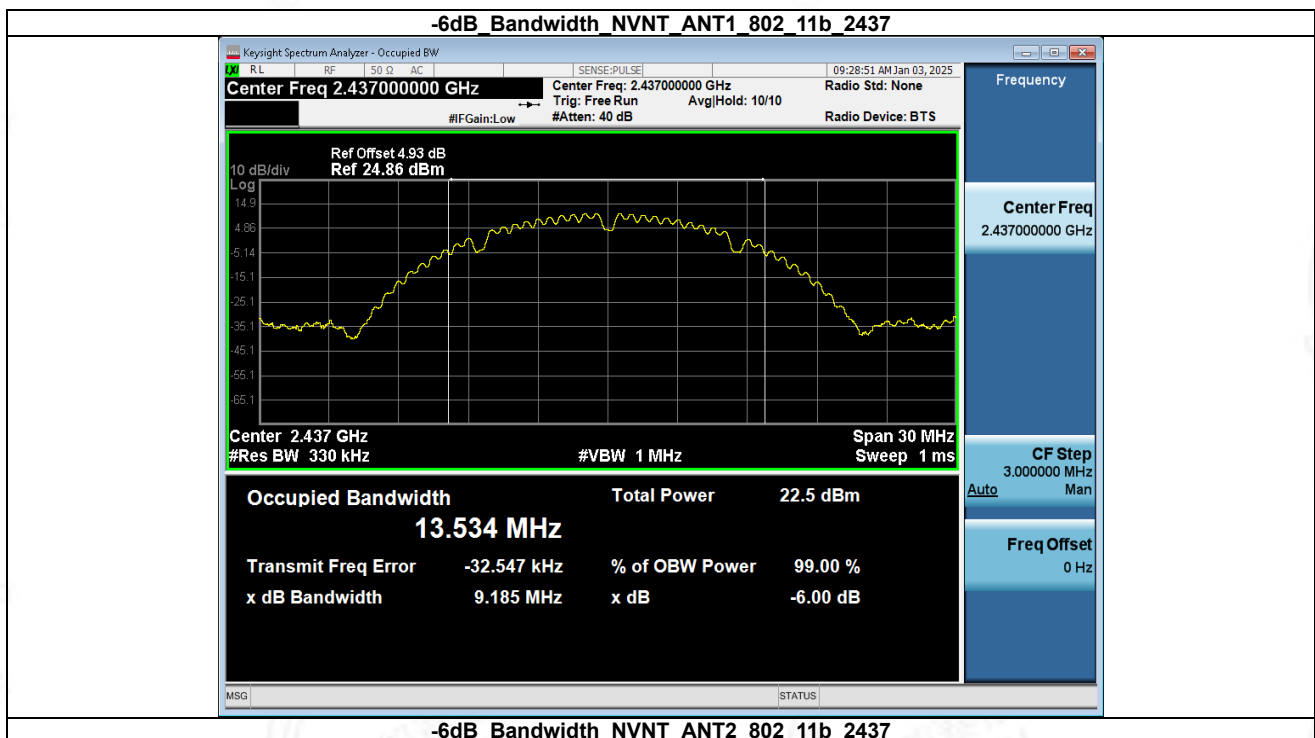
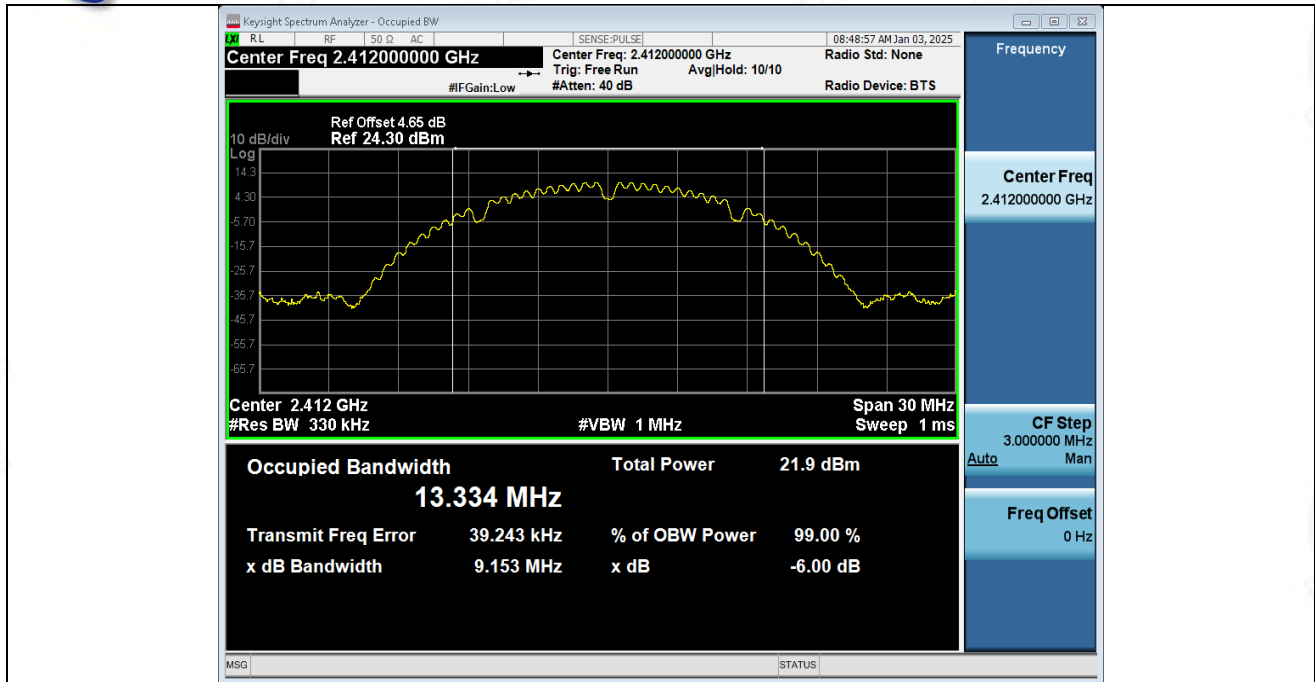
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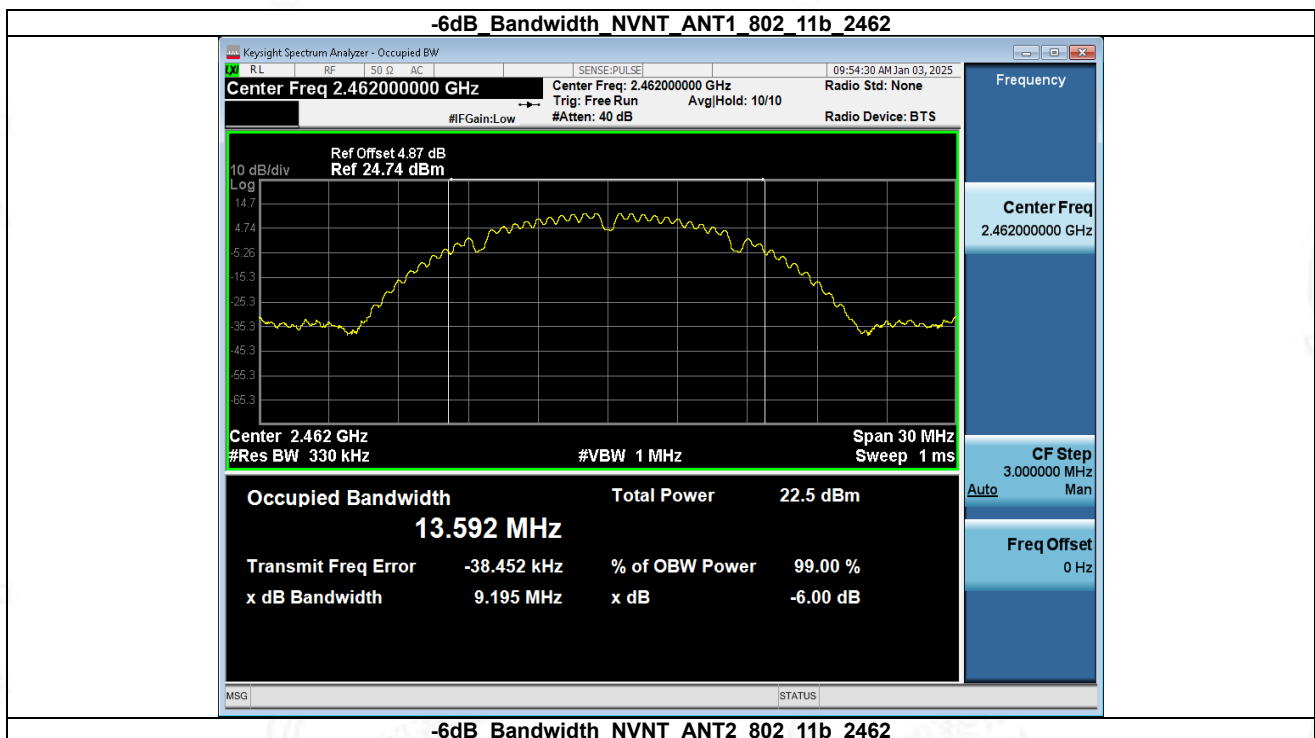
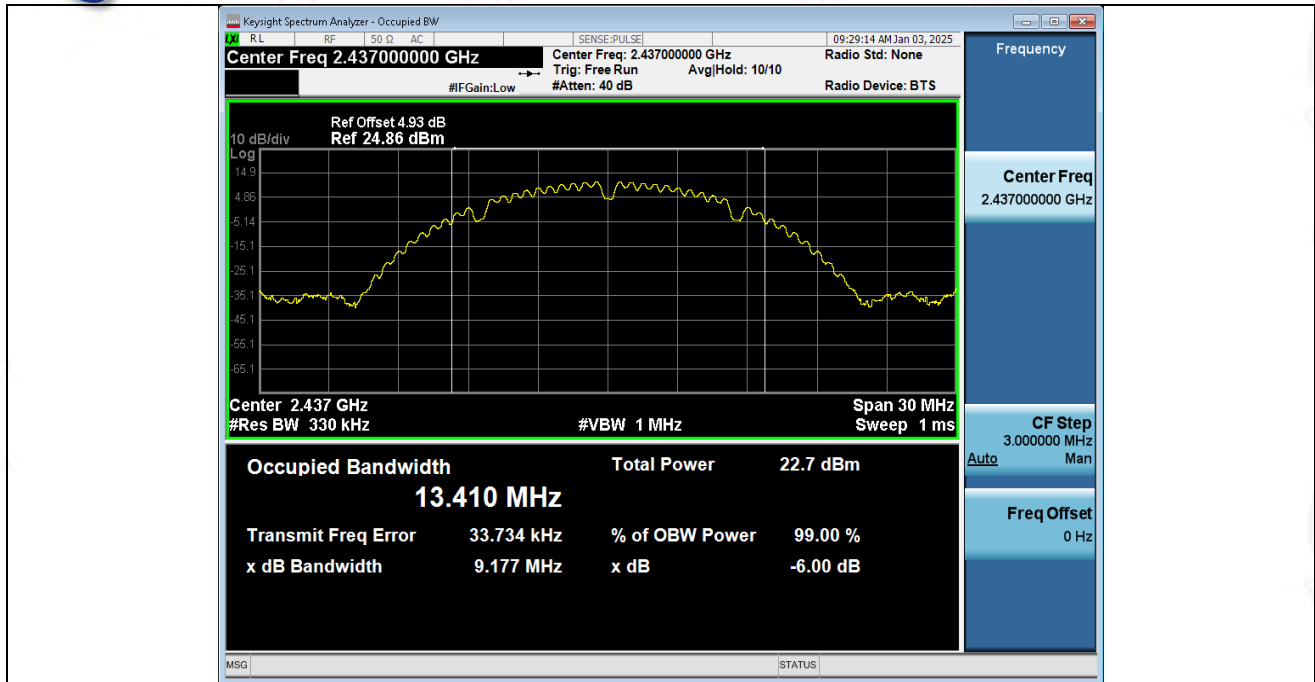


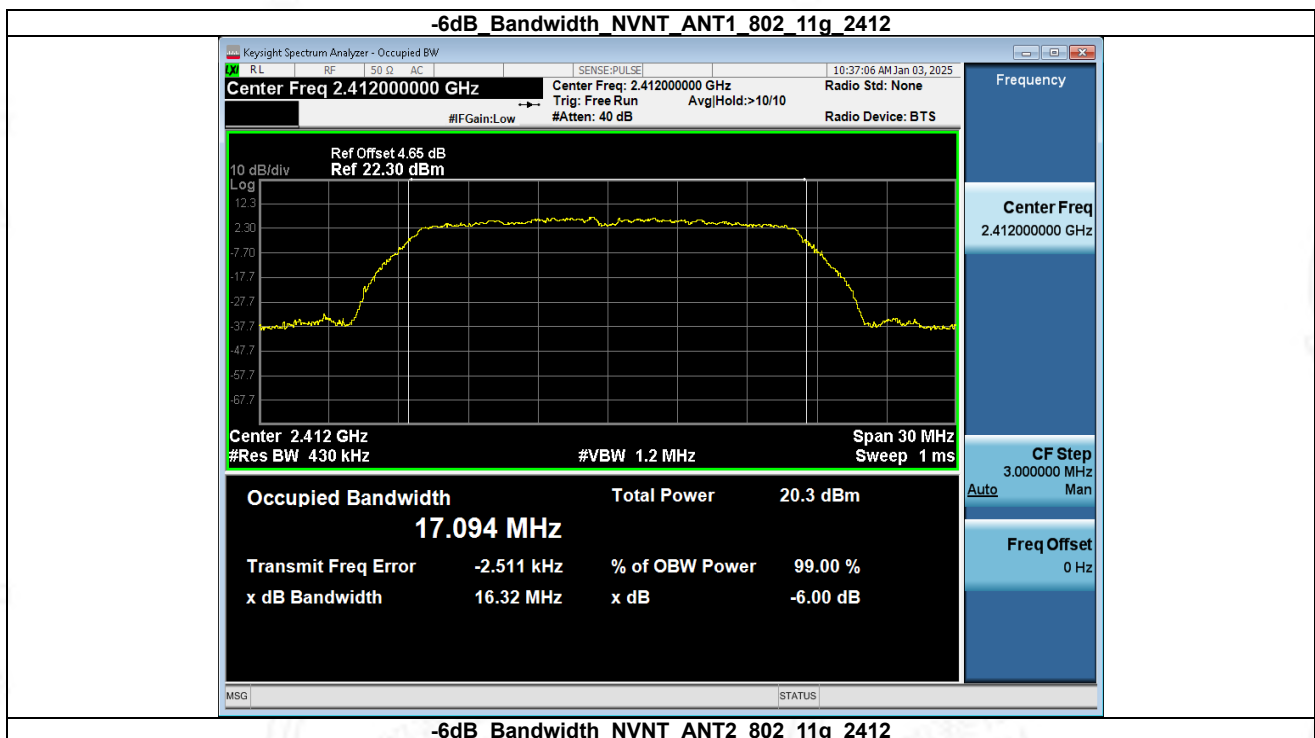
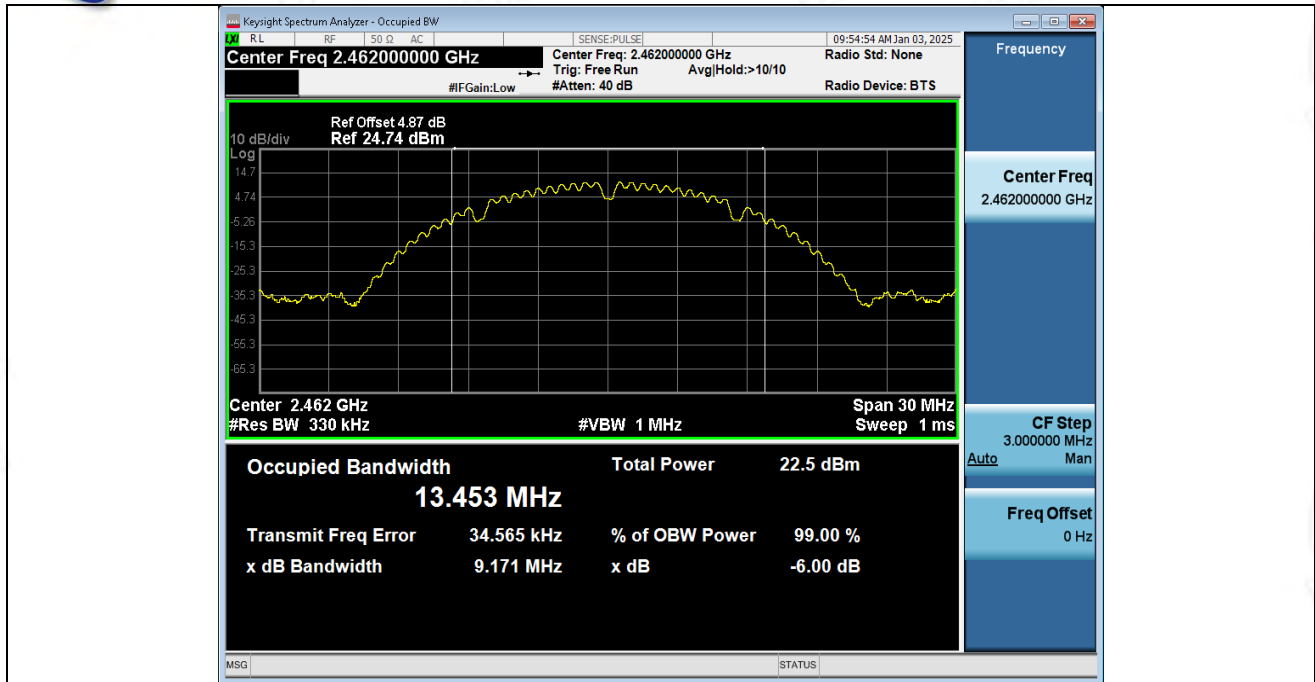
1. -6dB Bandwidth

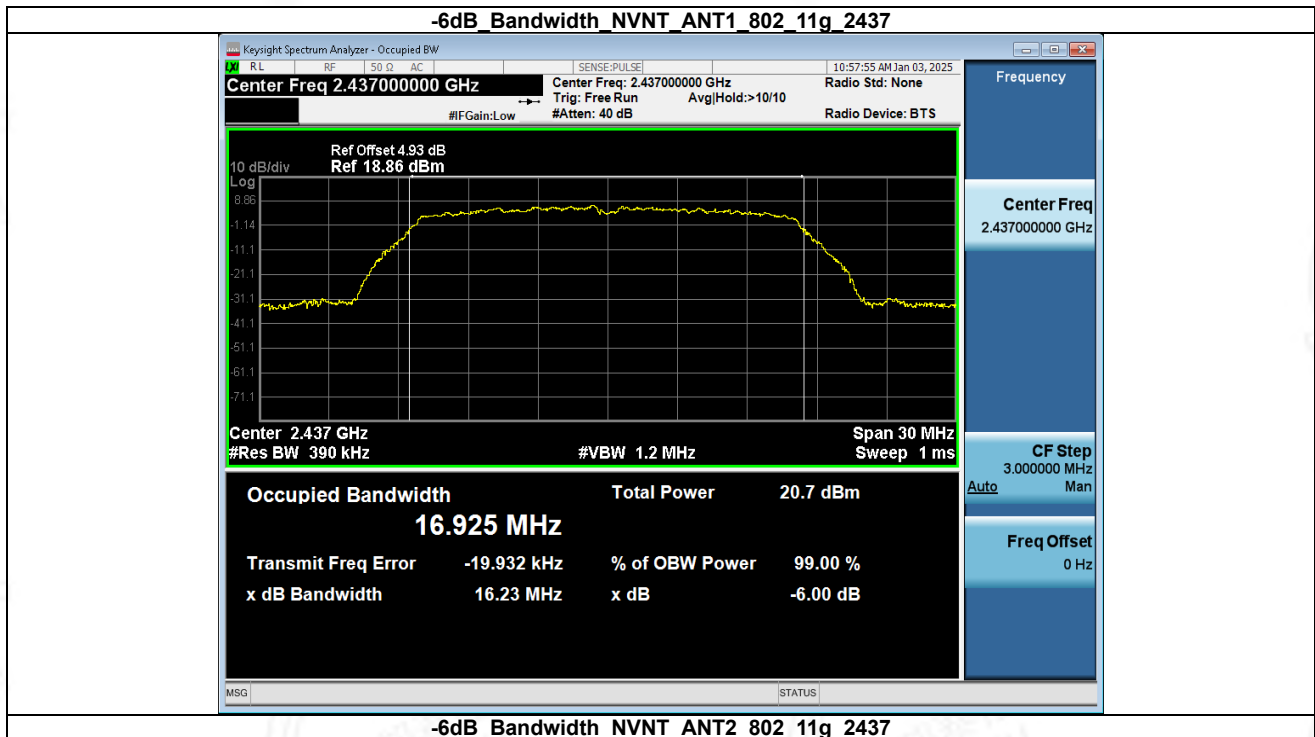
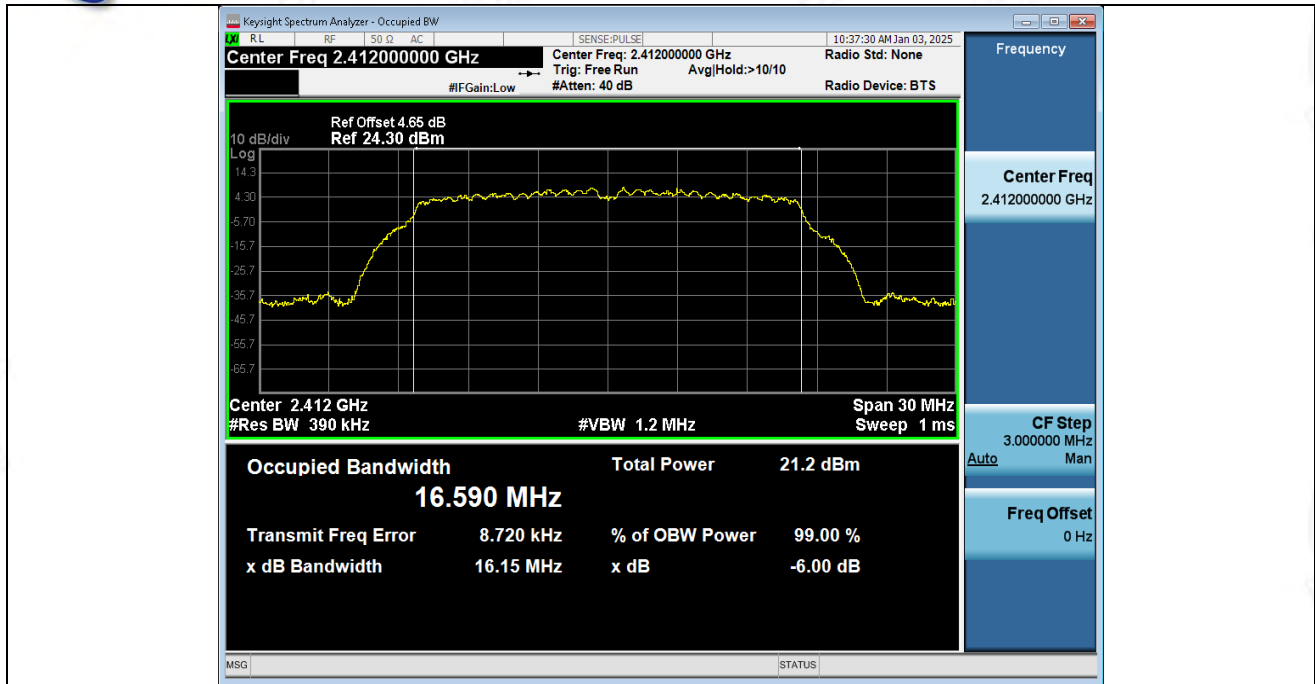
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.22	500	Pass
NVNT	ANT2	802.11b	2412.00	9.15	500	Pass
NVNT	ANT1	802.11b	2437.00	9.19	500	Pass
NVNT	ANT2	802.11b	2437.00	9.18	500	Pass
NVNT	ANT1	802.11b	2462.00	9.19	500	Pass
NVNT	ANT2	802.11b	2462.00	9.17	500	Pass
NVNT	ANT1	802.11g	2412.00	16.32	500	Pass
NVNT	ANT2	802.11g	2412.00	16.15	500	Pass
NVNT	ANT1	802.11g	2437.00	16.23	500	Pass
NVNT	ANT2	802.11g	2437.00	16.32	500	Pass
NVNT	ANT1	802.11g	2462.00	16.20	500	Pass
NVNT	ANT2	802.11g	2462.00	16.31	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.54	500	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	16.79	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.28	500	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	16.83	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.34	500	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	16.79	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.72	500	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	35.55	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.62	500	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	35.11	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.54	500	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	35.42	500	Pass

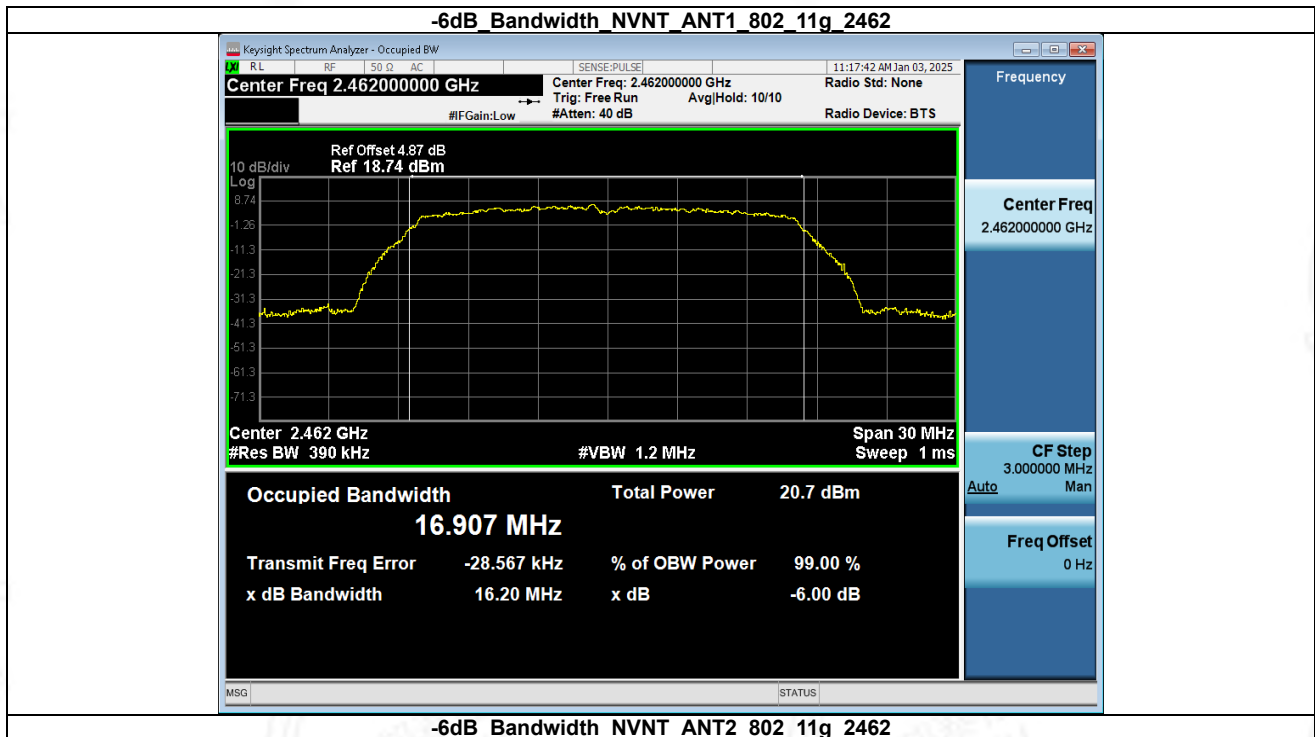
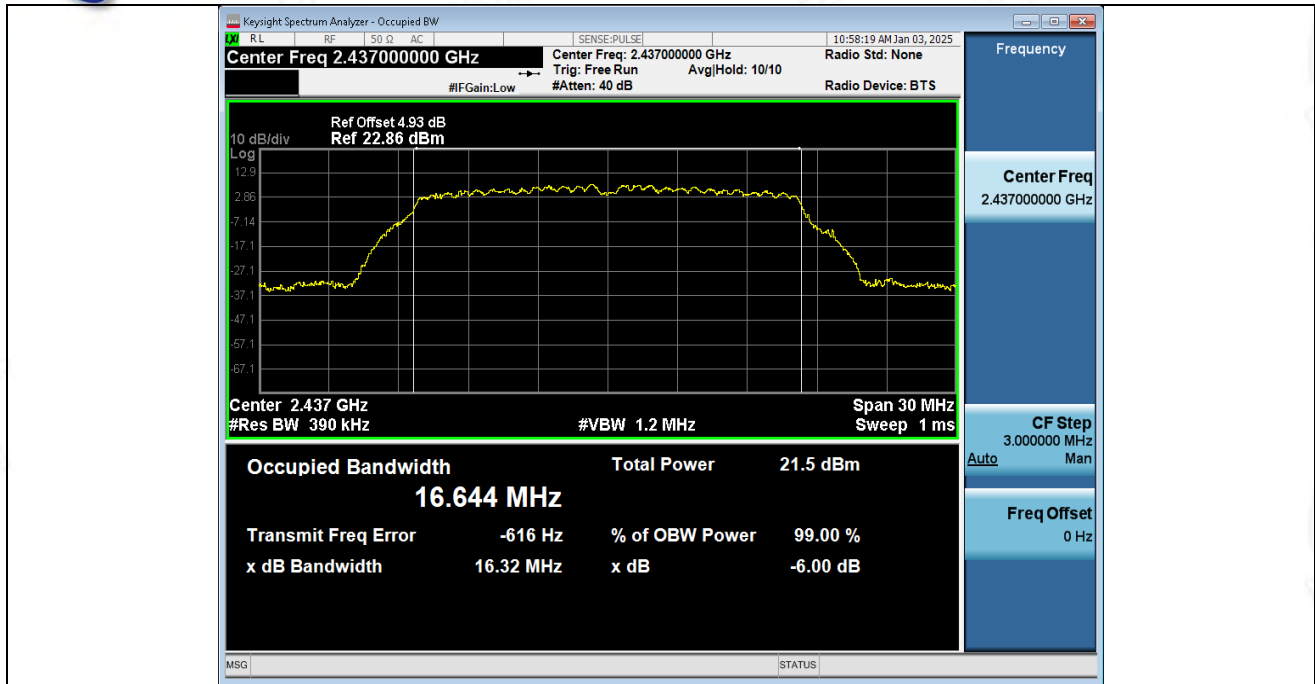


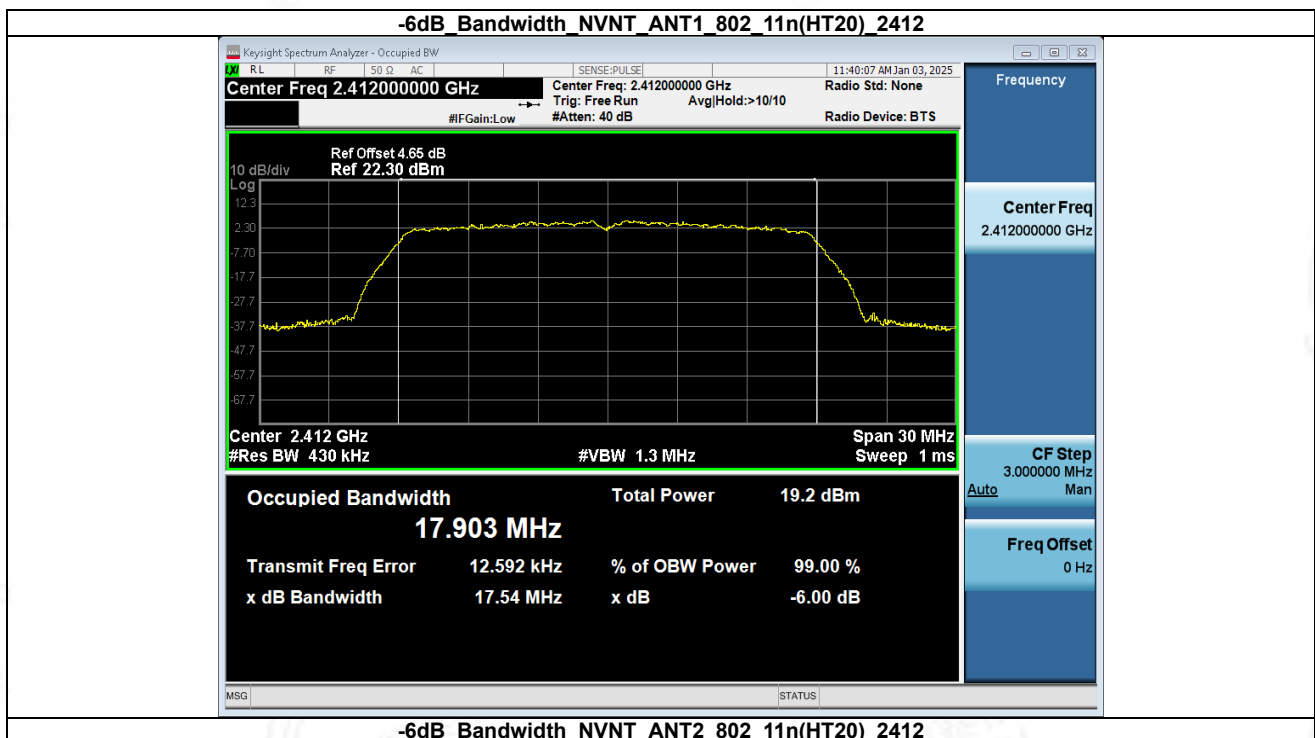
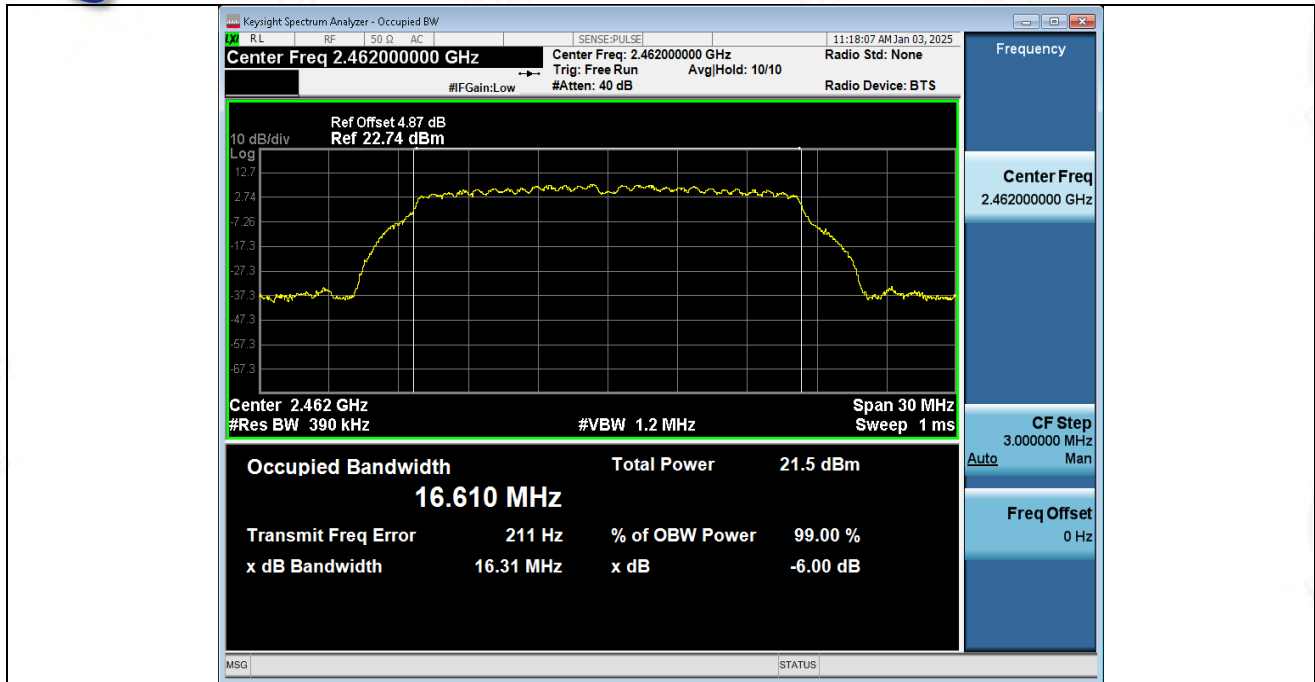


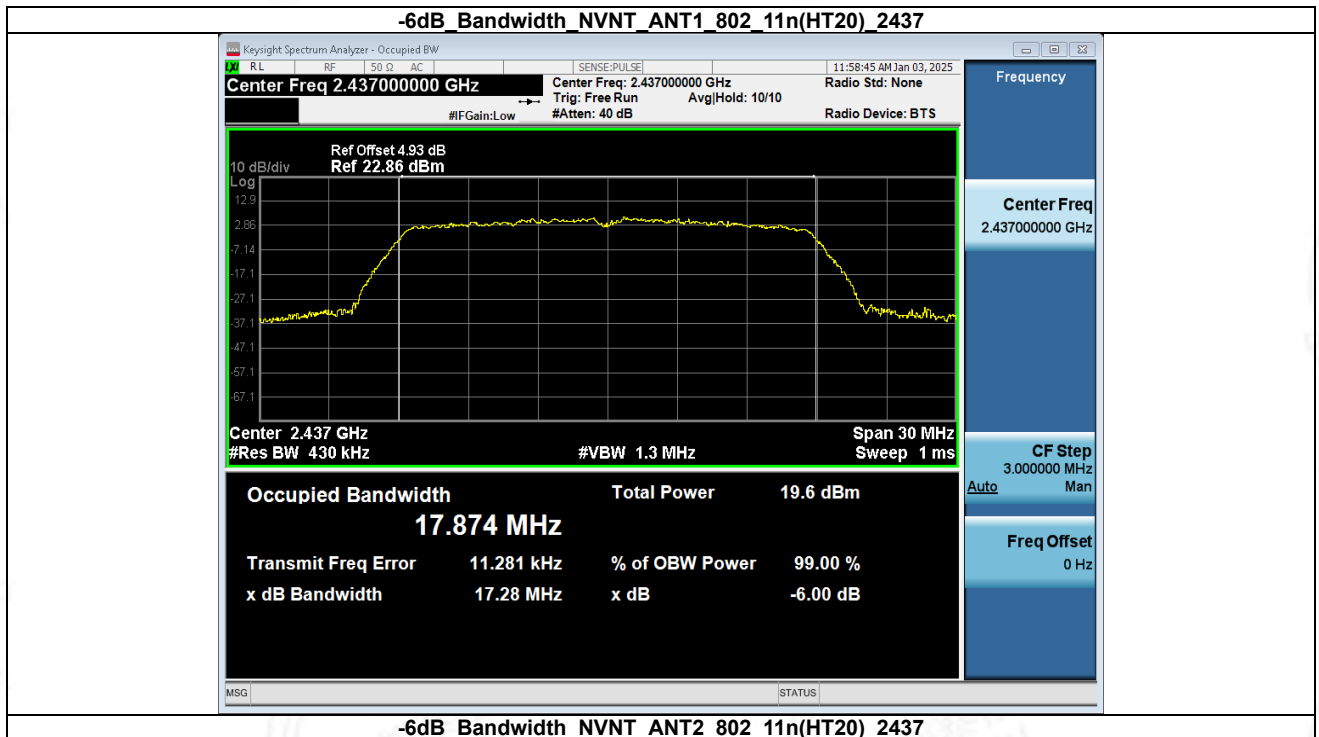
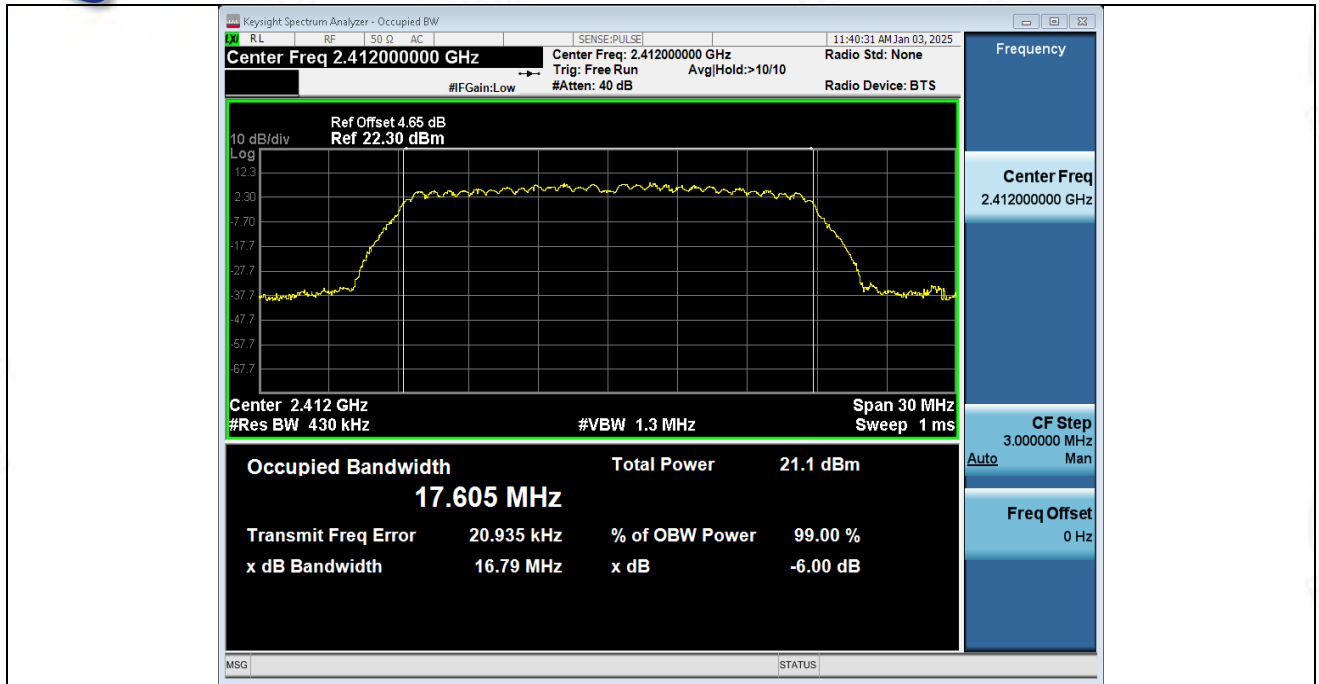


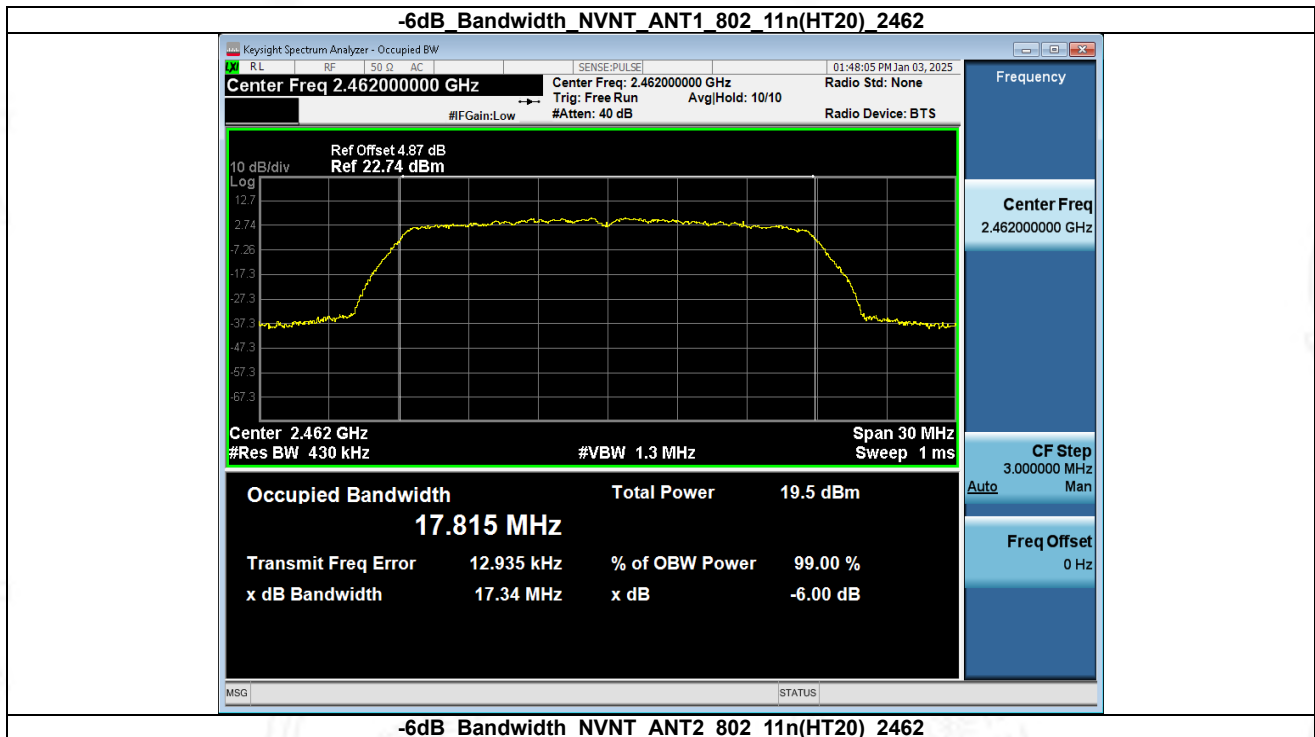
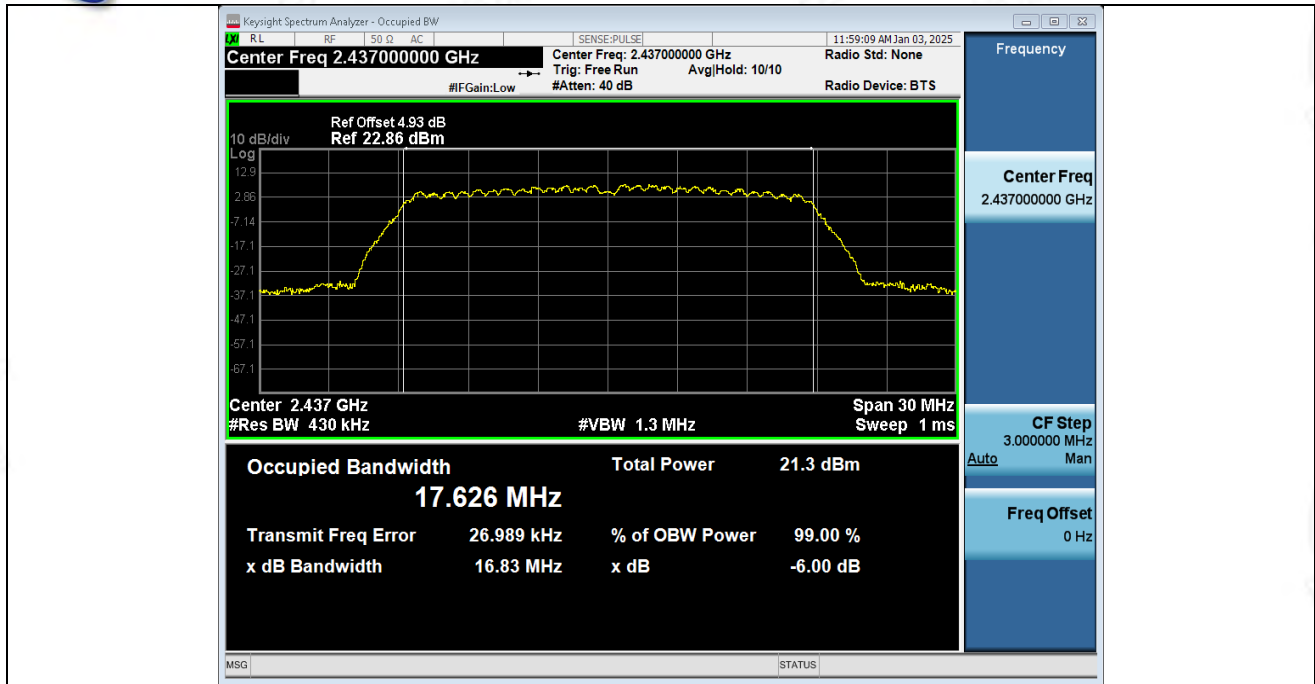


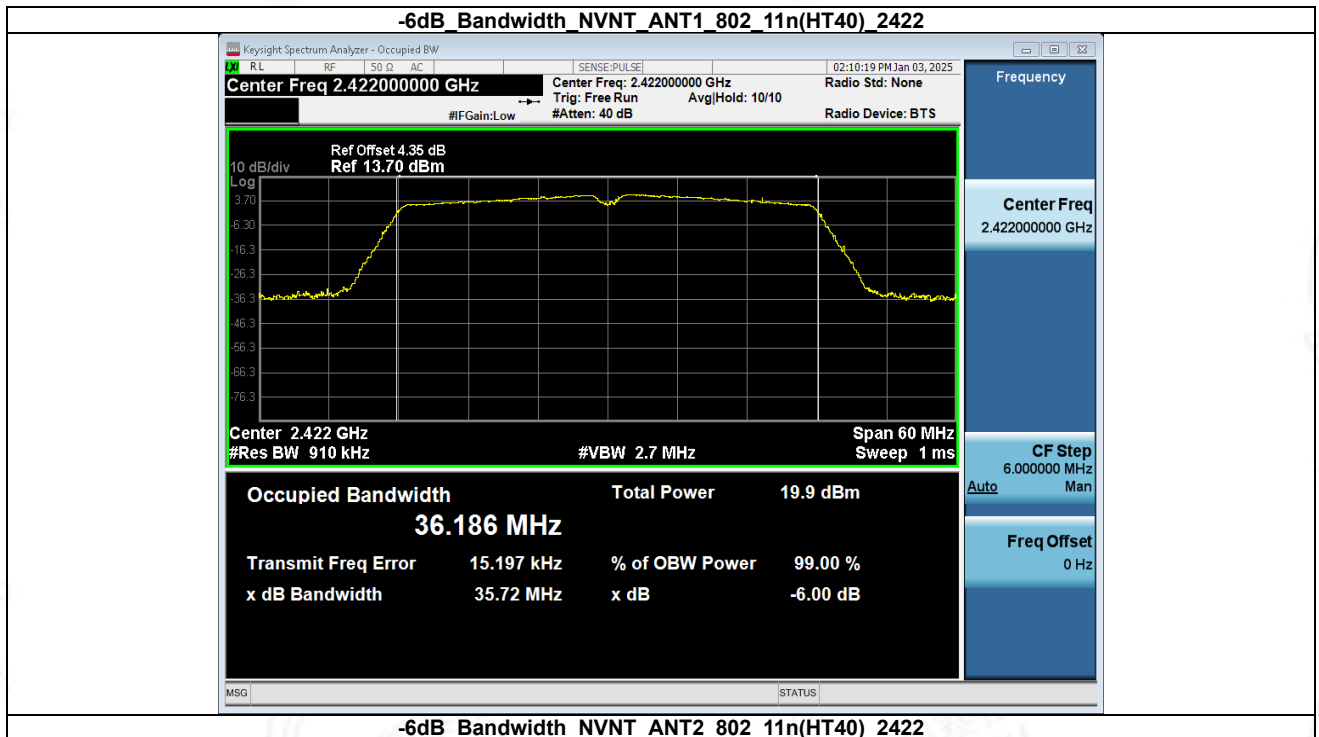
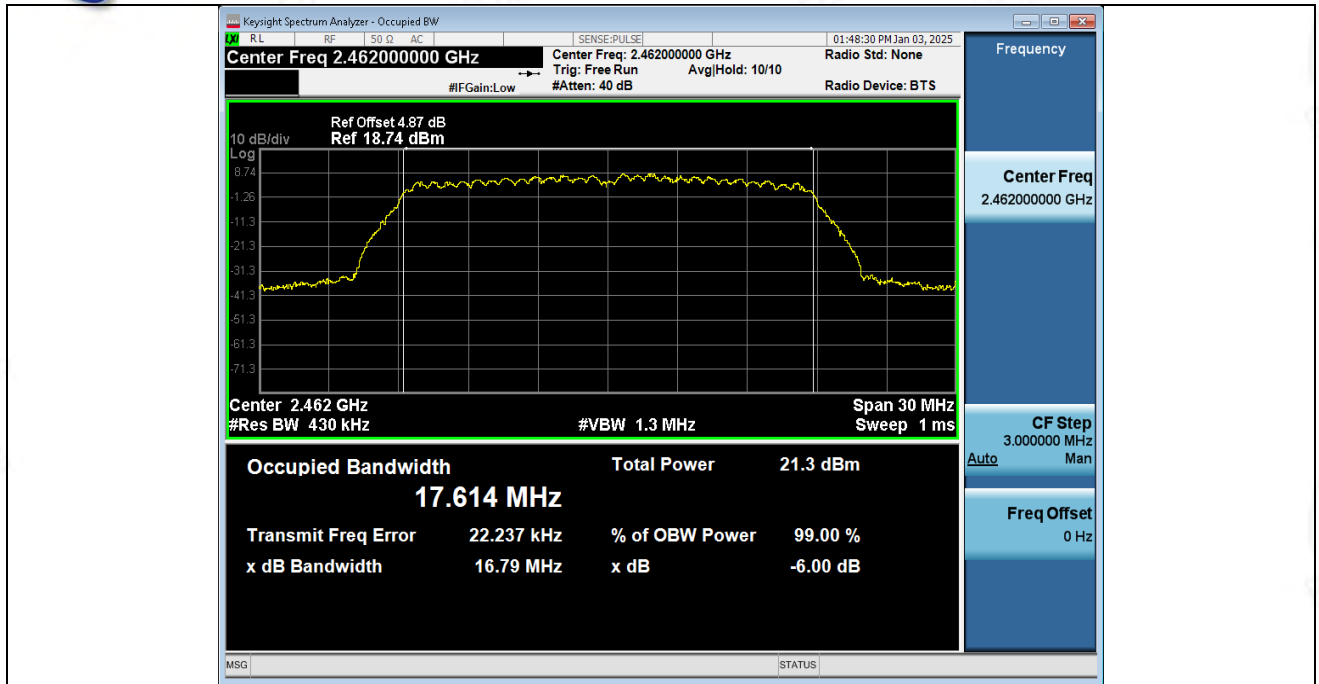


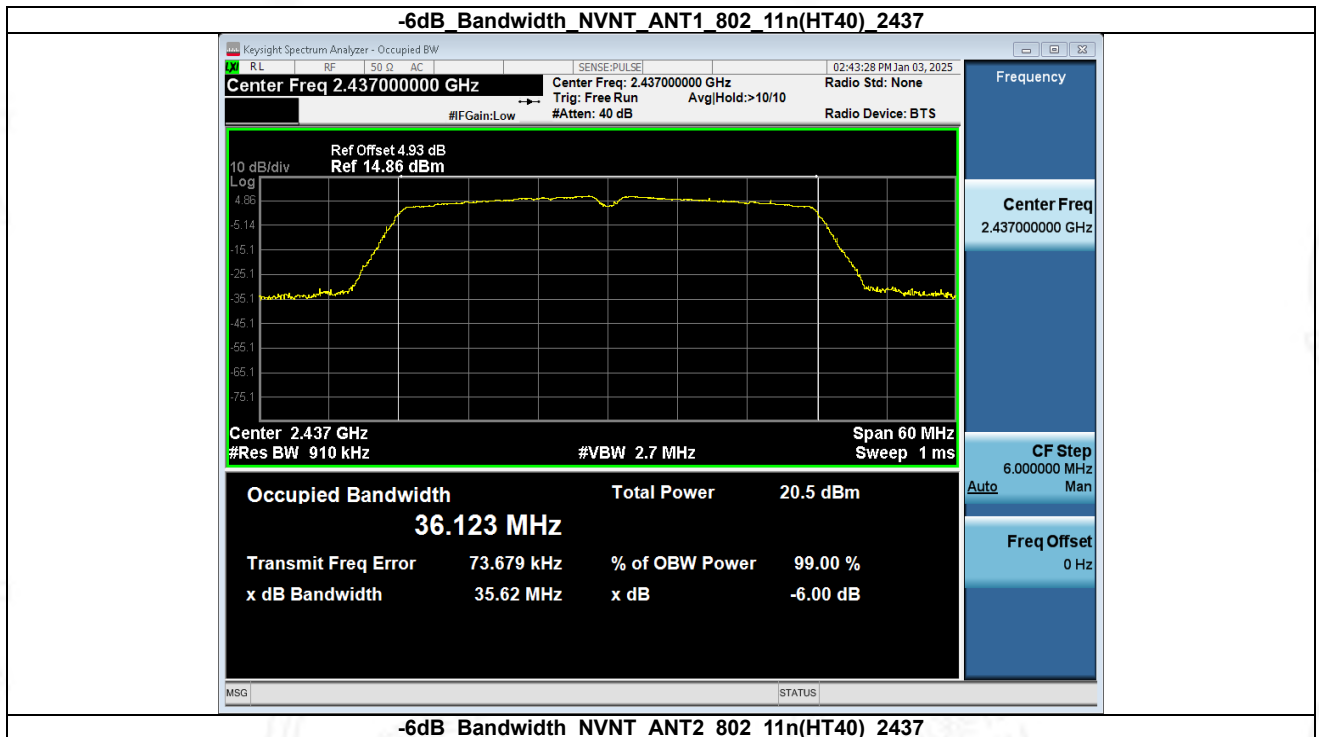
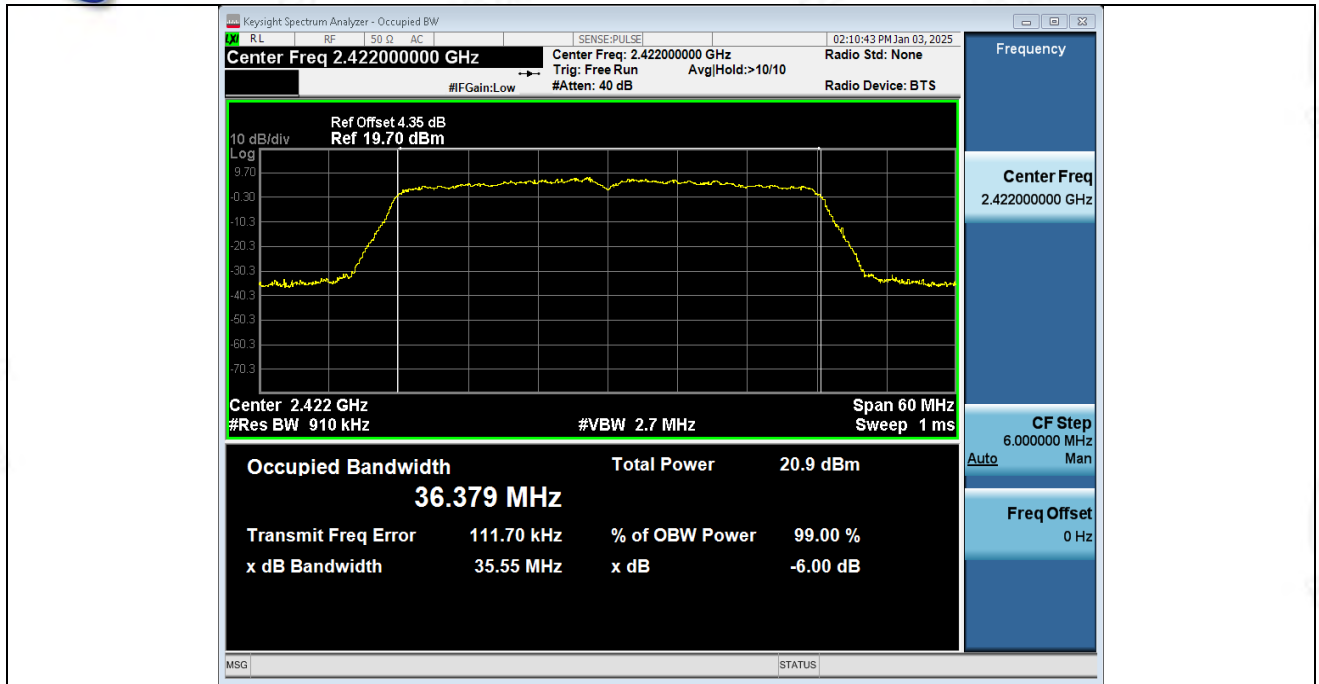


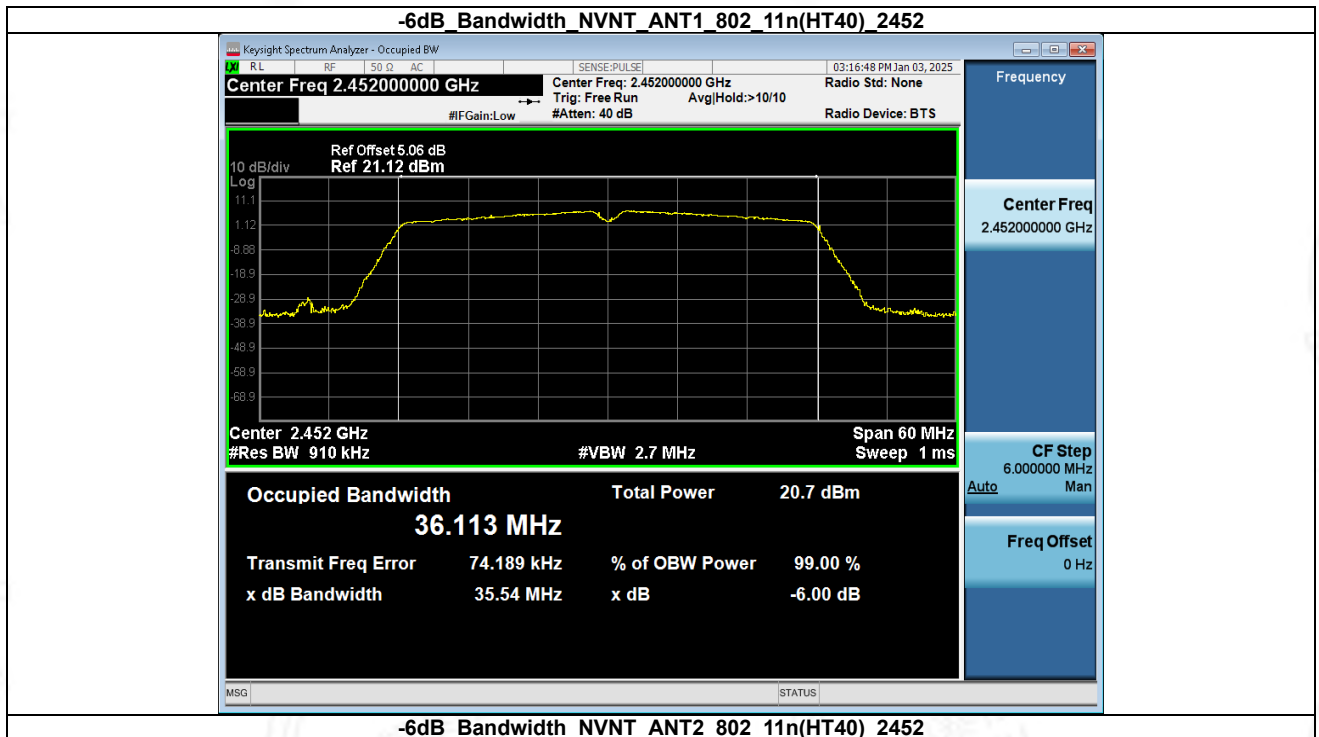
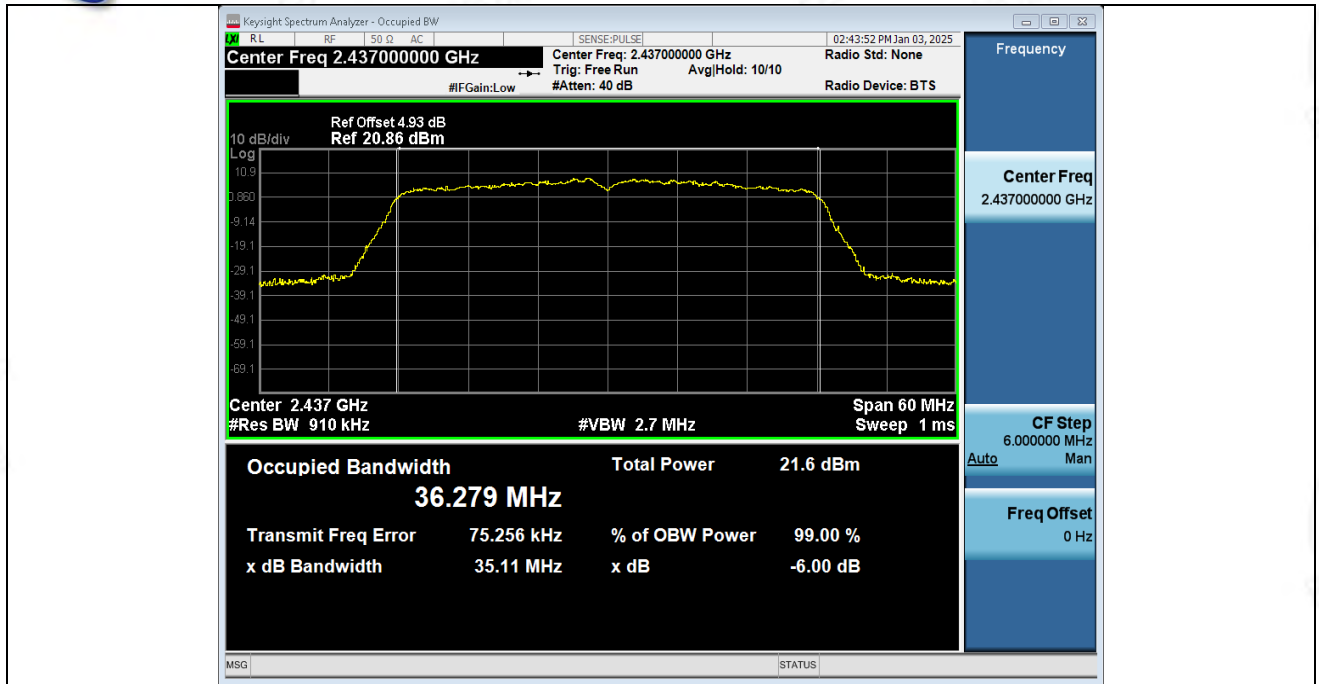


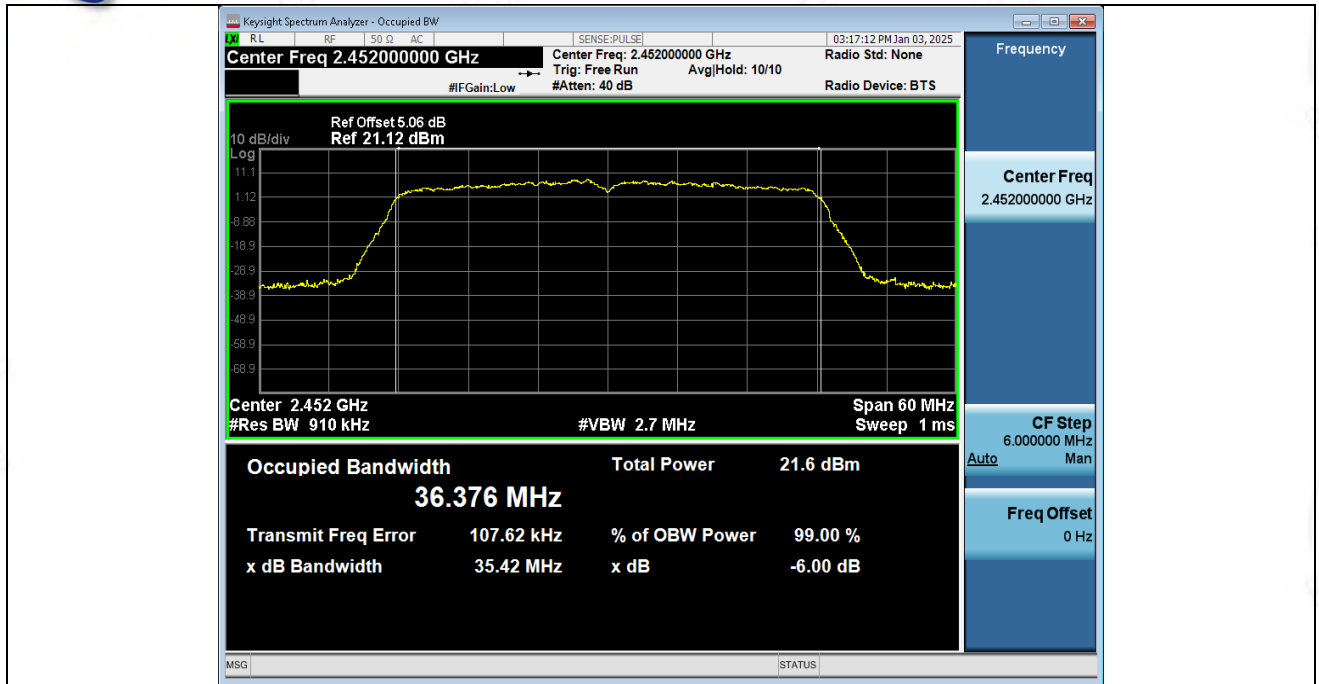








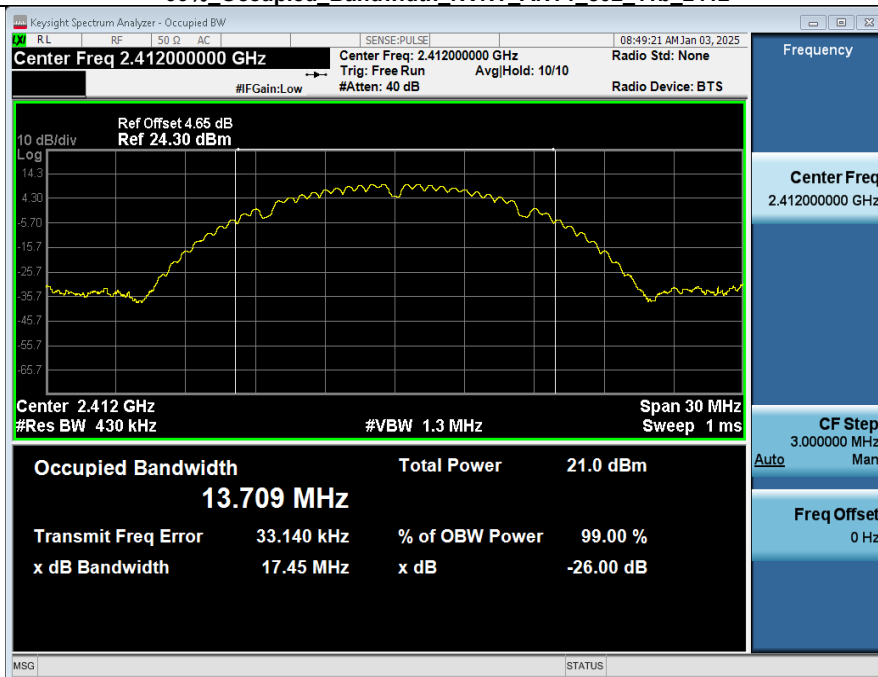




2. 99% Occupied Bandwidth

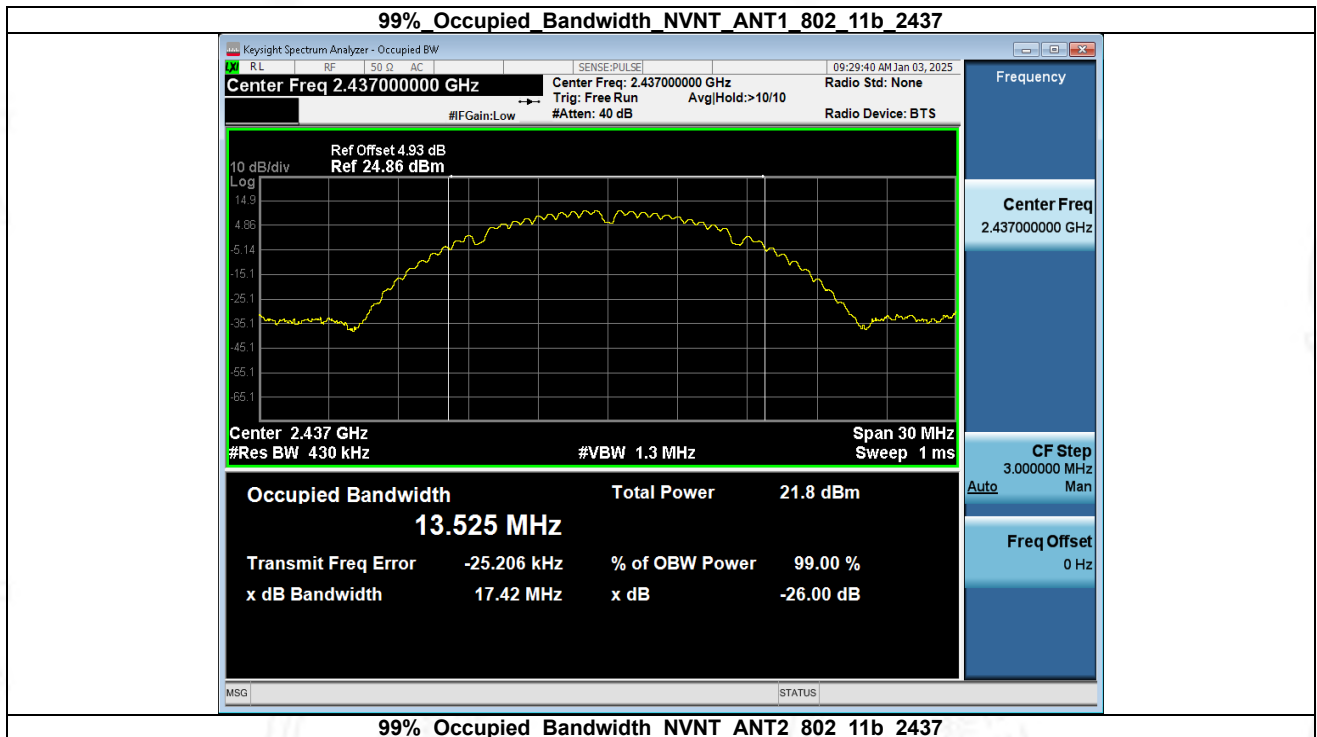
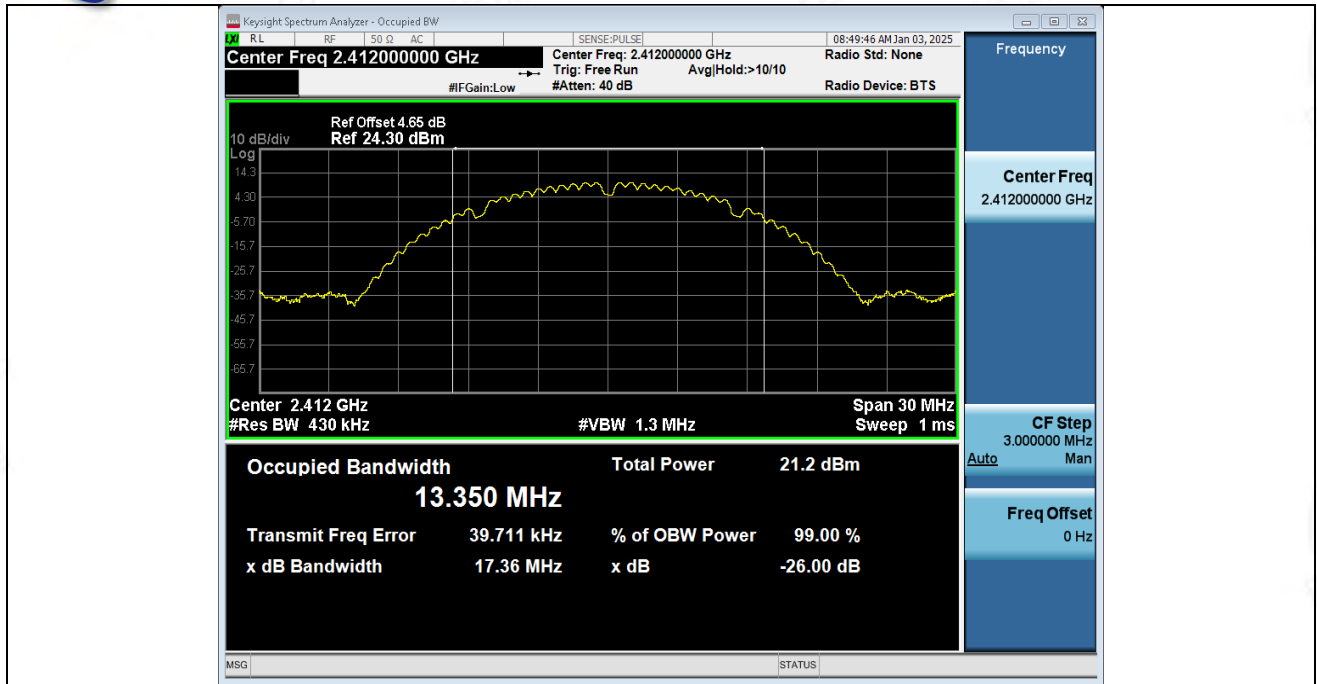
Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	13.709
NVNT	ANT2	802.11b	2412.00	13.350
NVNT	ANT1	802.11b	2437.00	13.525
NVNT	ANT2	802.11b	2437.00	13.423
NVNT	ANT1	802.11b	2462.00	13.580
NVNT	ANT2	802.11b	2462.00	13.454
NVNT	ANT1	802.11g	2412.00	17.183
NVNT	ANT2	802.11g	2412.00	16.688
NVNT	ANT1	802.11g	2437.00	17.197
NVNT	ANT2	802.11g	2437.00	16.742
NVNT	ANT1	802.11g	2462.00	17.052
NVNT	ANT2	802.11g	2462.00	16.728
NVNT	ANT1	802.11n(HT20)	2412.00	18.035
NVNT	ANT2	802.11n(HT20)	2412.00	17.660
NVNT	ANT1	802.11n(HT20)	2437.00	17.939
NVNT	ANT2	802.11n(HT20)	2437.00	17.690
NVNT	ANT1	802.11n(HT20)	2462.00	17.889
NVNT	ANT2	802.11n(HT20)	2462.00	17.681
NVNT	ANT1	802.11n(HT40)	2422.00	36.173
NVNT	ANT2	802.11n(HT40)	2422.00	36.427
NVNT	ANT1	802.11n(HT40)	2437.00	36.066
NVNT	ANT2	802.11n(HT40)	2437.00	36.322
NVNT	ANT1	802.11n(HT40)	2452.00	36.074
NVNT	ANT2	802.11n(HT40)	2452.00	36.414

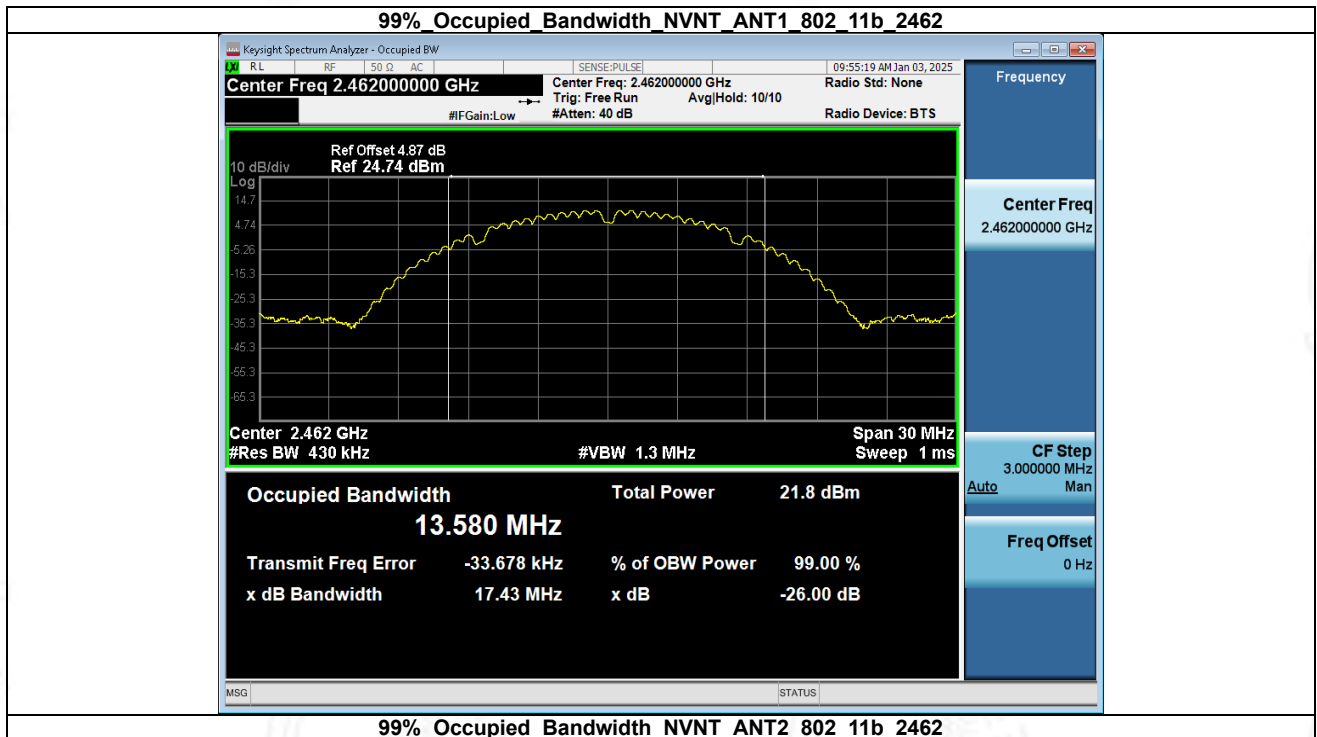
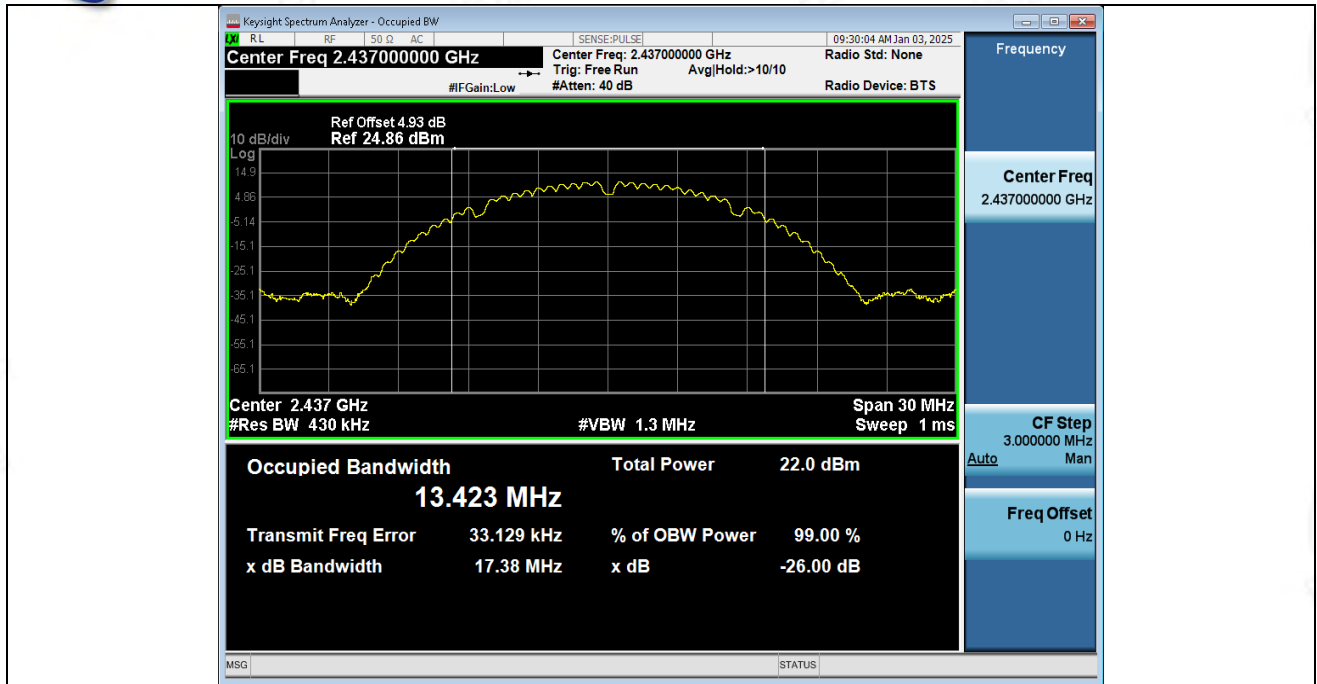
99% Occupied Bandwidth NVNT ANT1 802_11b_2412

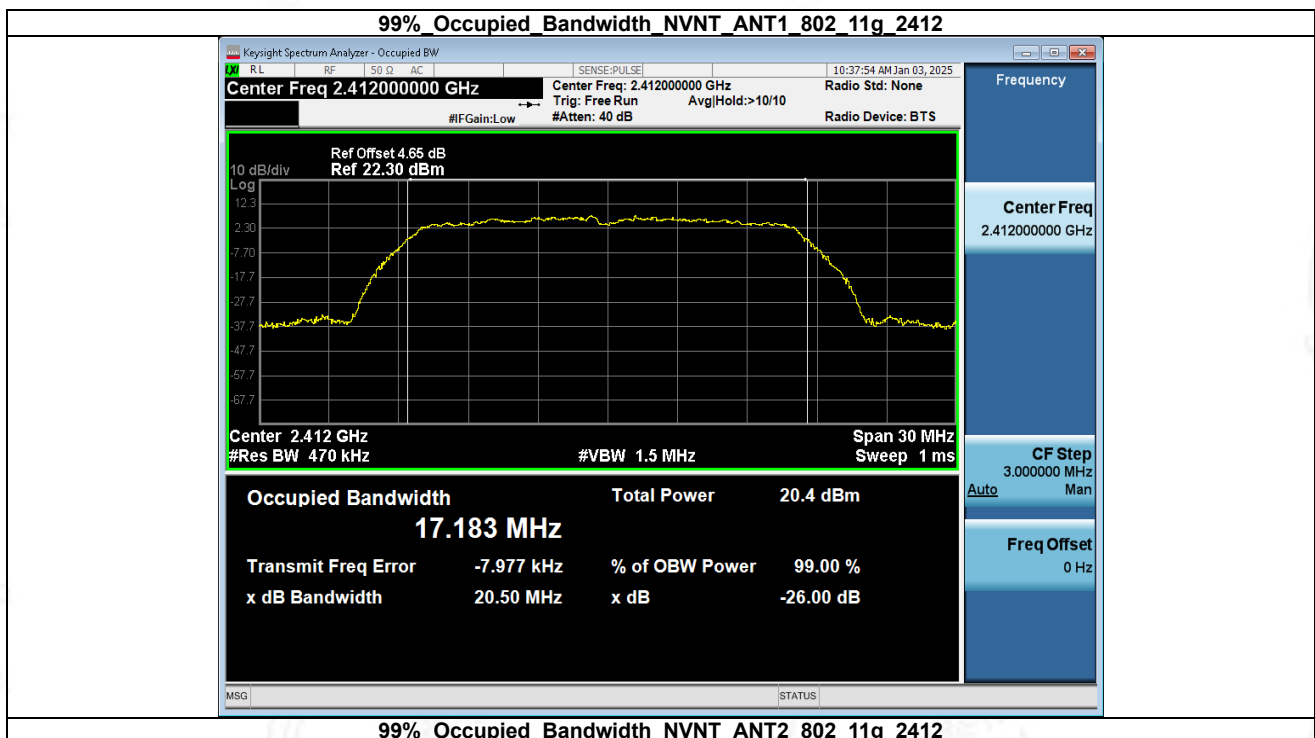
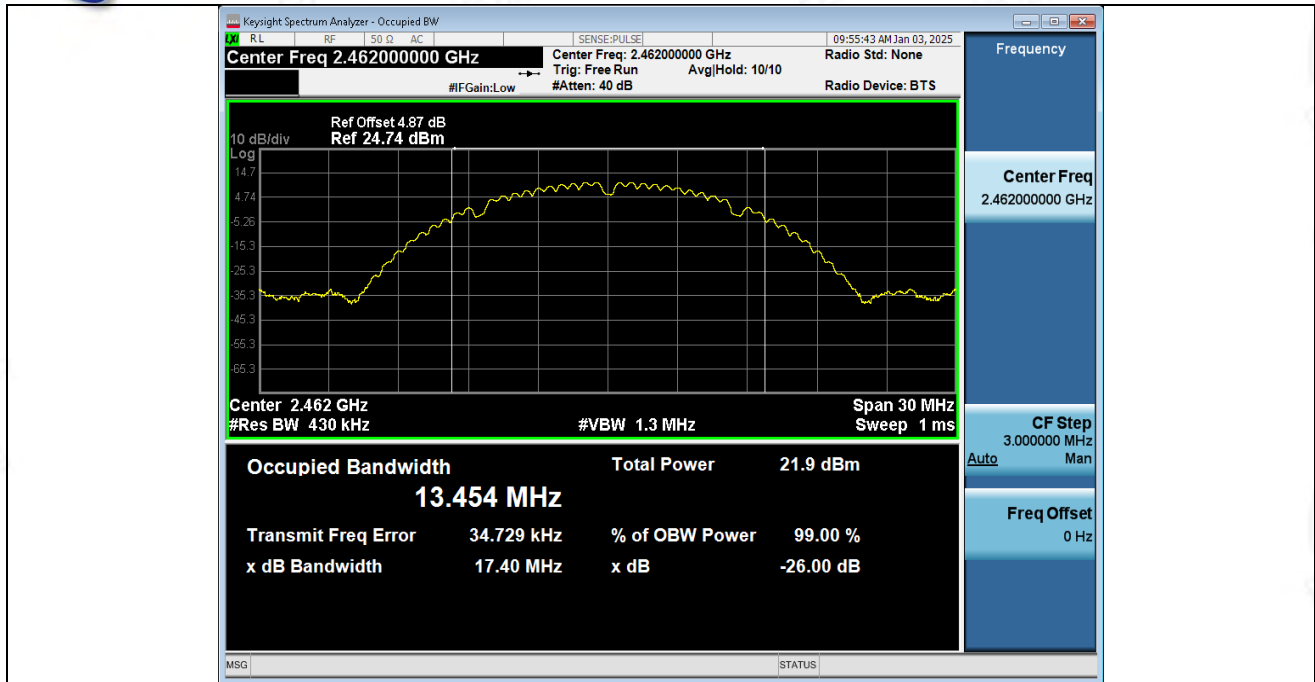


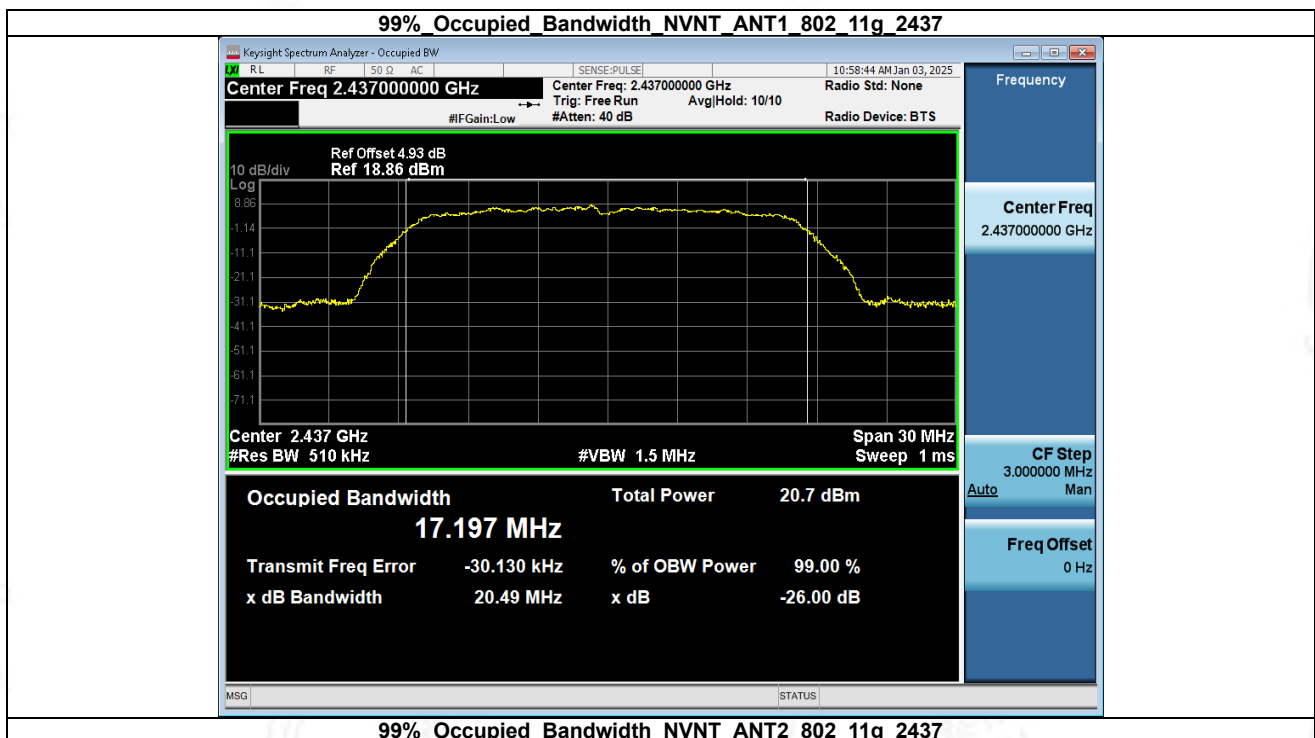
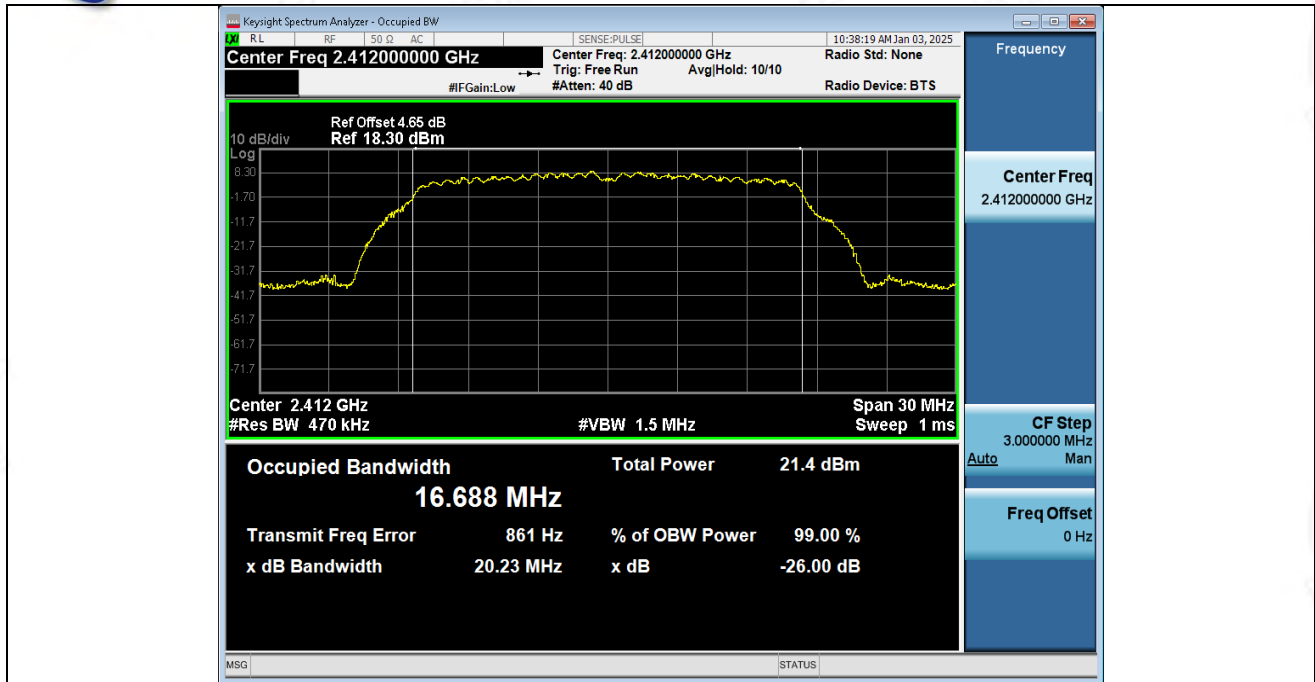
99% Occupied Bandwidth NVNT ANT2 802_11b_2412

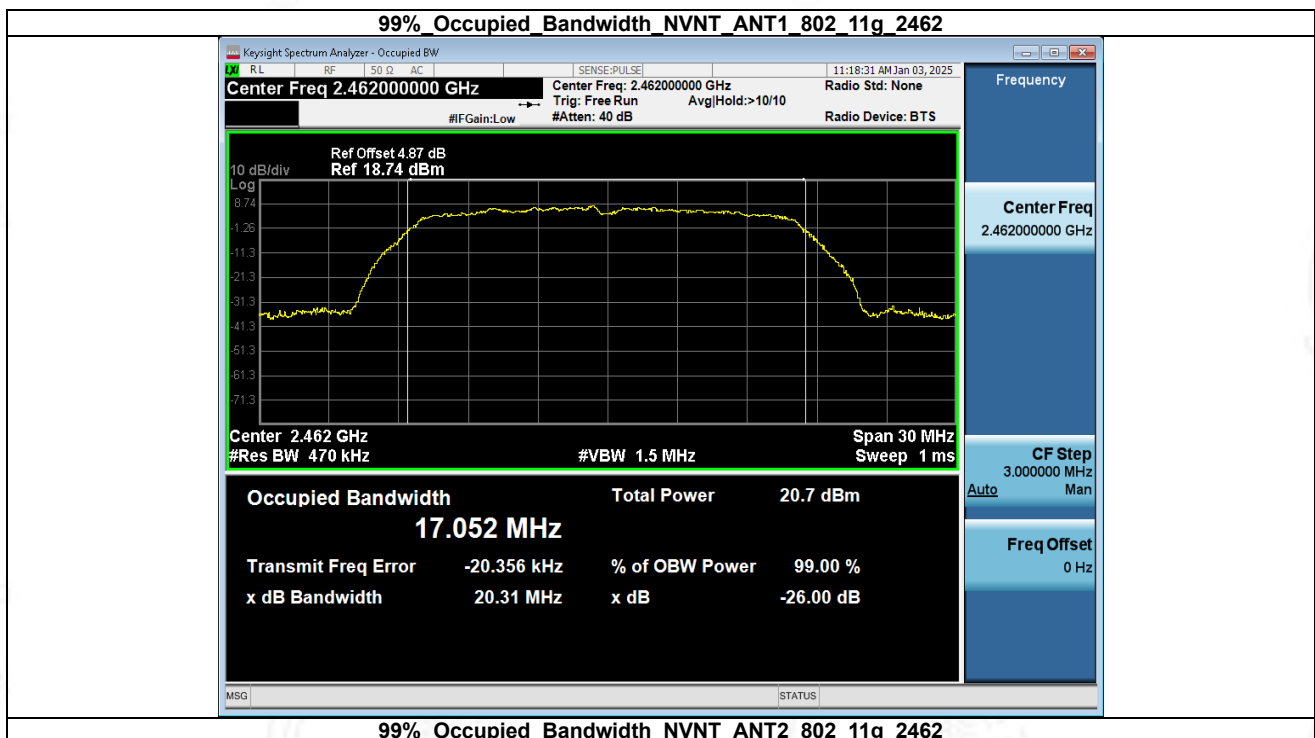
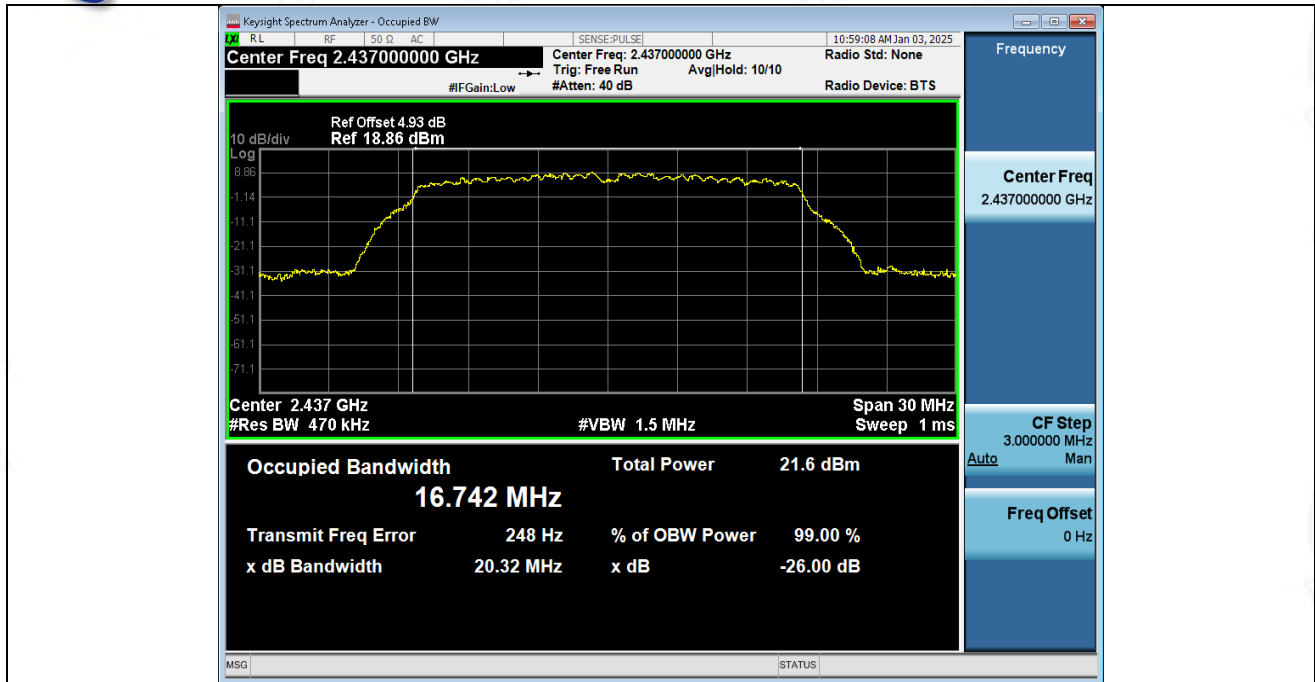


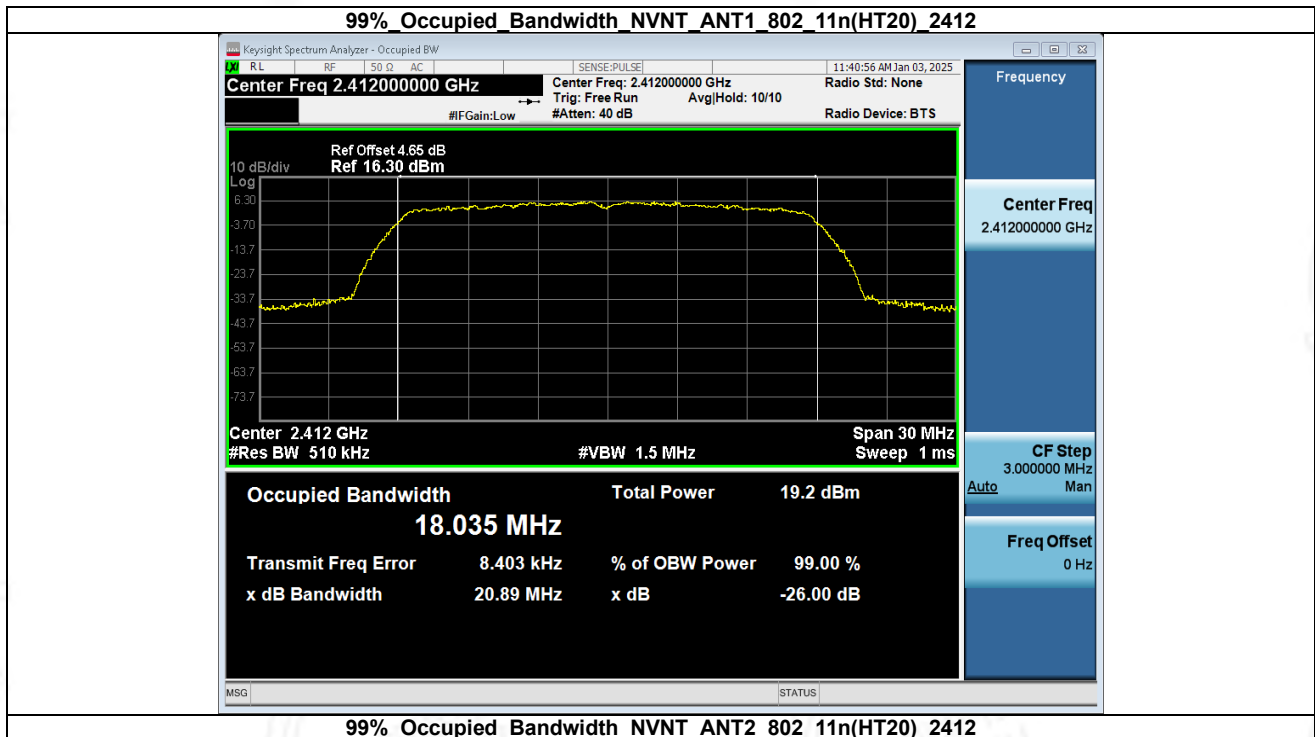
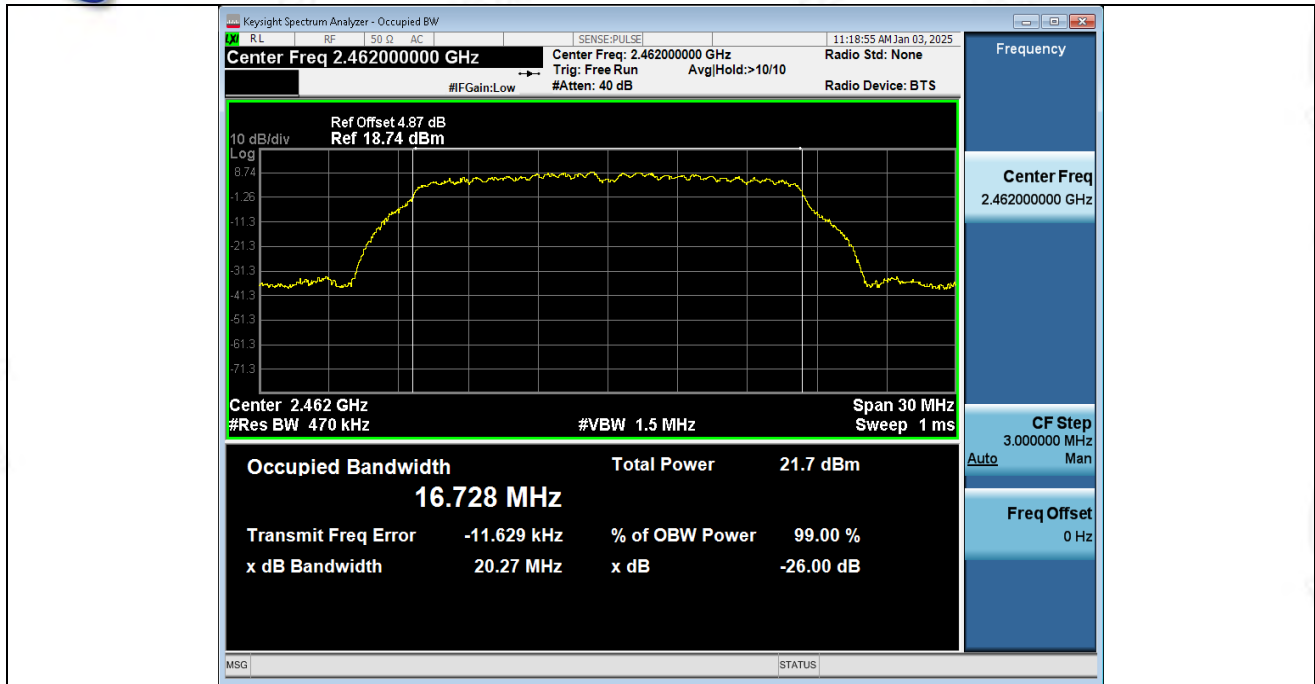


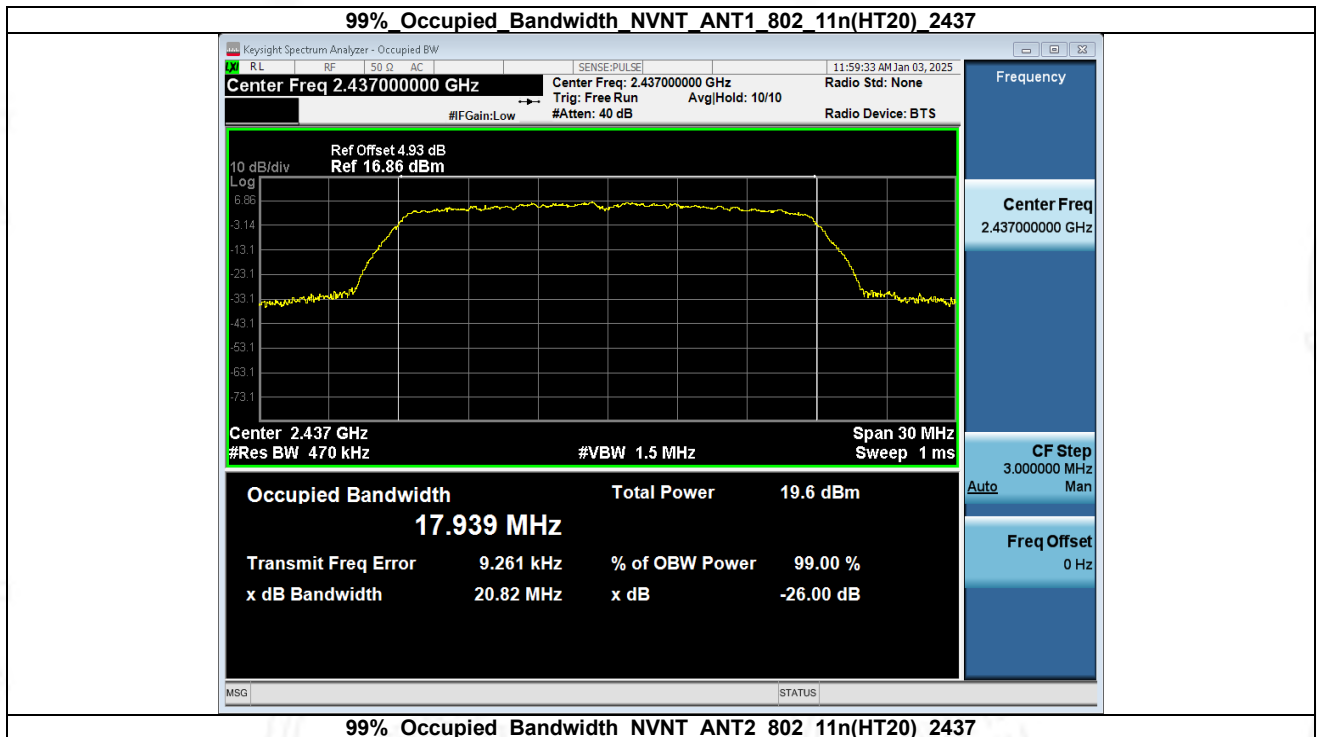
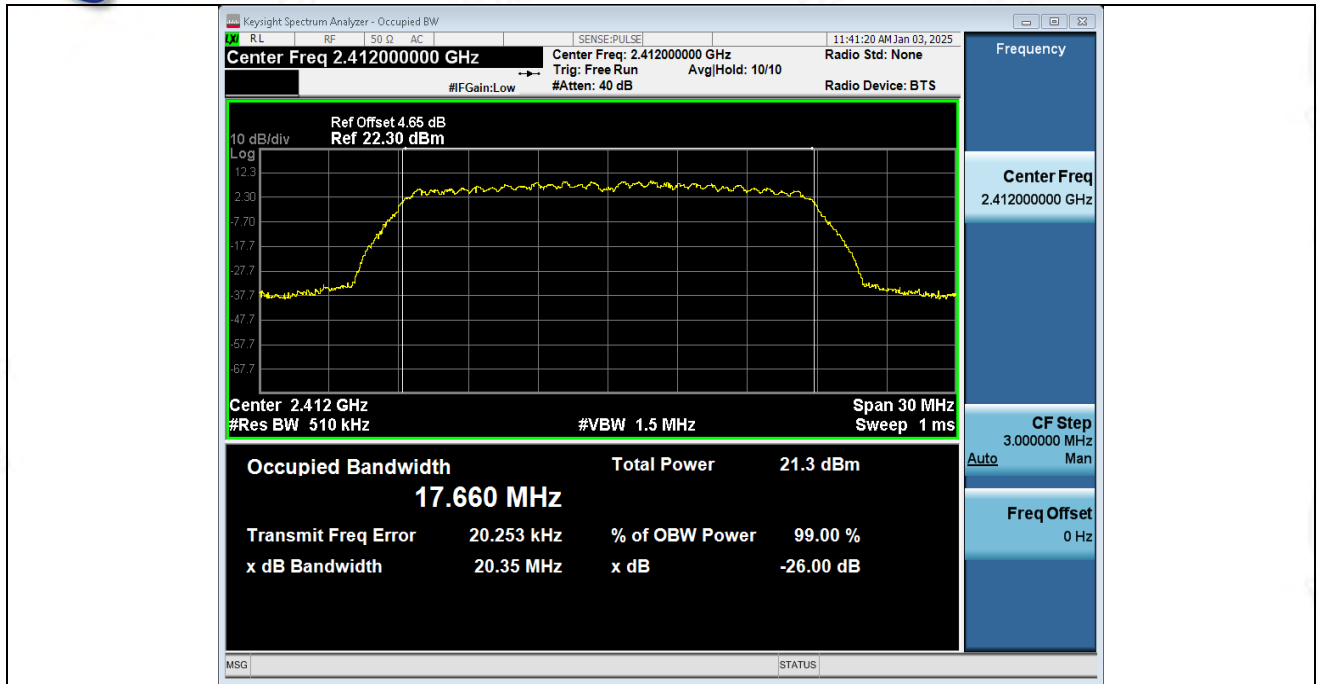


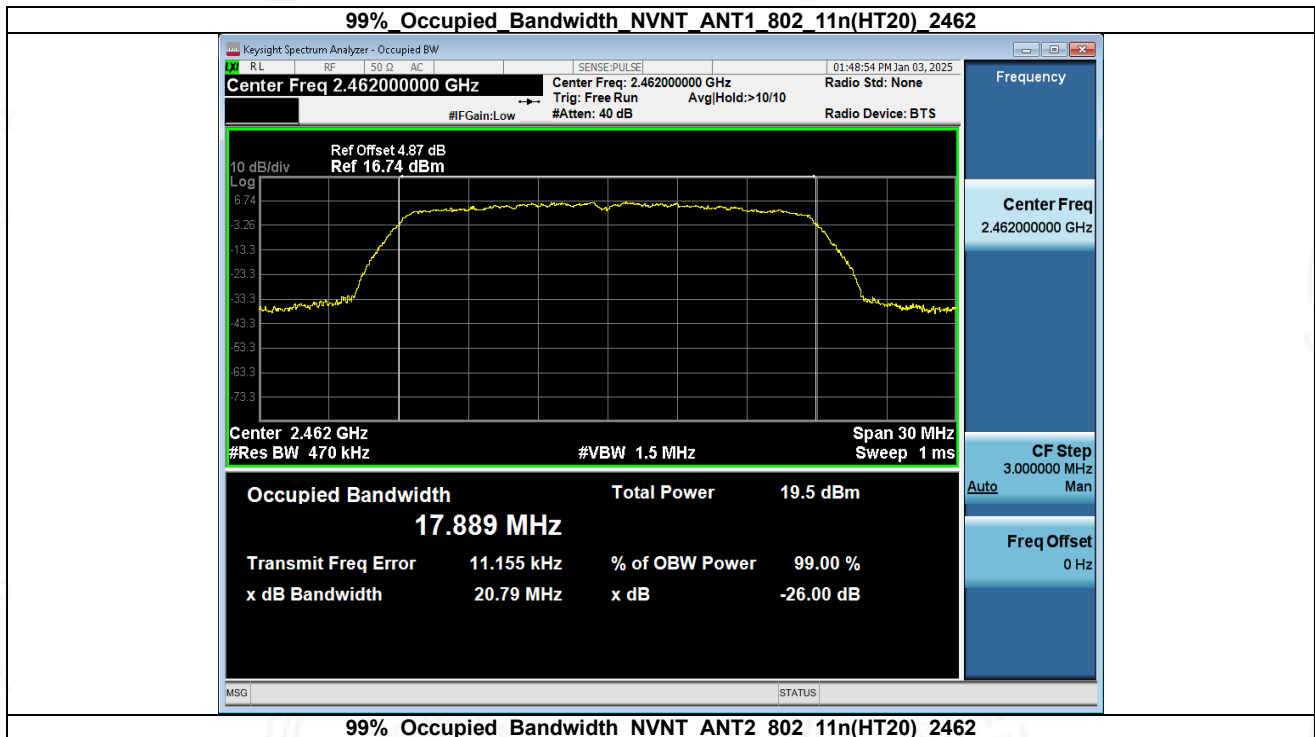
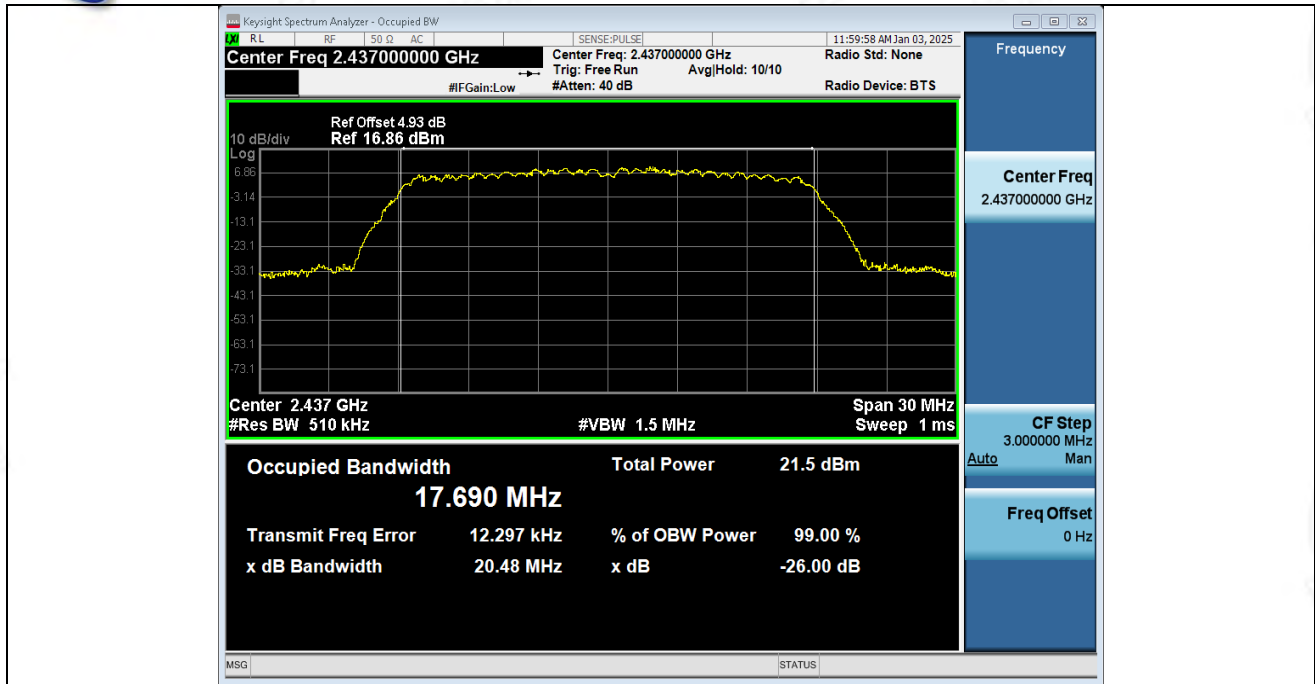


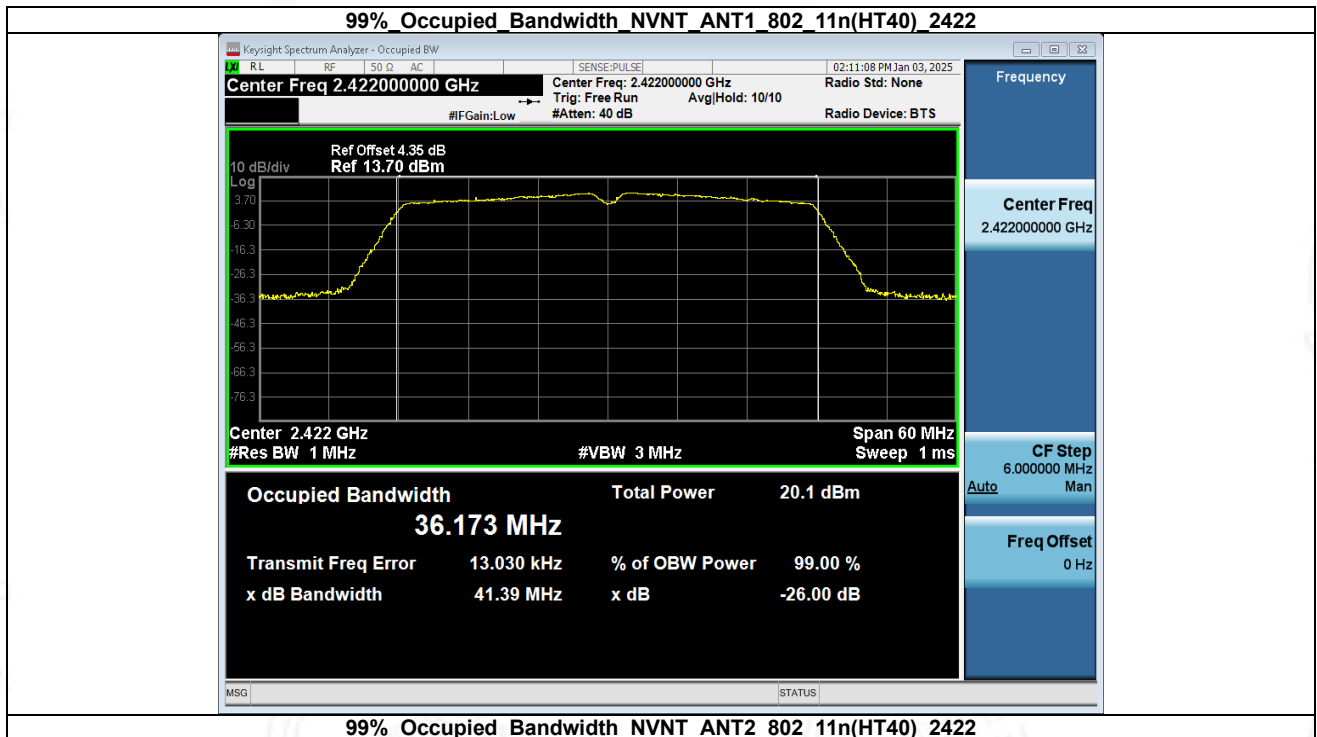
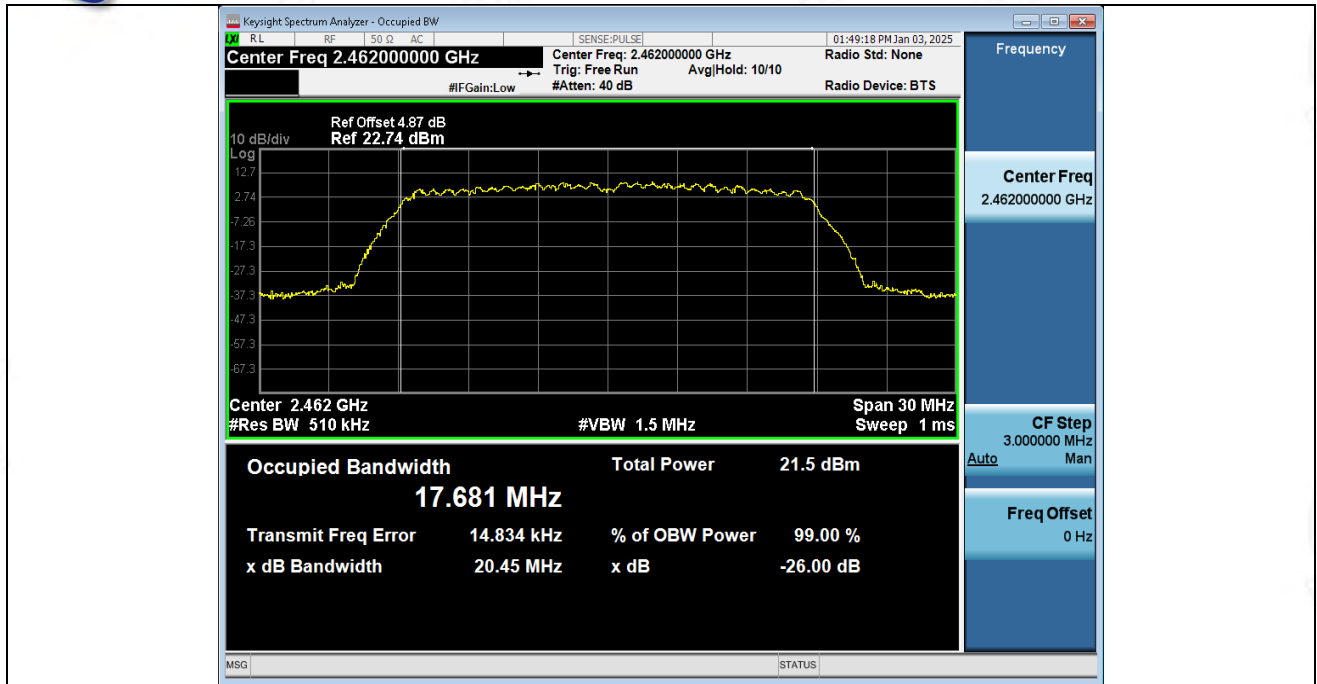


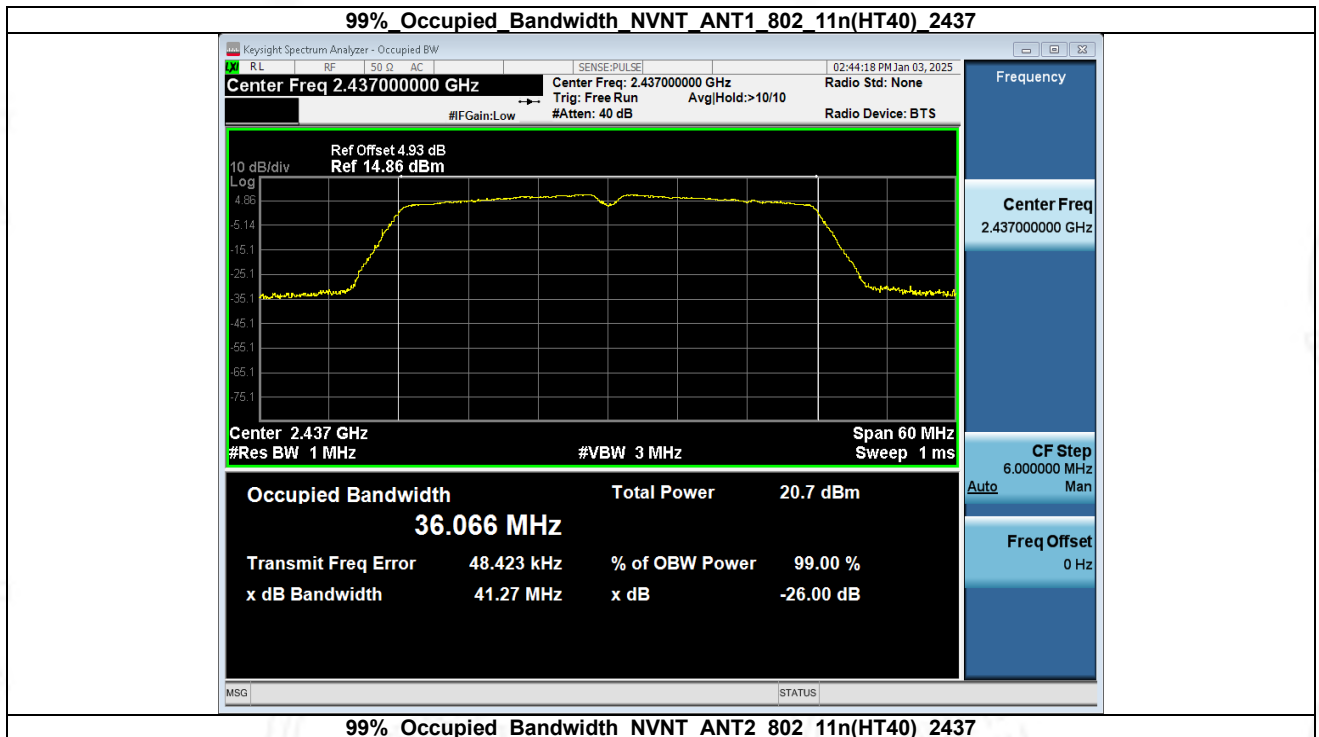
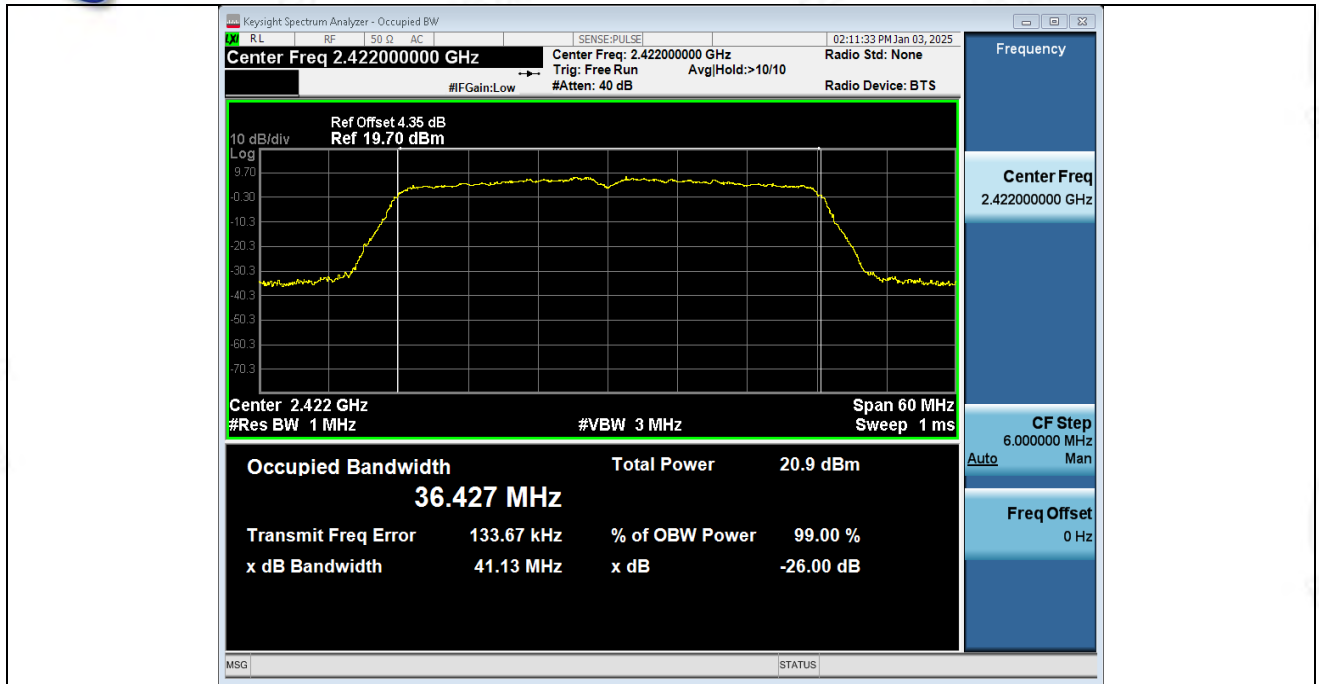


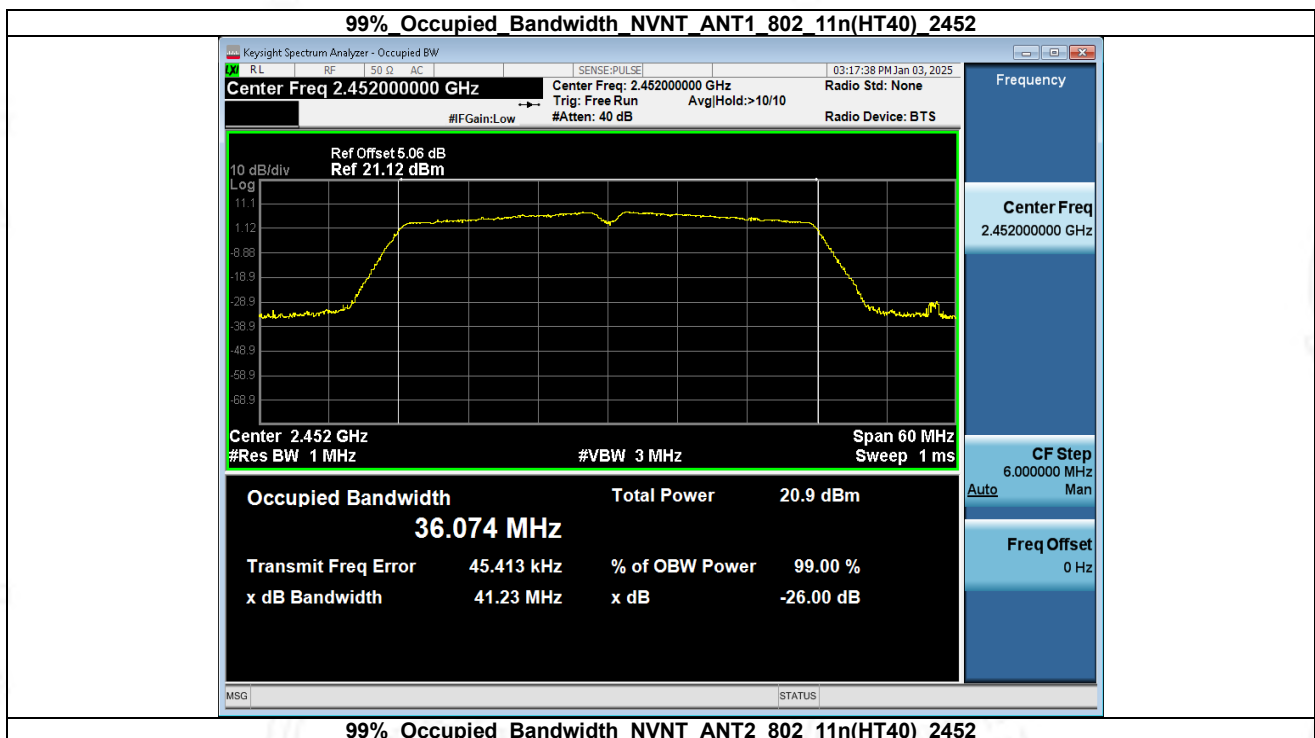
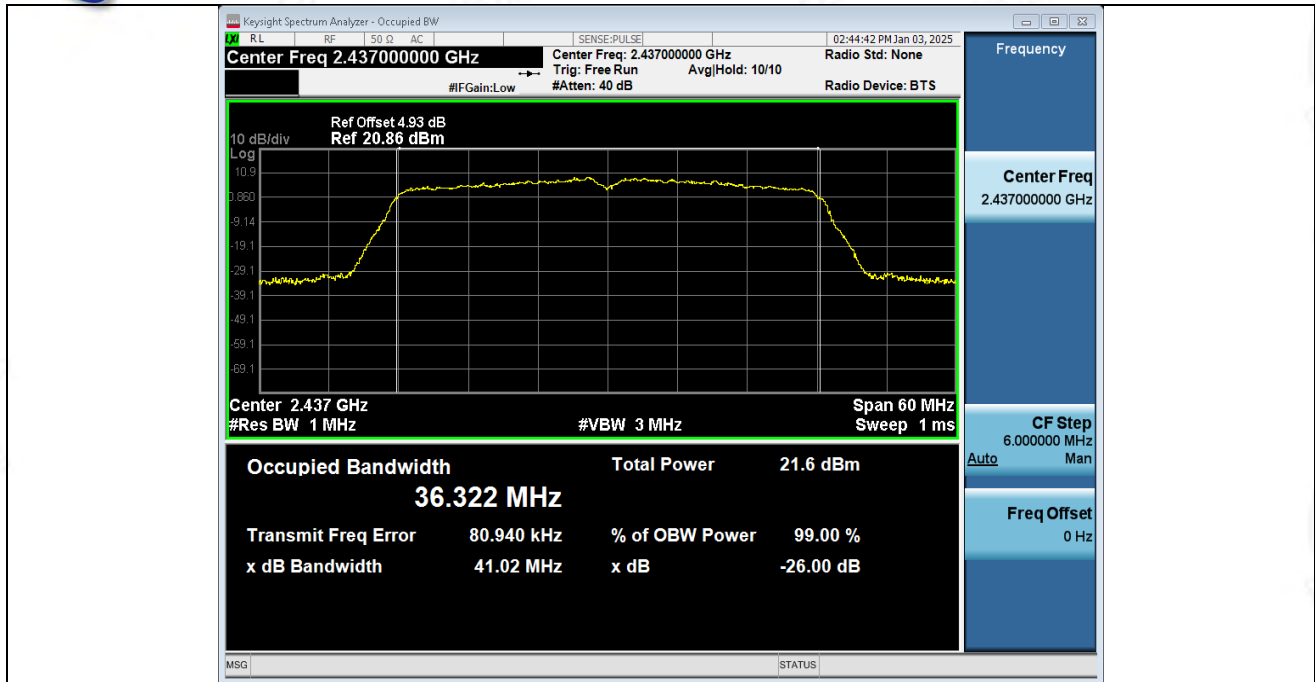


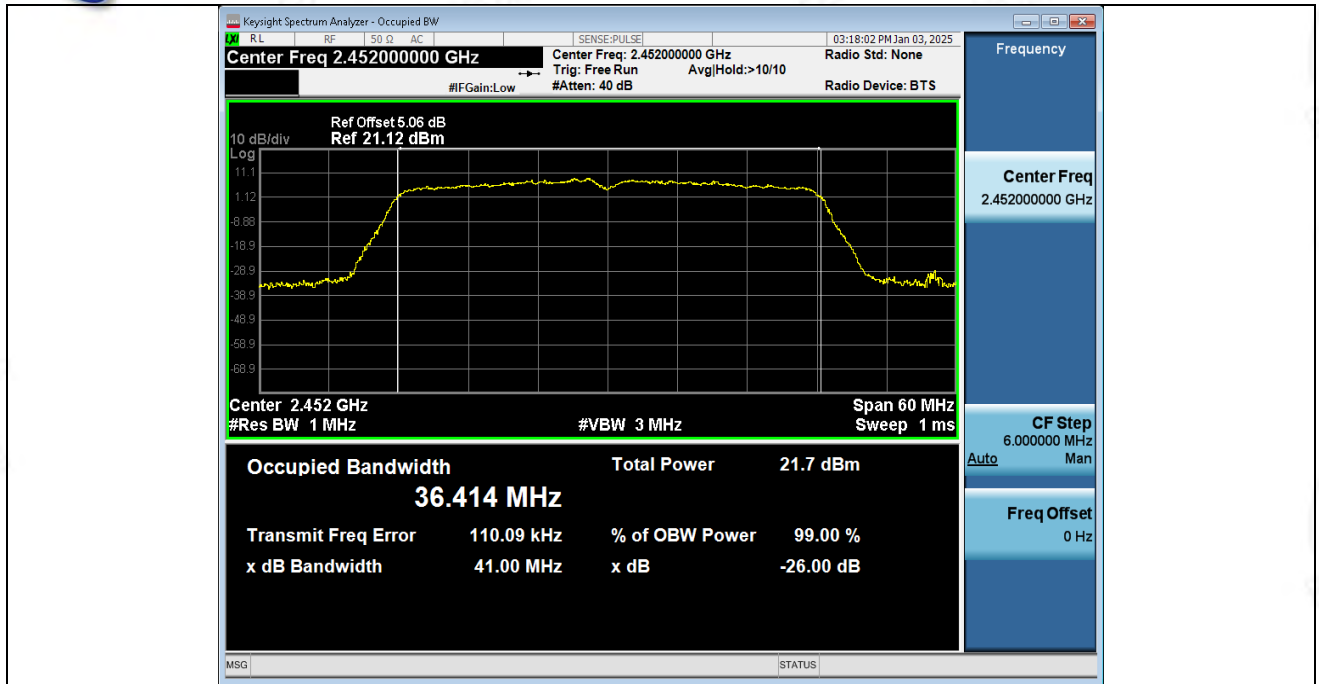






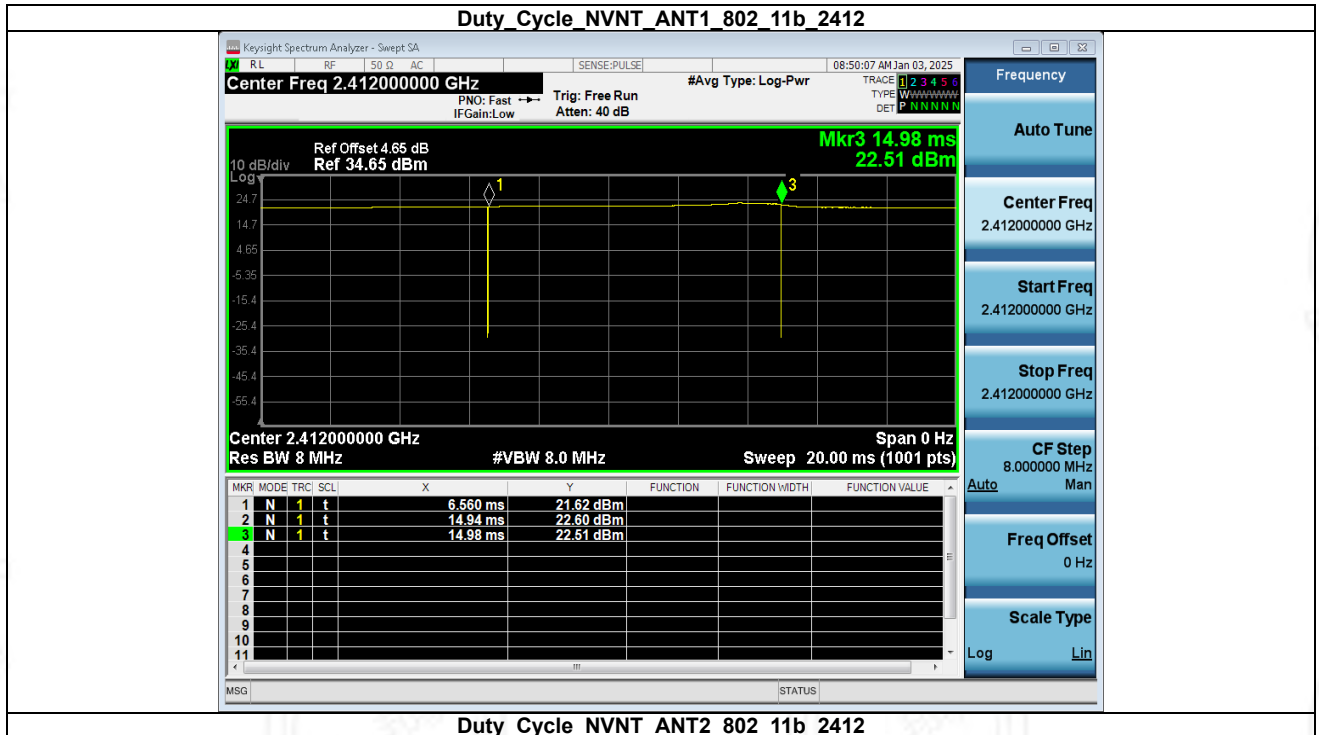


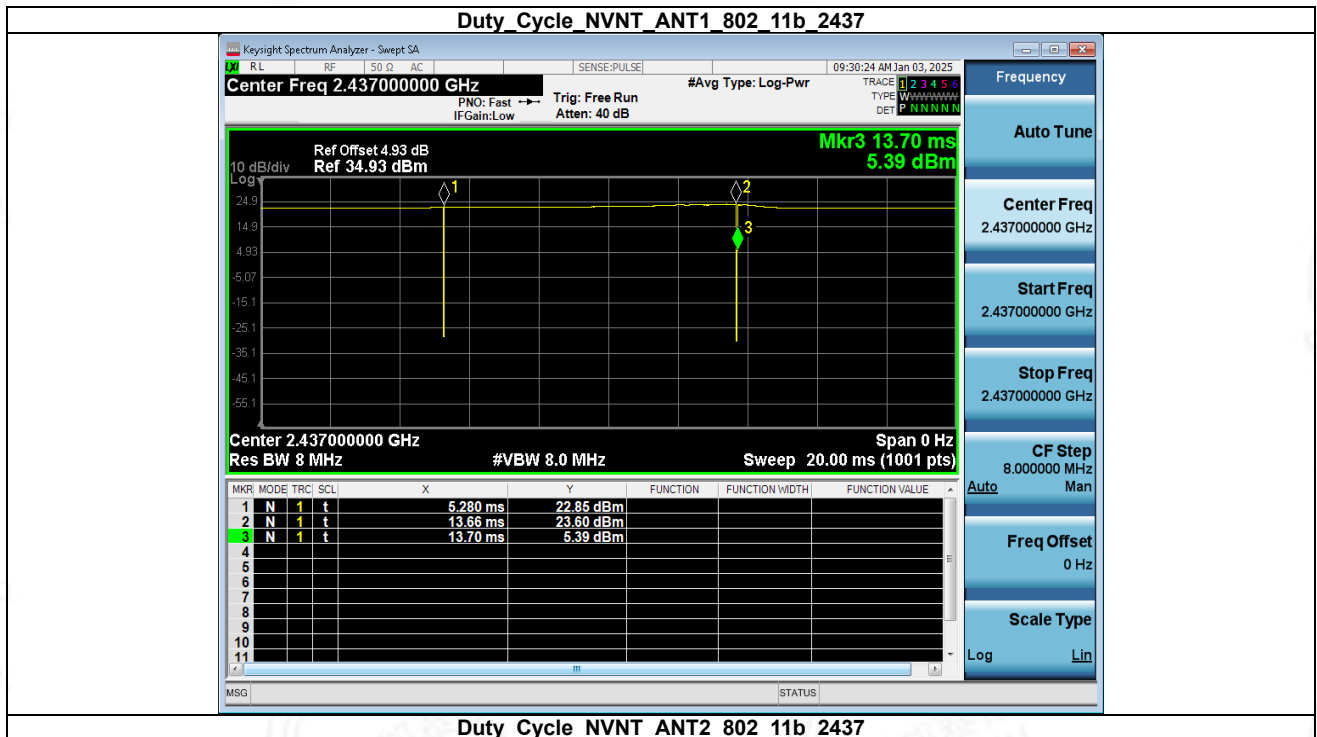
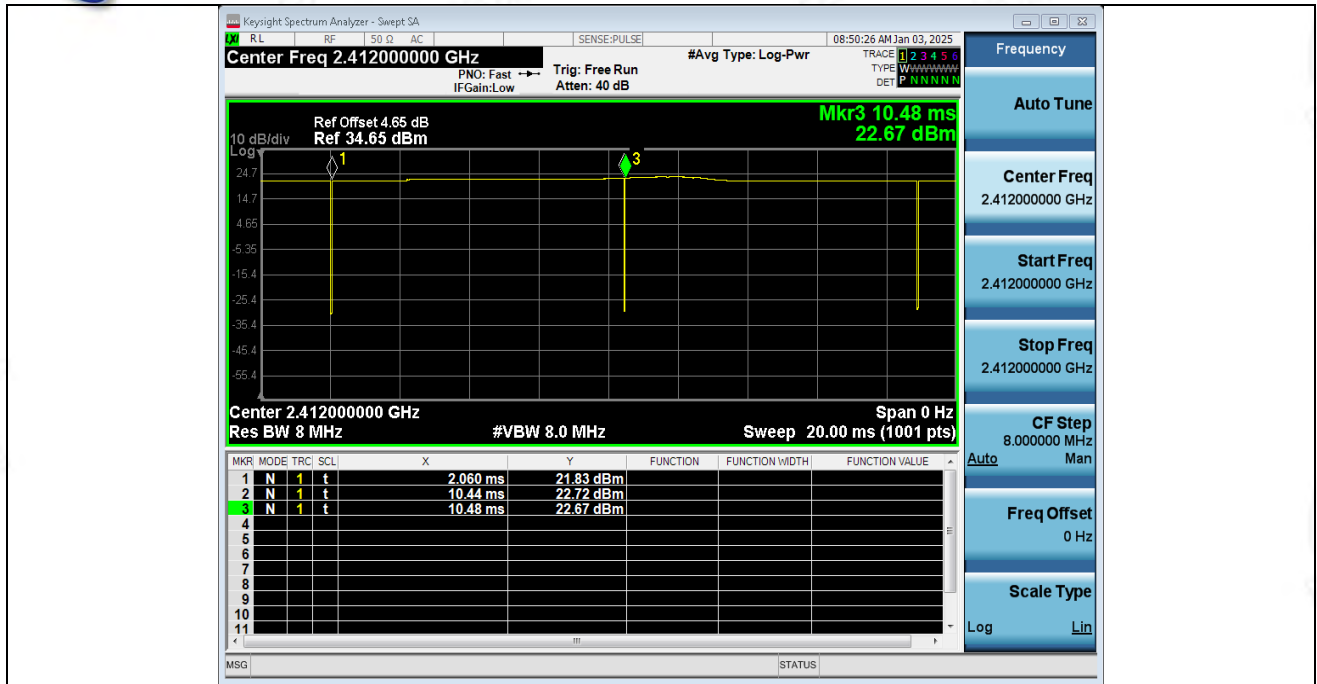


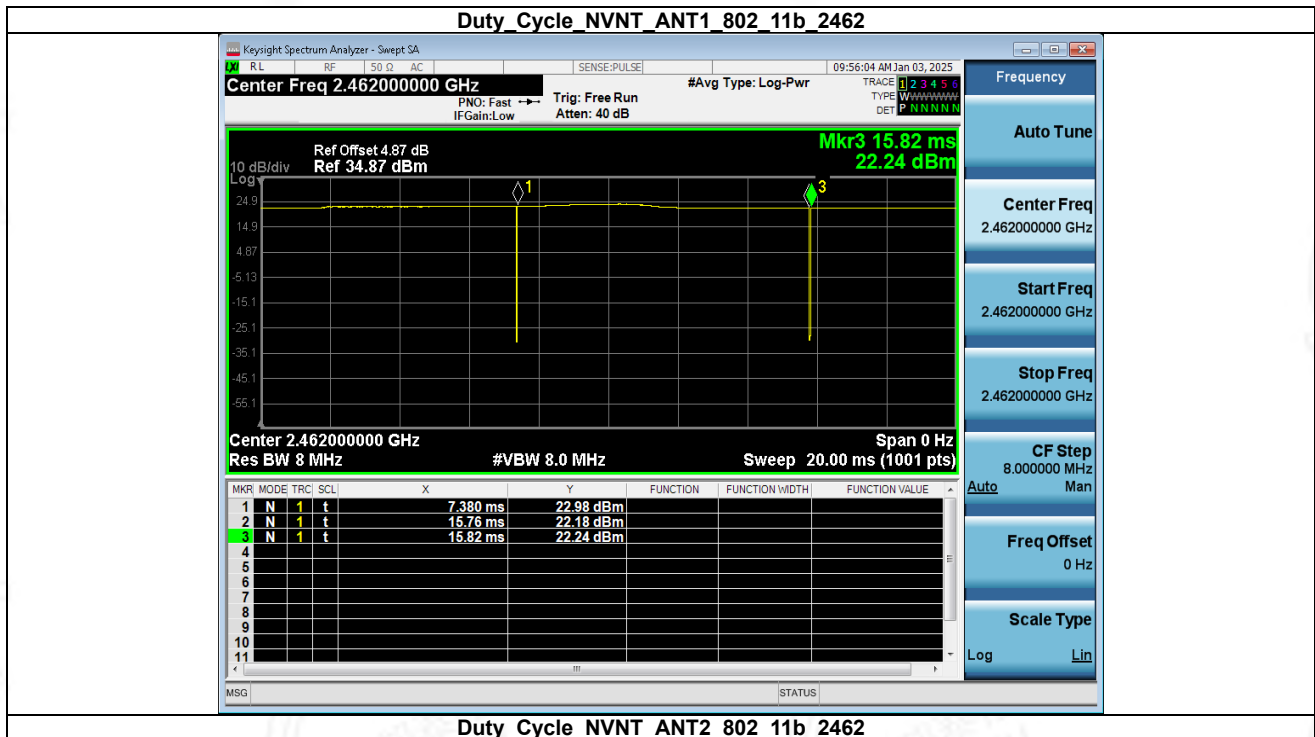
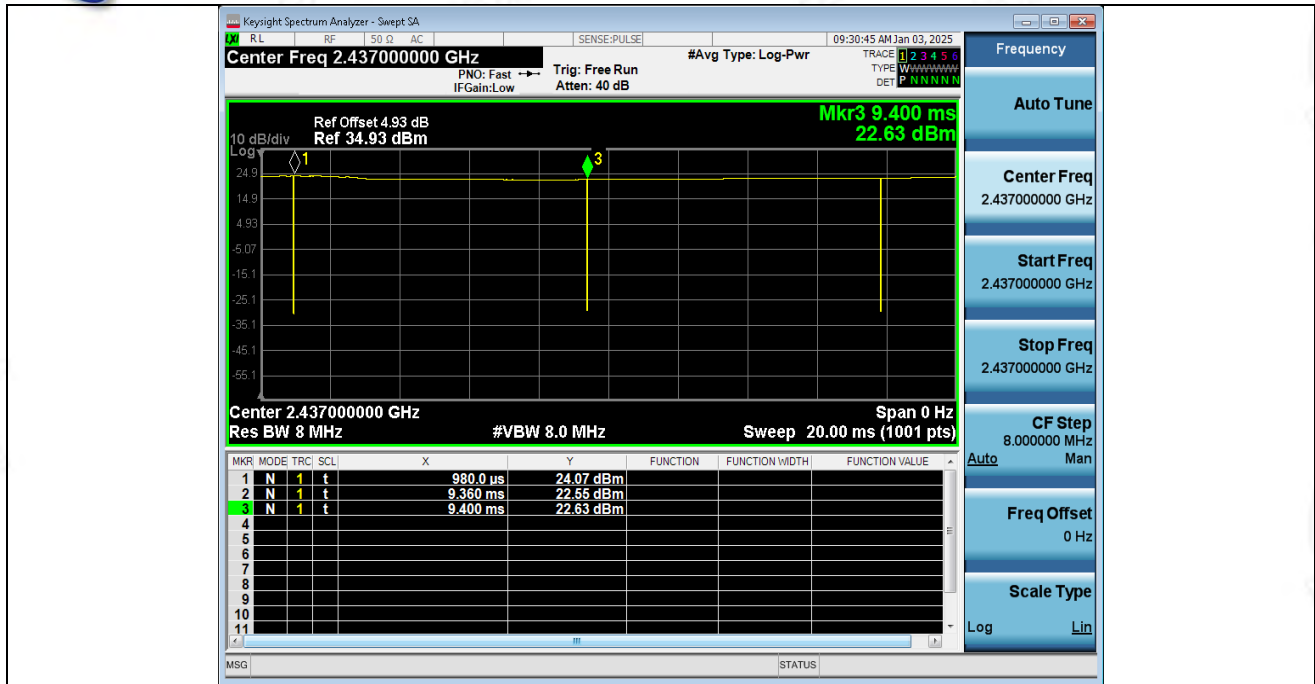


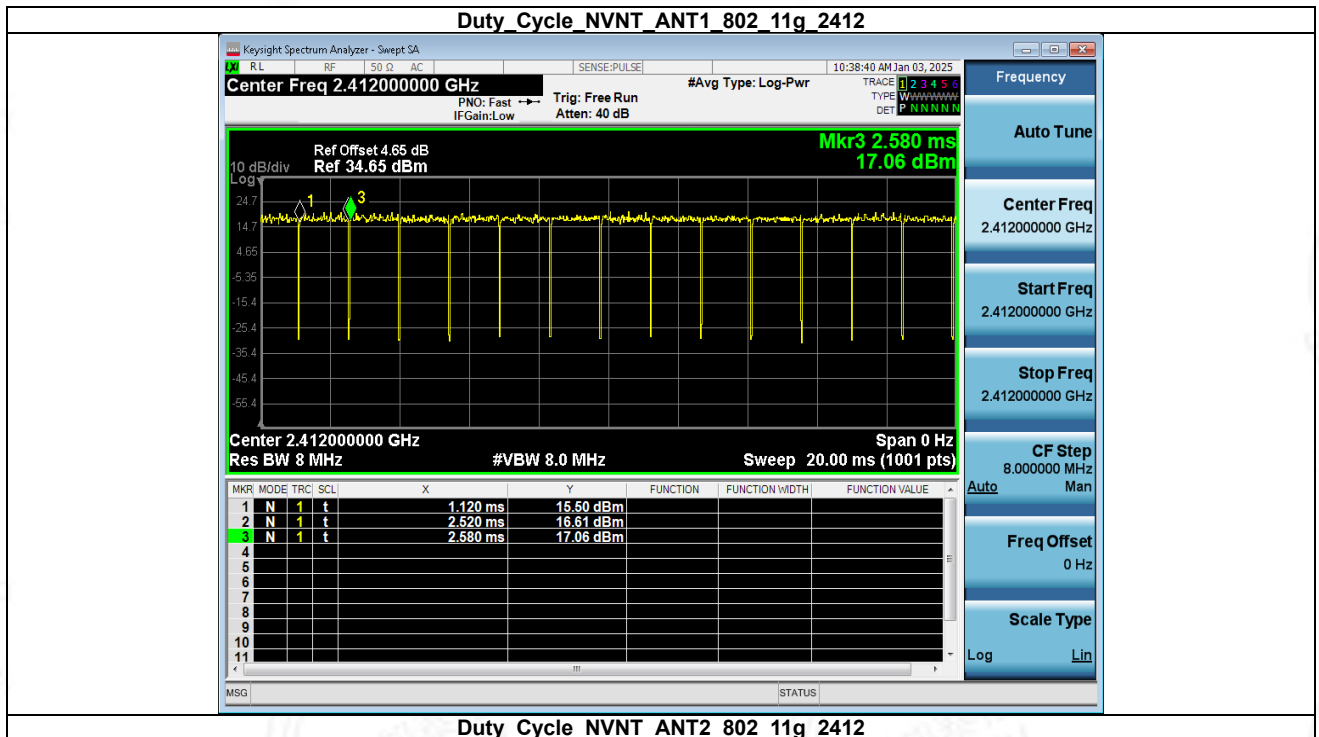
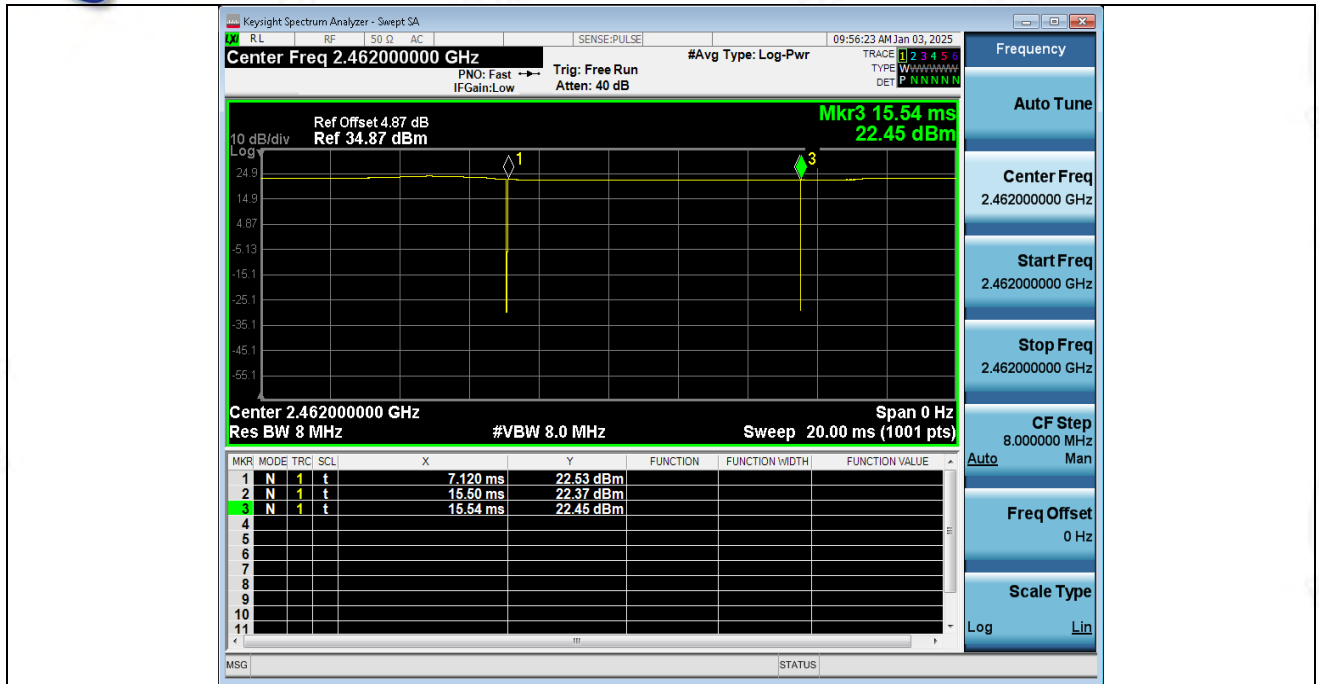
3. Duty Cycle

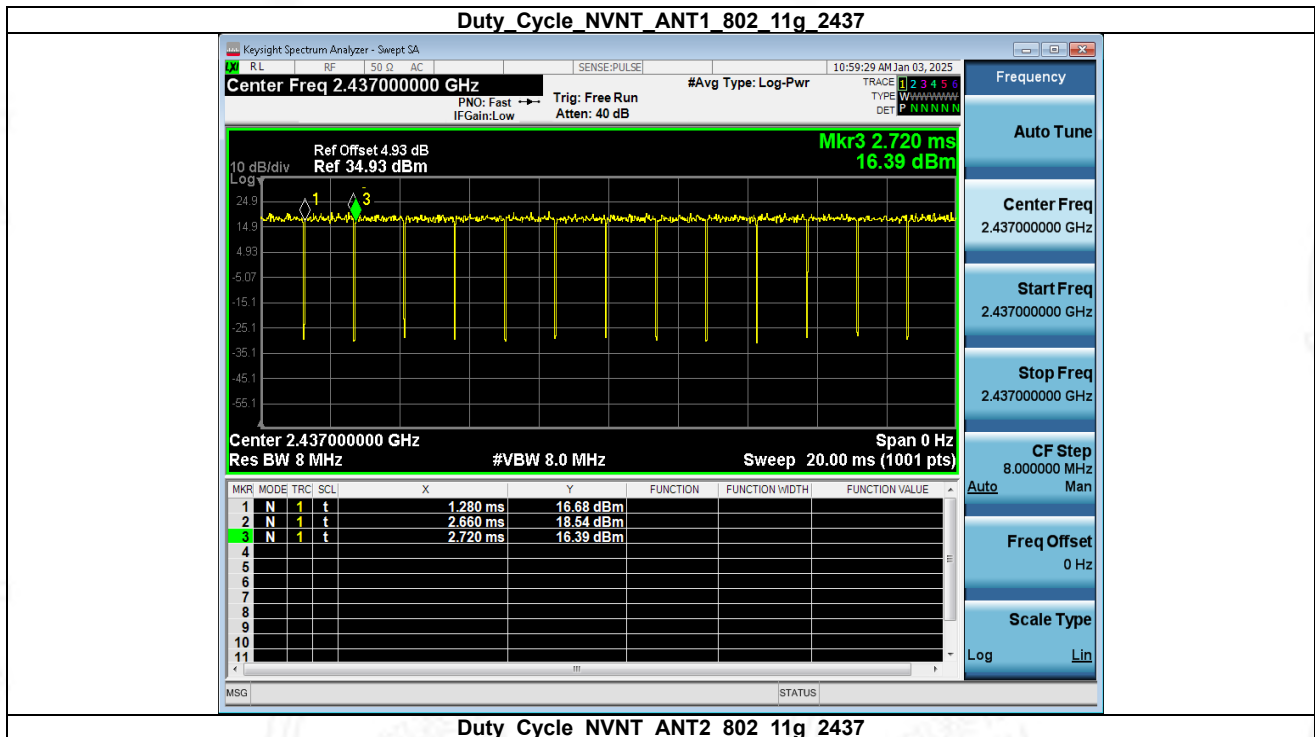
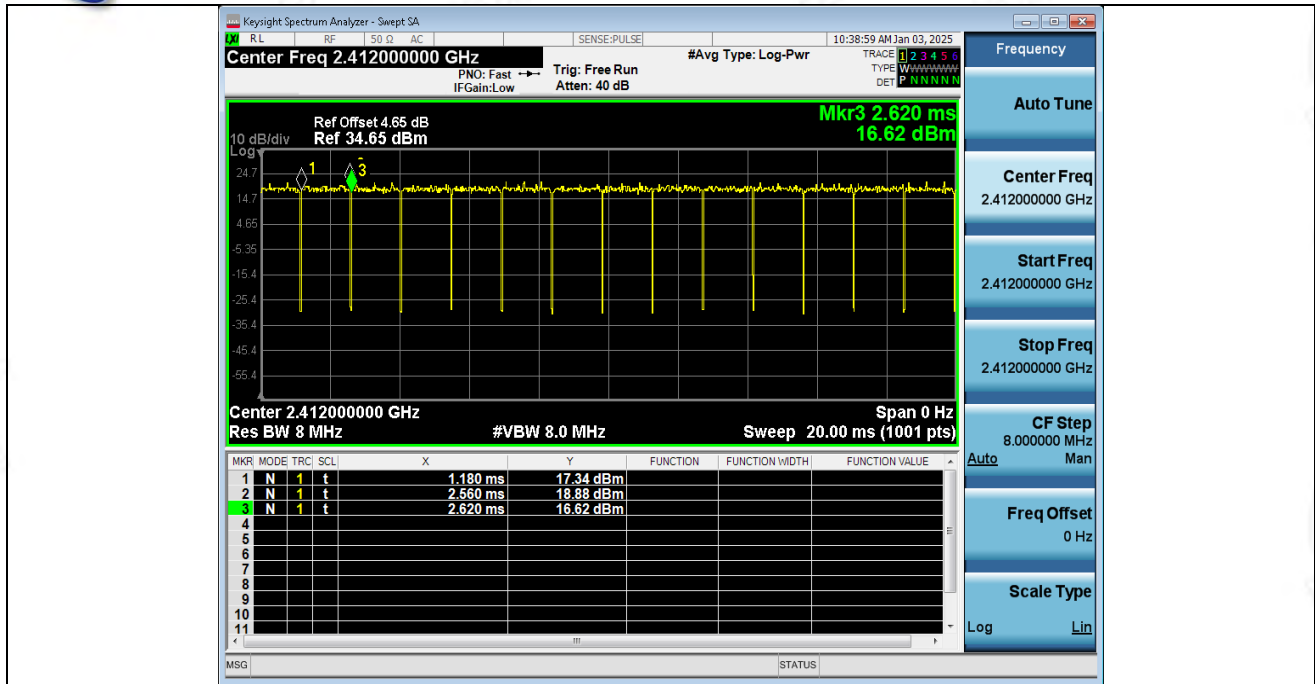
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.76	0.00
NVNT	ANT2	802.11b	2412.00	99.76	0.00
NVNT	ANT1	802.11b	2437.00	99.76	0.00
NVNT	ANT2	802.11b	2437.00	99.76	0.00
NVNT	ANT1	802.11b	2462.00	99.53	0.00
NVNT	ANT2	802.11b	2462.00	99.76	0.00
NVNT	ANT1	802.11g	2412.00	97.26	0.12
NVNT	ANT2	802.11g	2412.00	97.22	0.12
NVNT	ANT1	802.11g	2437.00	97.22	0.12
NVNT	ANT2	802.11g	2437.00	97.26	0.12
NVNT	ANT1	802.11g	2462.00	97.22	0.12
NVNT	ANT2	802.11g	2462.00	97.22	0.12
NVNT	ANT1	802.11n(HT20)	2412.00	97.06	0.13
NVNT	ANT2	802.11n(HT20)	2412.00	97.06	0.13
NVNT	ANT1	802.11n(HT20)	2437.00	98.51	0.00
NVNT	ANT2	802.11n(HT20)	2437.00	98.51	0.00
NVNT	ANT1	802.11n(HT20)	2462.00	97.06	0.13
NVNT	ANT2	802.11n(HT20)	2462.00	97.06	0.13
NVNT	ANT1	802.11n(HT40)	2422.00	94.29	0.26
NVNT	ANT2	802.11n(HT40)	2422.00	94.29	0.26
NVNT	ANT1	802.11n(HT40)	2437.00	94.29	0.26
NVNT	ANT2	802.11n(HT40)	2437.00	94.29	0.26
NVNT	ANT1	802.11n(HT40)	2452.00	97.14	0.13
NVNT	ANT2	802.11n(HT40)	2452.00	97.14	0.13

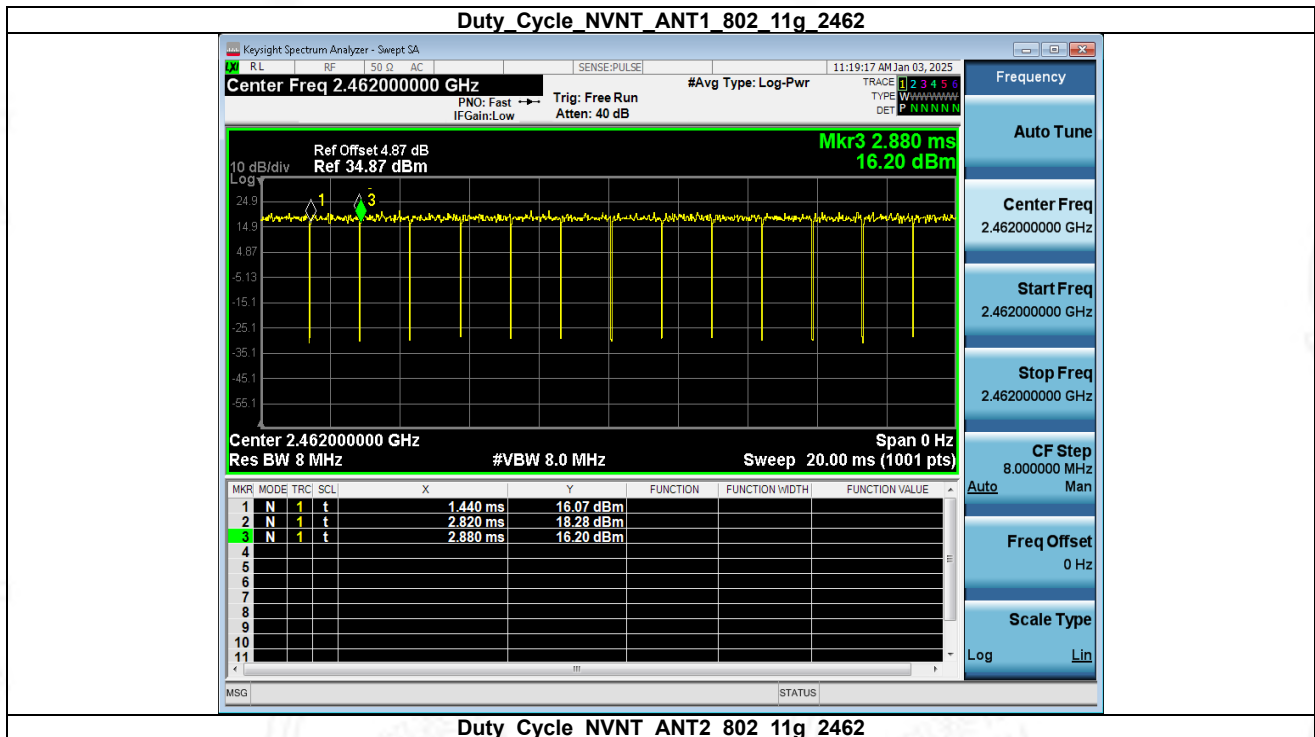
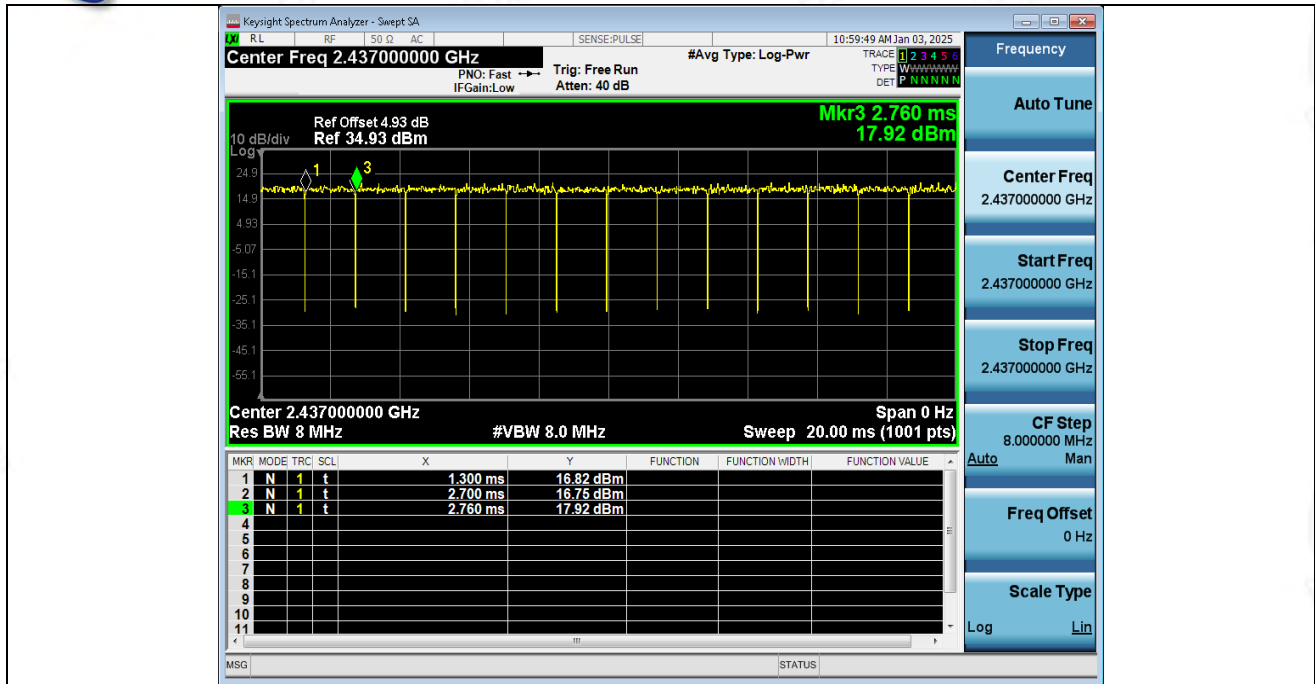


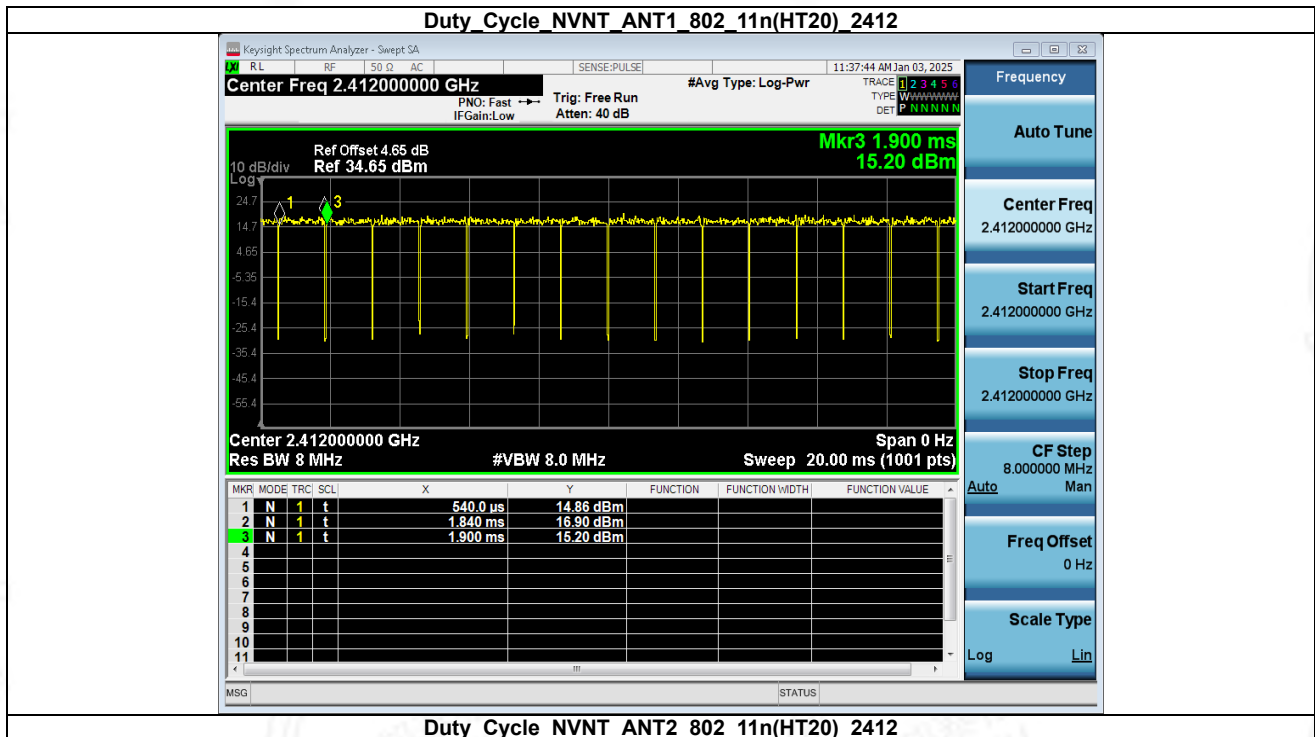
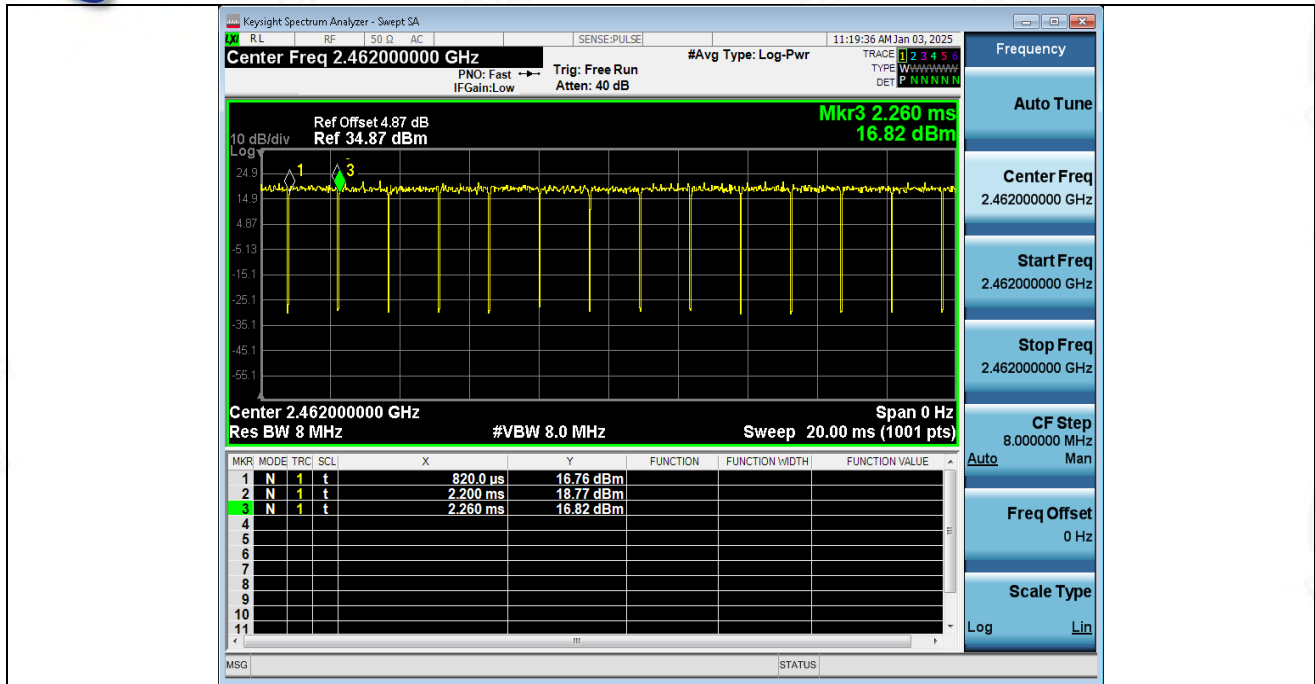


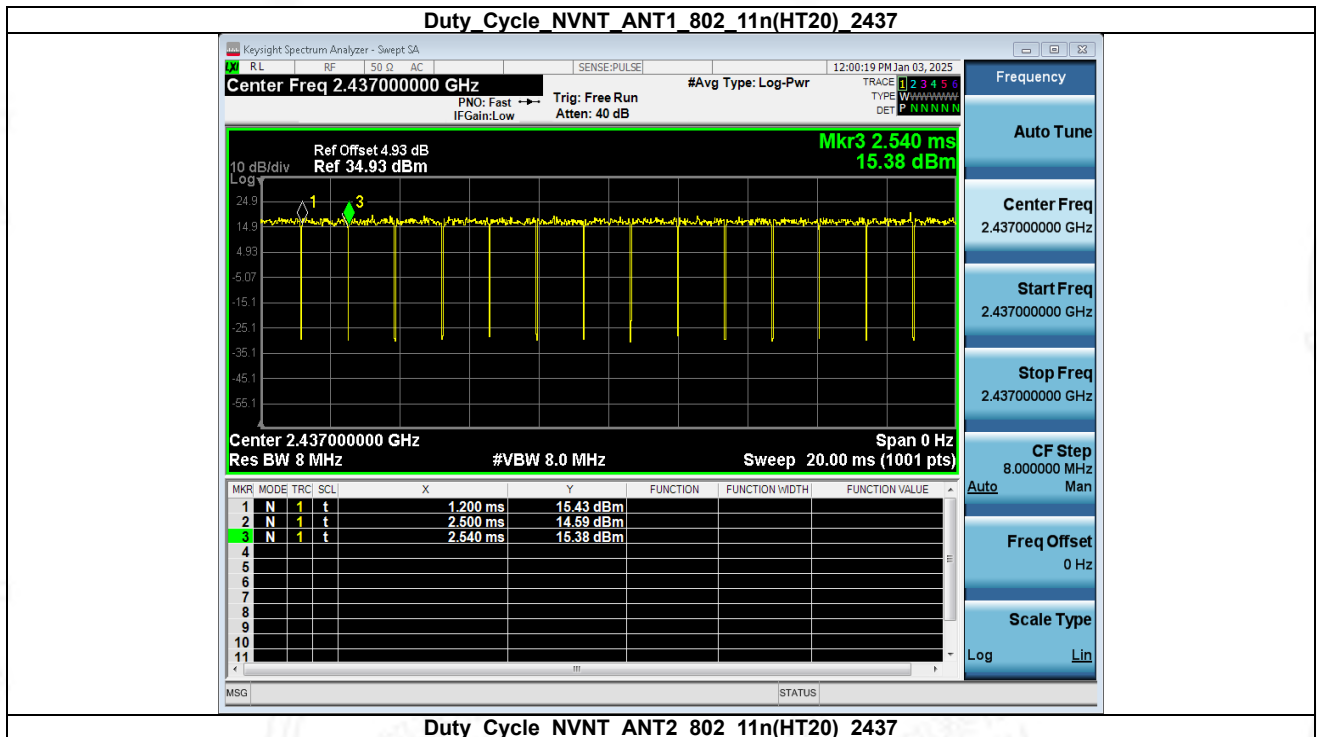
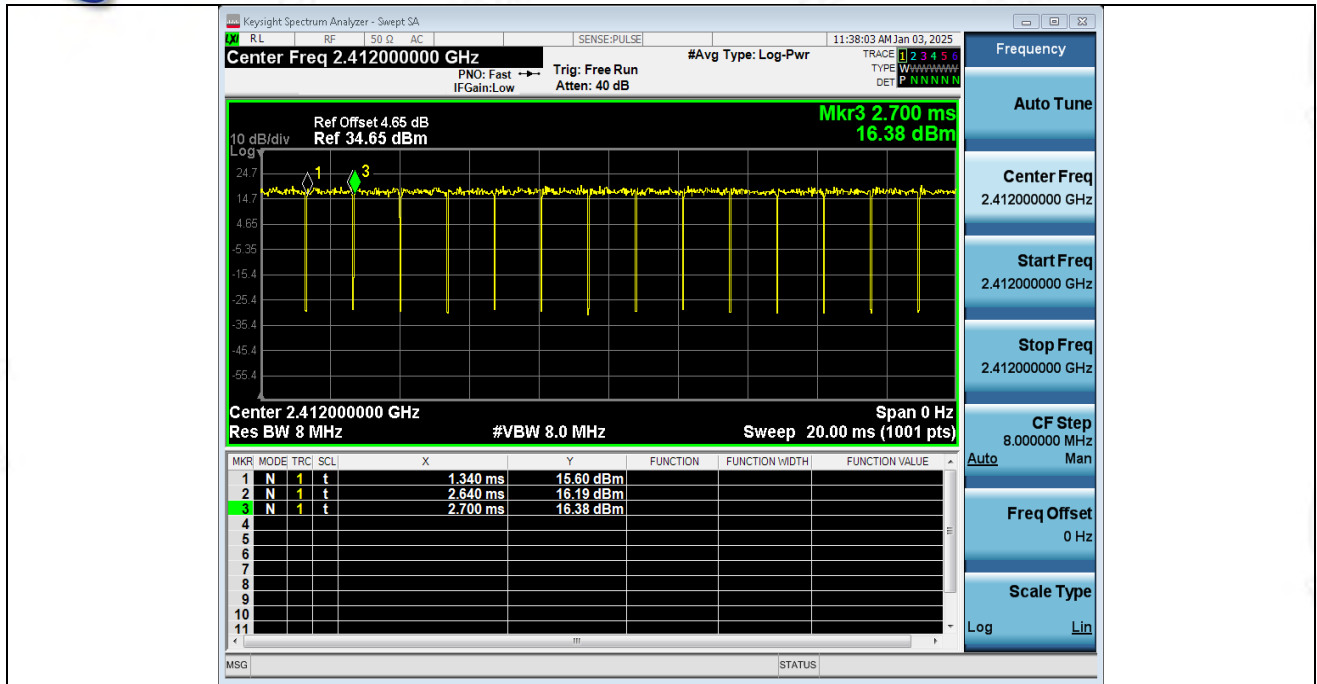


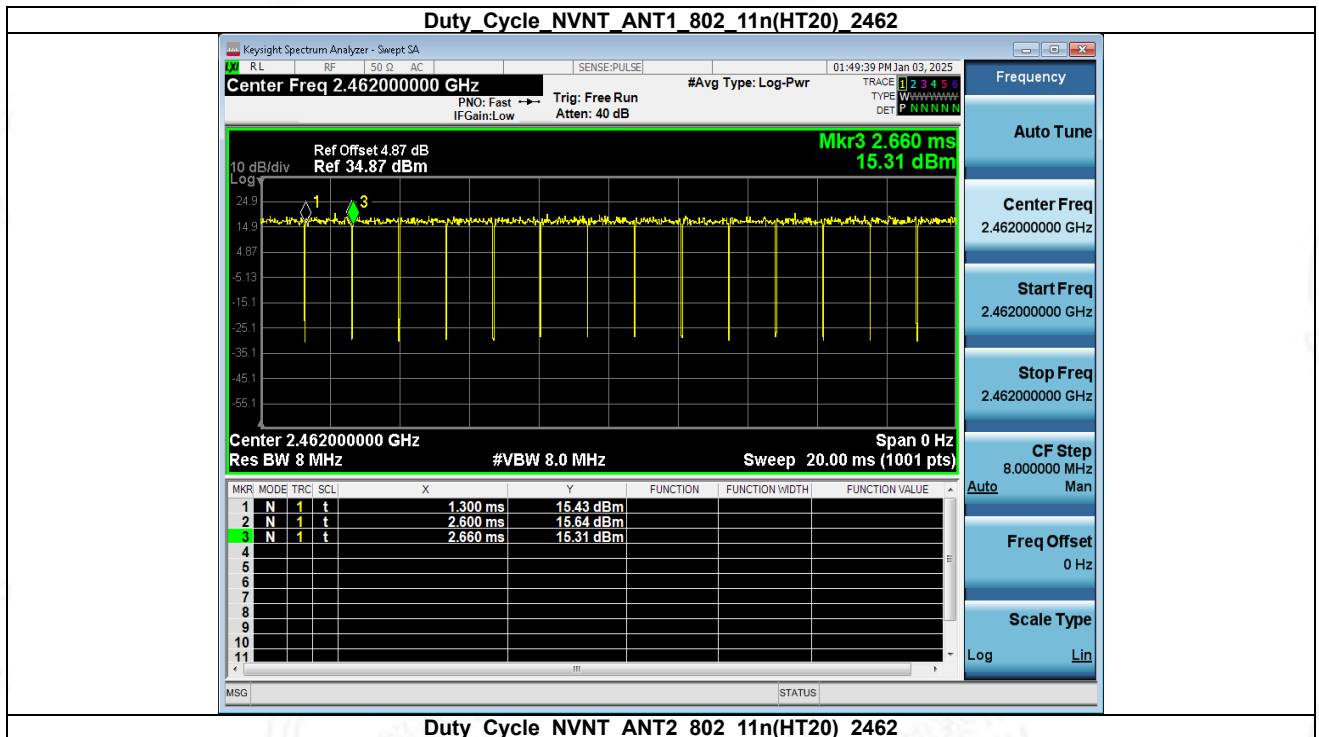
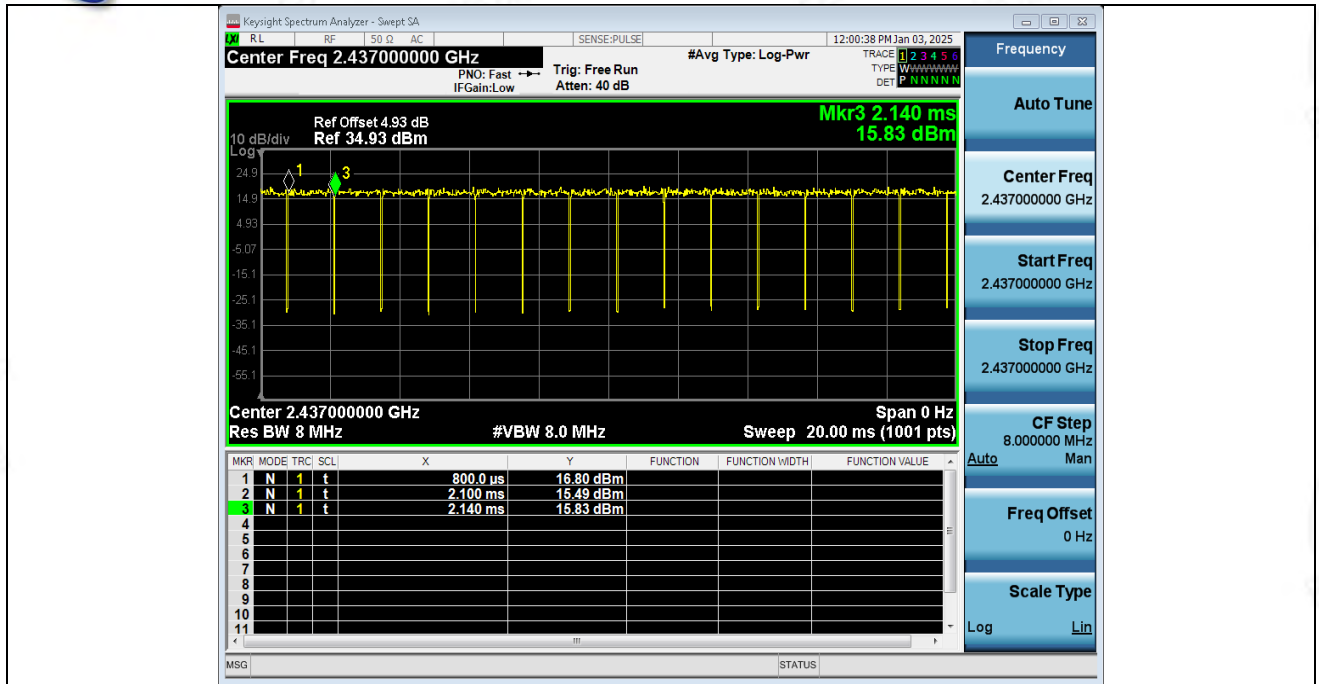


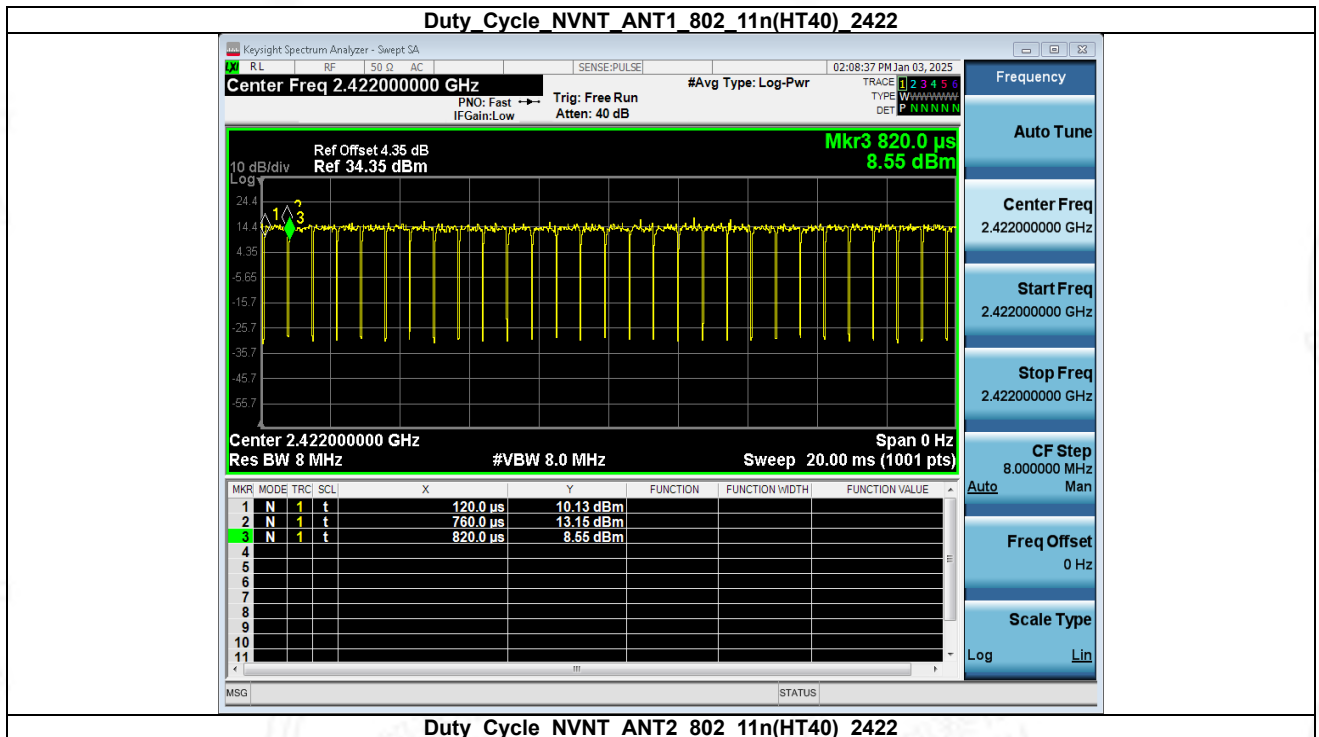
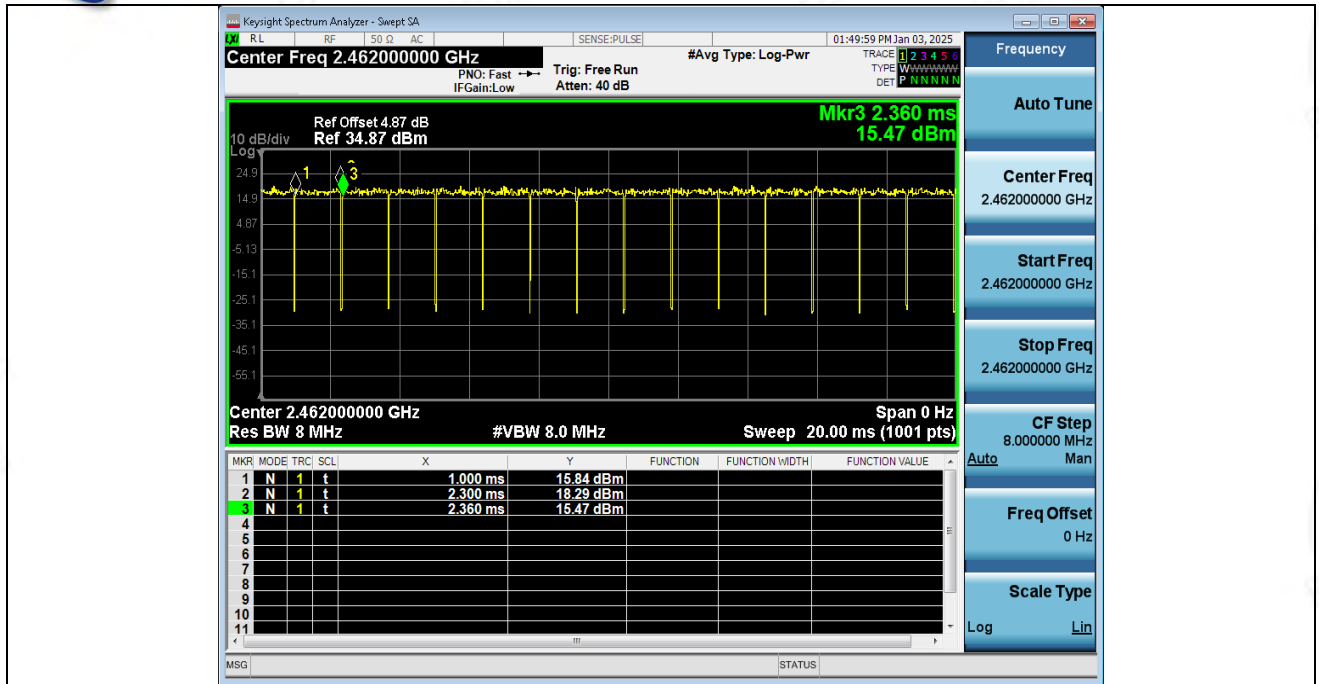


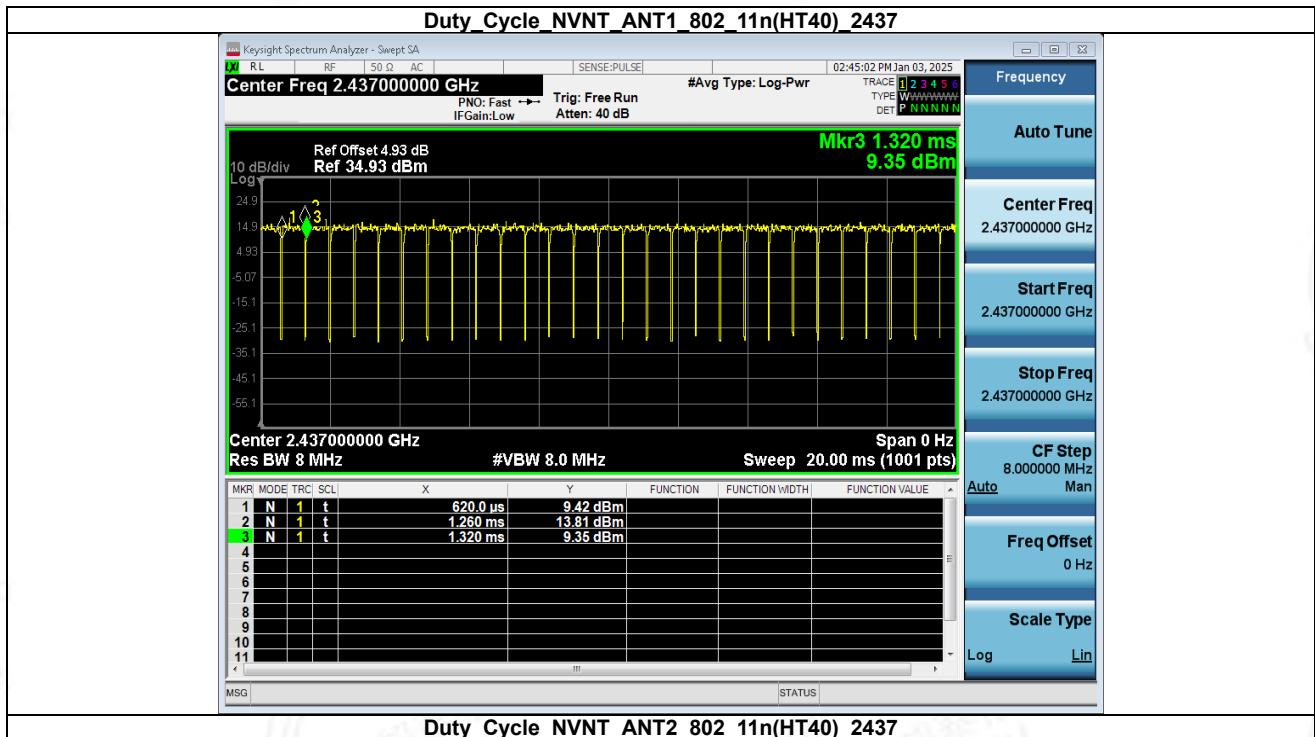
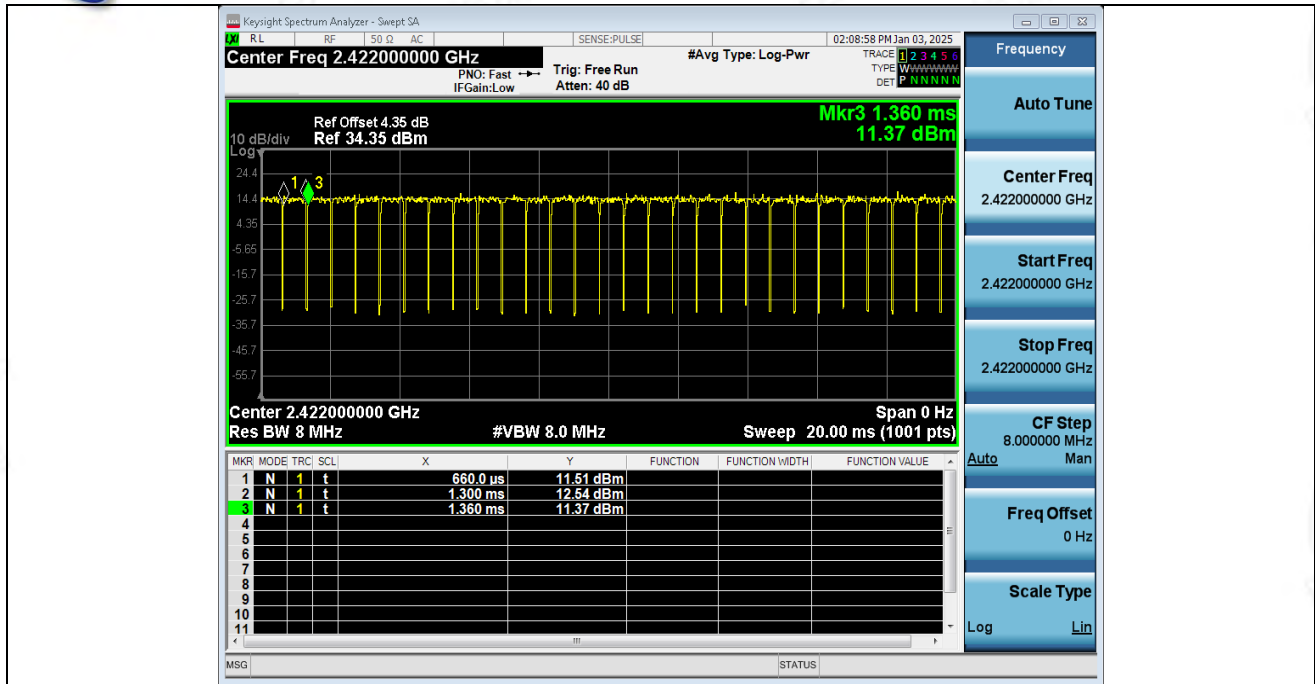


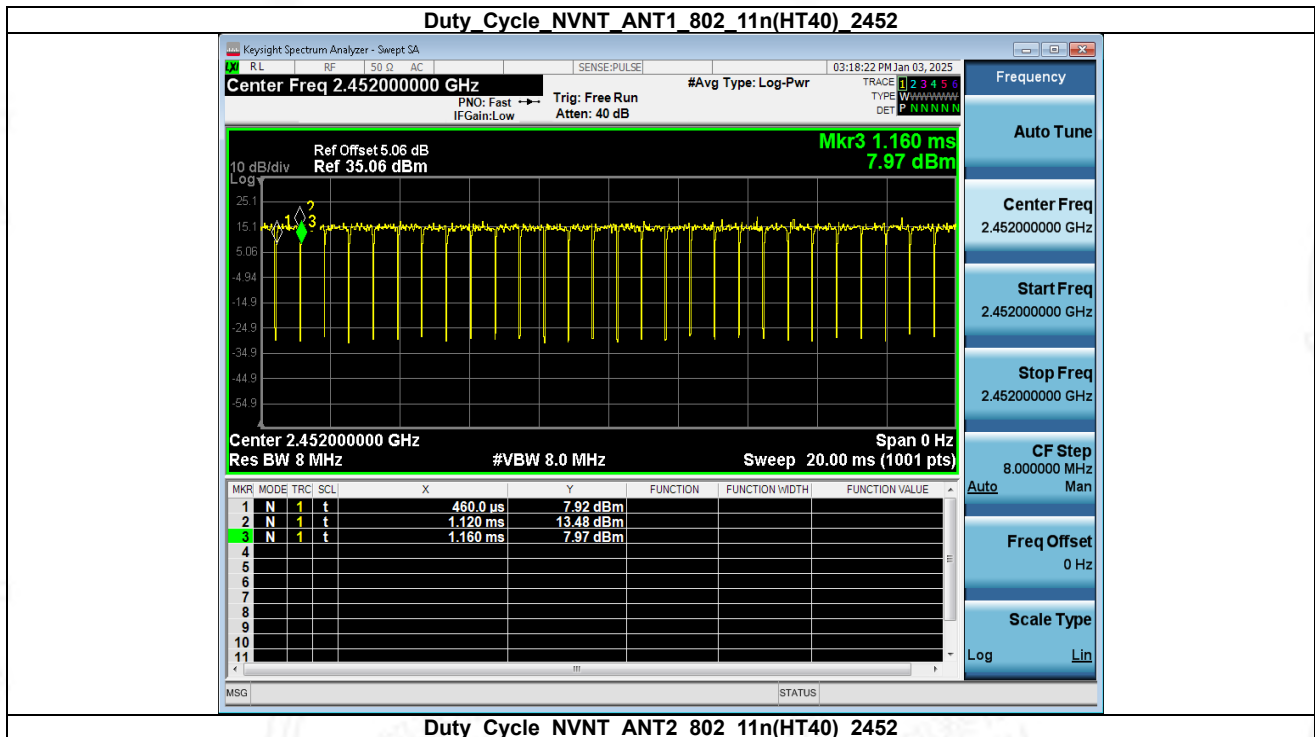
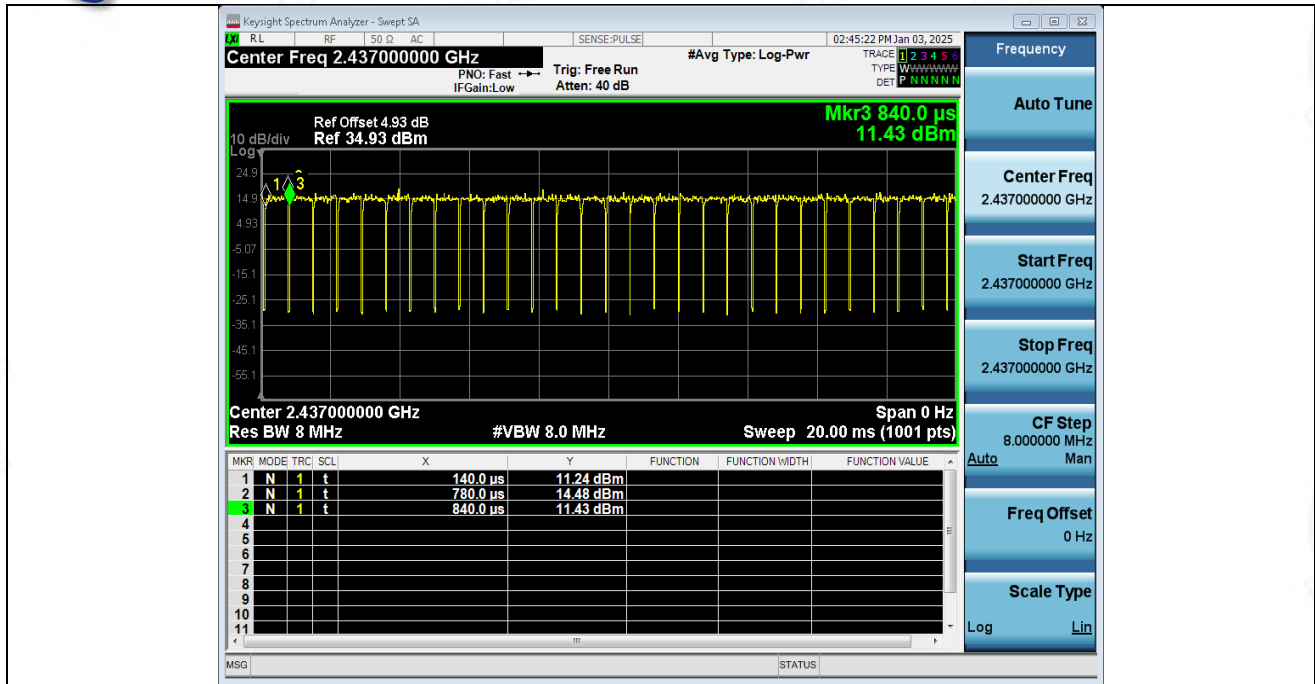


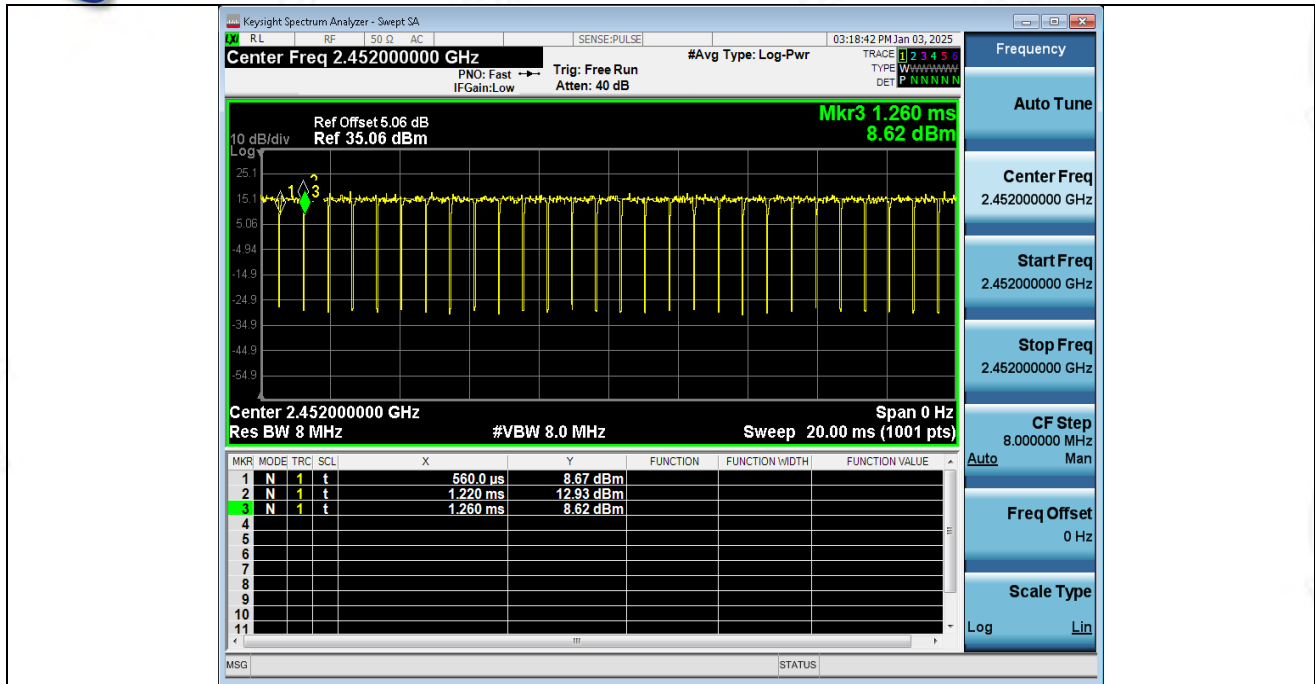








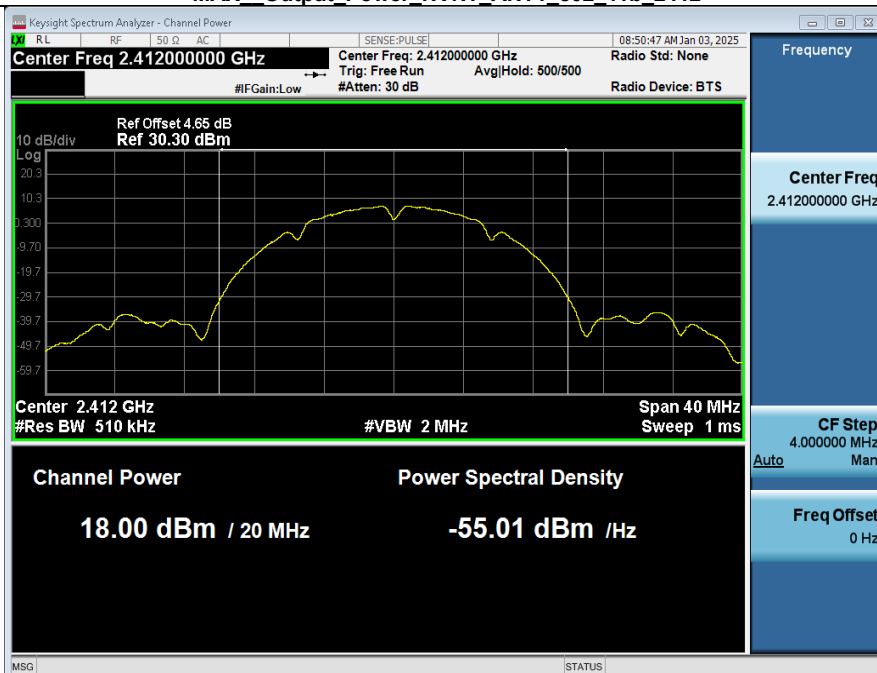




4. MAX. Output Power

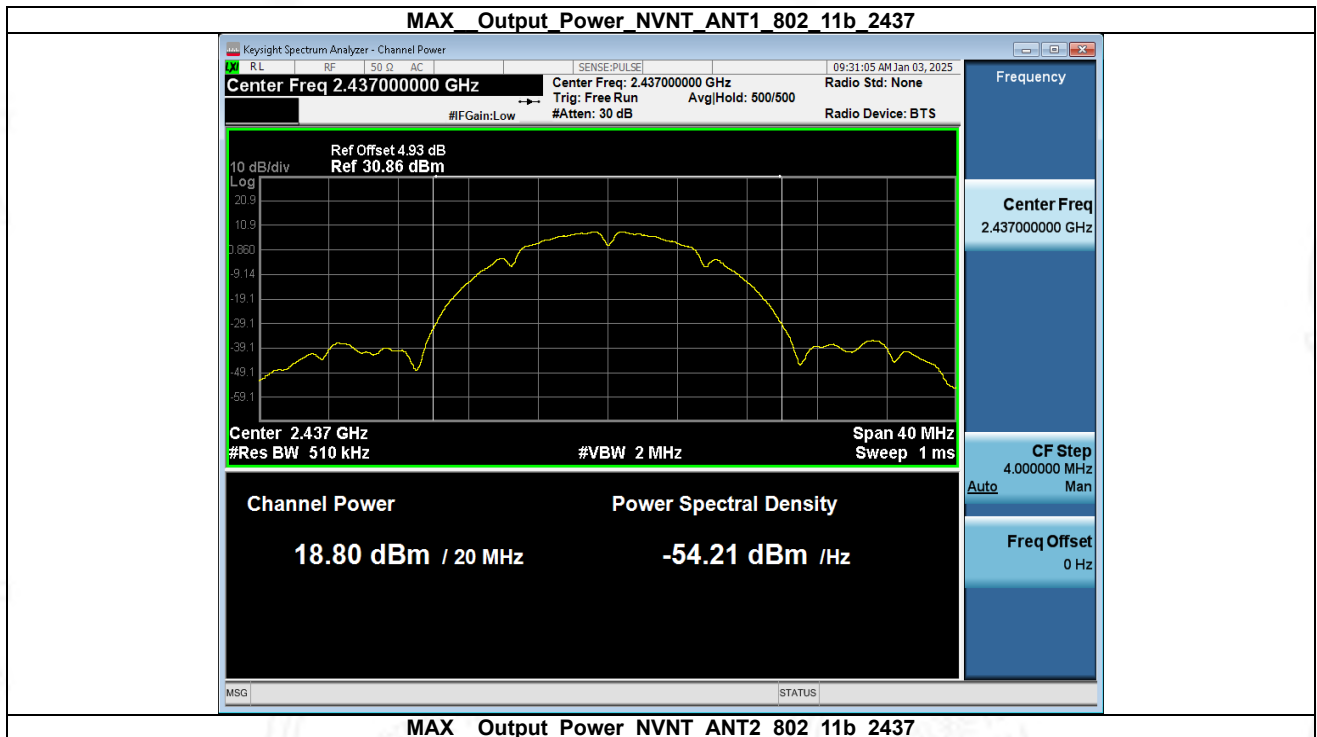
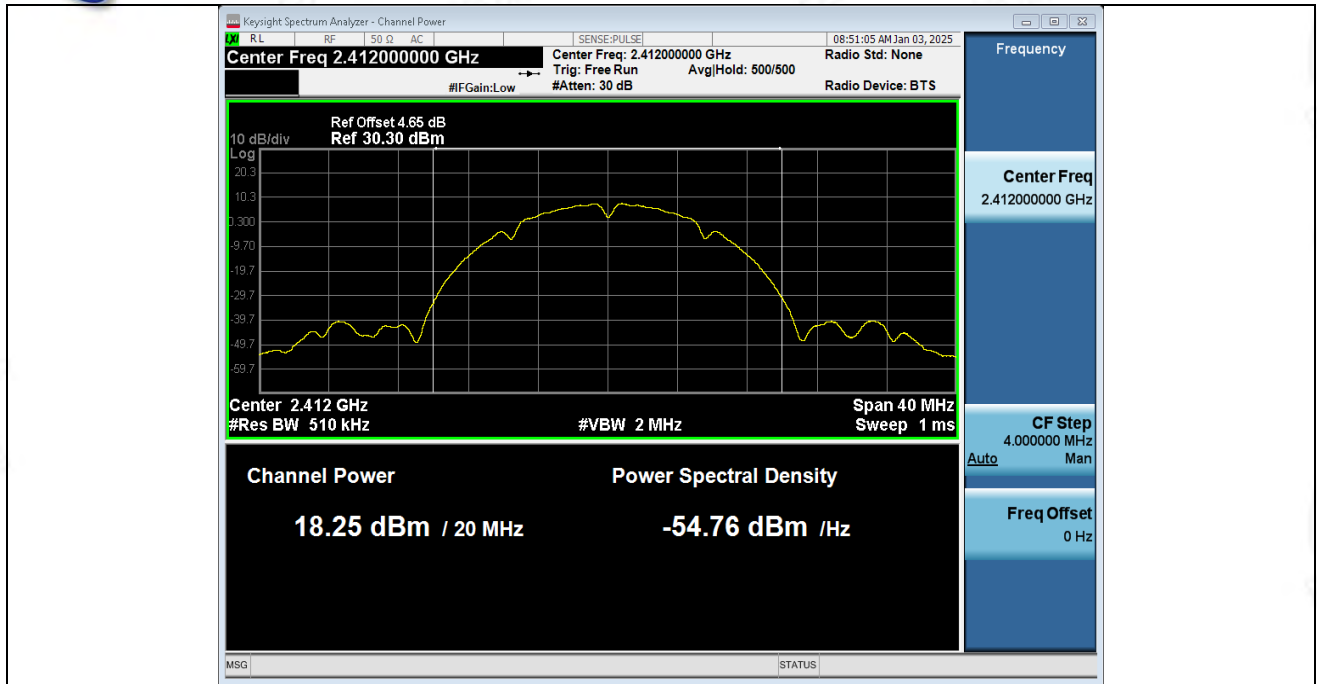
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	18.00	0.00	18.00	30	Pass
NVNT	ANT2	802.11b	2412.00	RMS	18.25	0.00	18.25	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	18.80	0.00	18.80	30	Pass
NVNT	ANT2	802.11b	2437.00	RMS	19.05	0.00	19.05	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	18.74	0.00	18.74	30	Pass
NVNT	ANT2	802.11b	2462.00	RMS	18.94	0.00	18.94	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	13.19	0.12	13.31	30	Pass
NVNT	ANT2	802.11g	2412.00	RMS	13.70	0.12	13.82	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	13.58	0.12	13.70	30	Pass
NVNT	ANT2	802.11g	2437.00	RMS	13.96	0.12	14.08	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	13.67	0.12	13.79	30	Pass
NVNT	ANT2	802.11g	2462.00	RMS	14.07	0.12	14.19	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	12.08	0.13	12.21	30	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	RMS	12.77	0.13	12.90	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	12.39	0.00	12.39	30	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	RMS	12.94	0.00	12.94	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	12.48	0.13	12.61	30	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	RMS	13.08	0.13	13.21	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	RMS	11.78	0.26	12.04	30	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	RMS	12.23	0.26	12.49	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	RMS	12.45	0.26	12.71	30	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	RMS	12.93	0.26	13.19	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	RMS	12.66	0.13	12.79	30	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	RMS	13.05	0.13	13.18	30	Pass

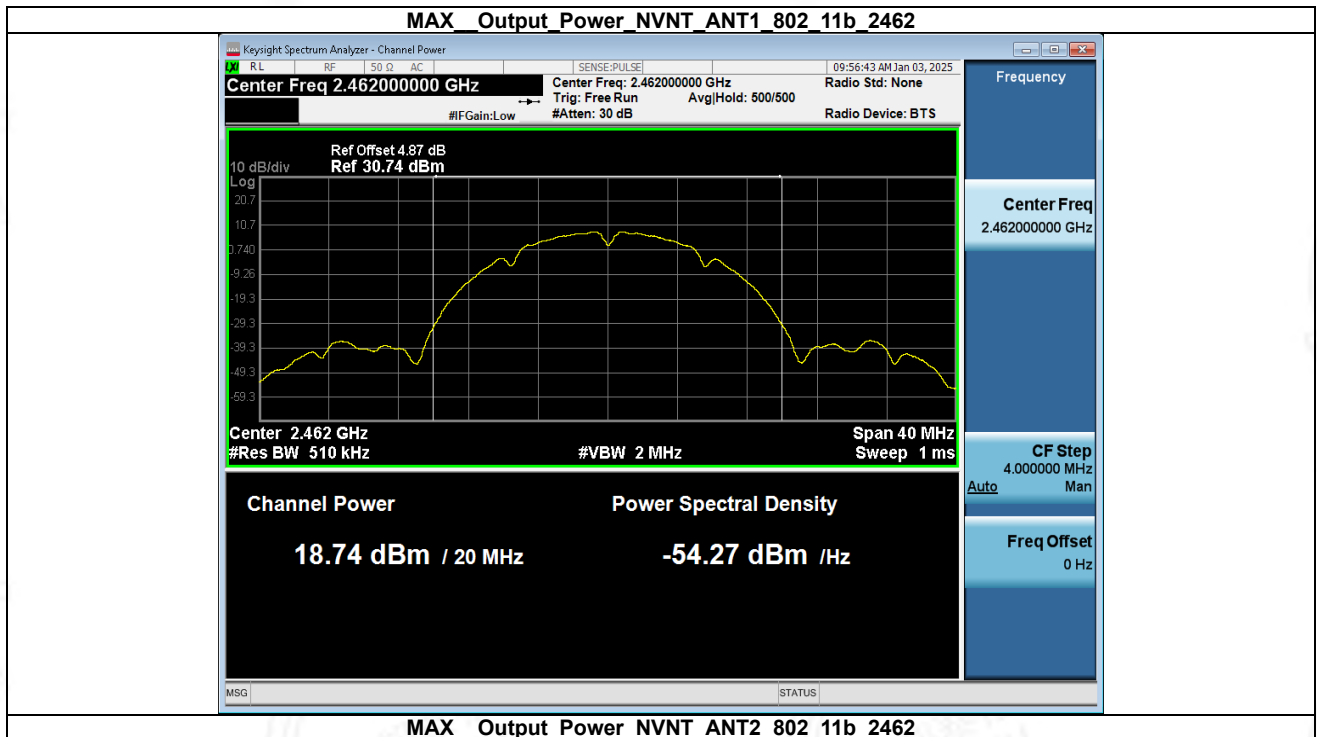
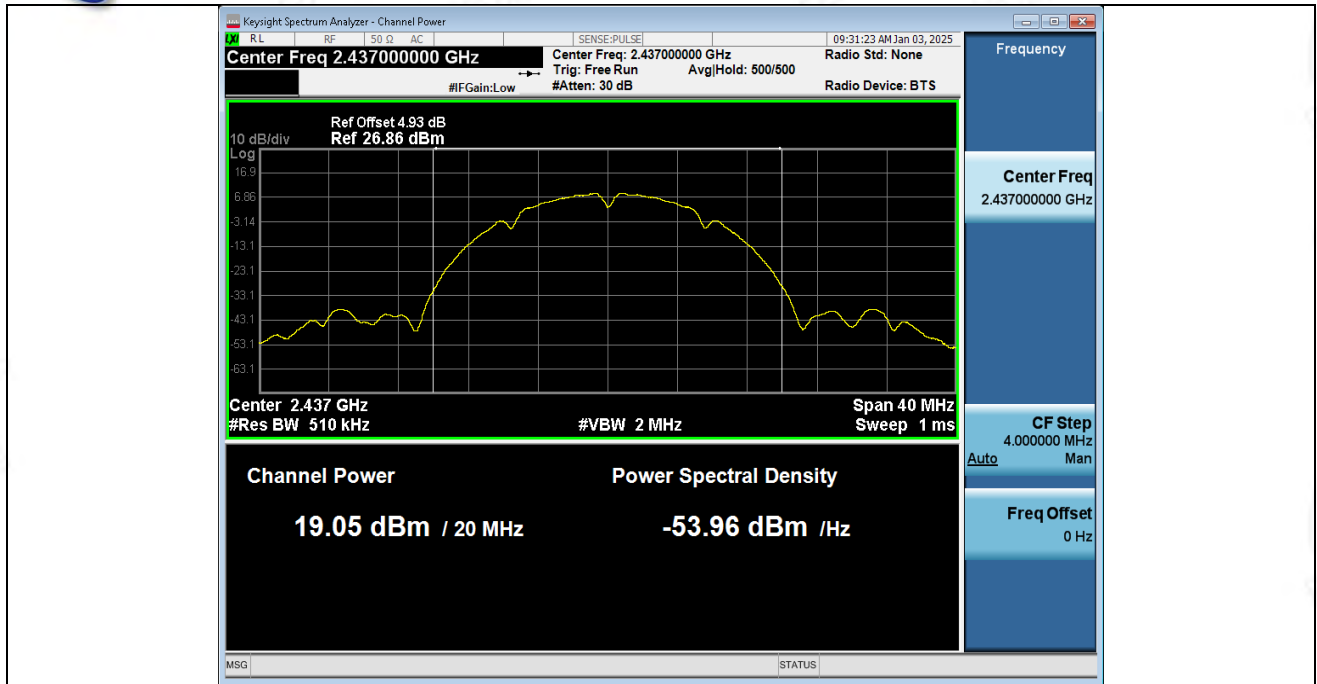
MAX Output Power NVNT ANT1 802 11b 2412

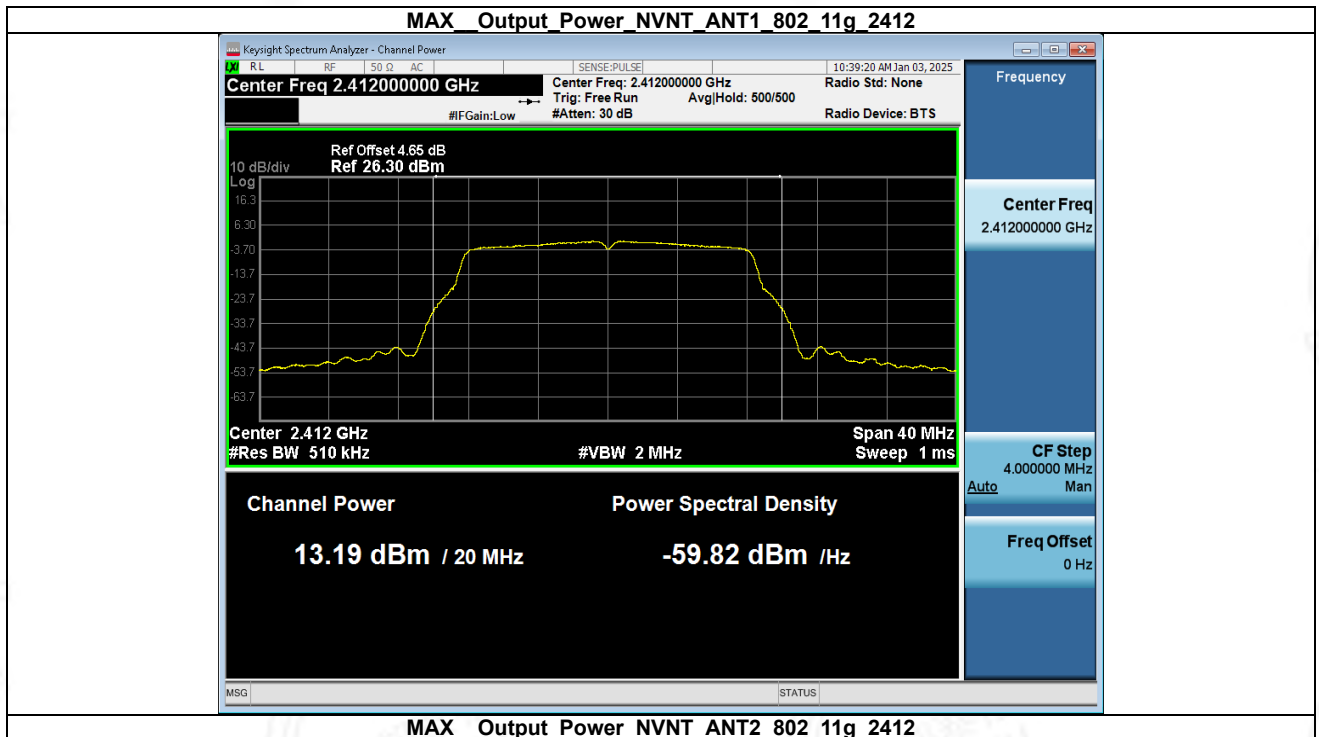
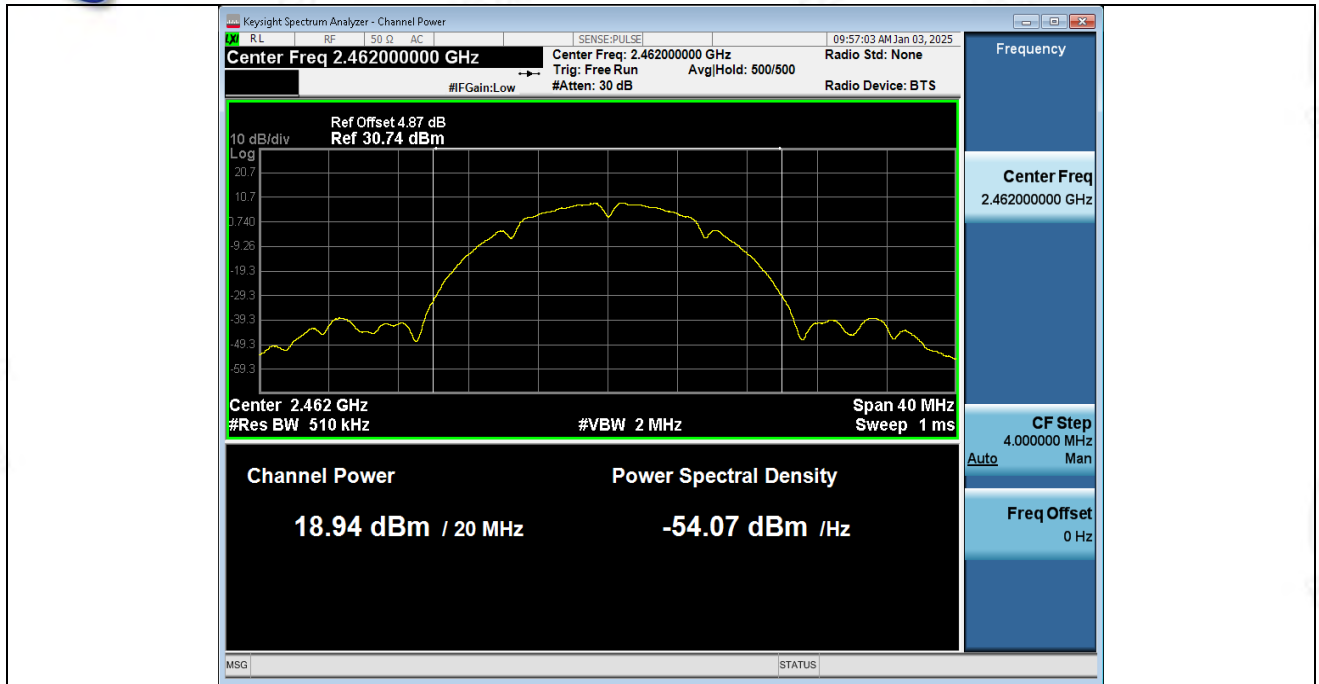


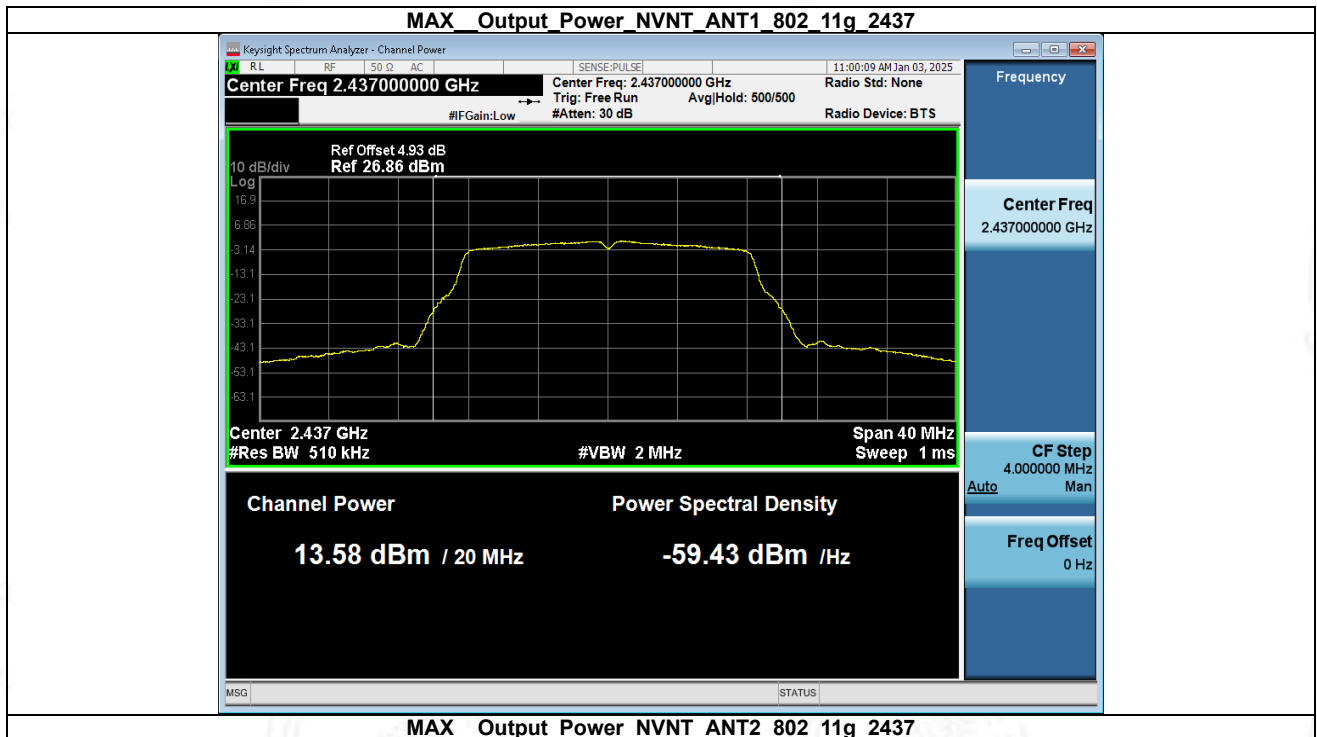
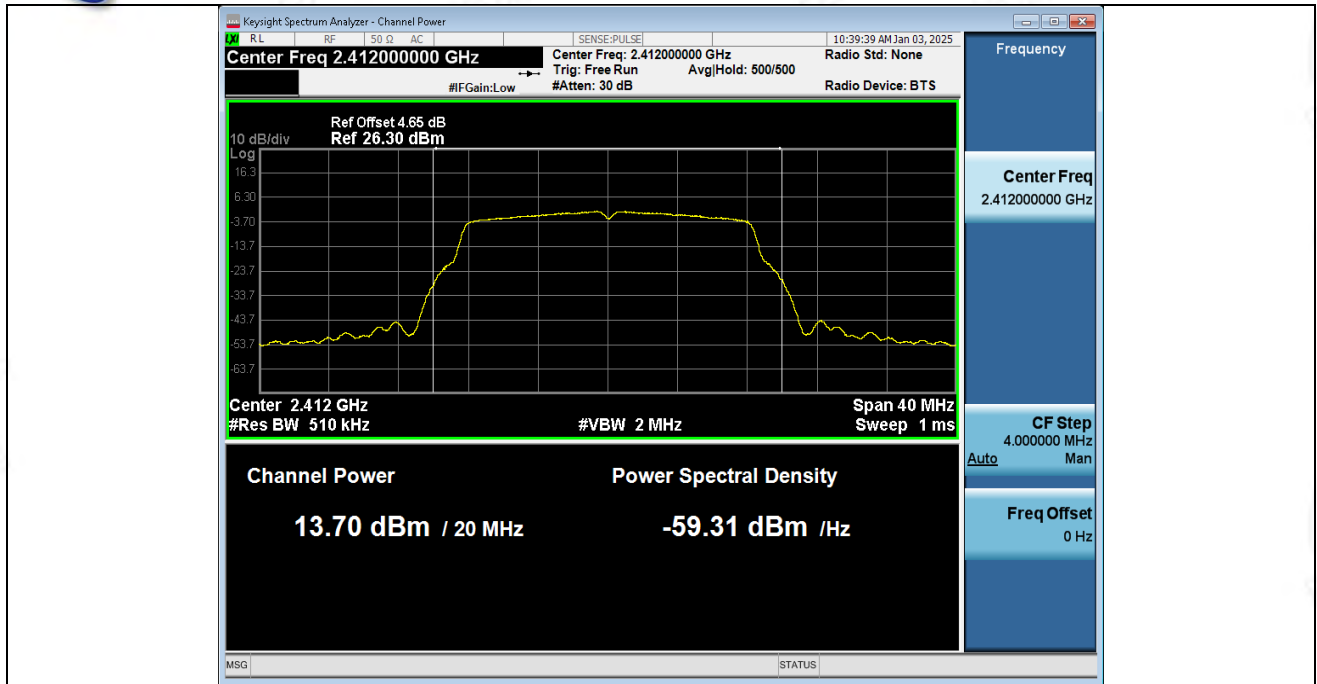
MAX Output Power NVNT ANT2 802 11b 2412

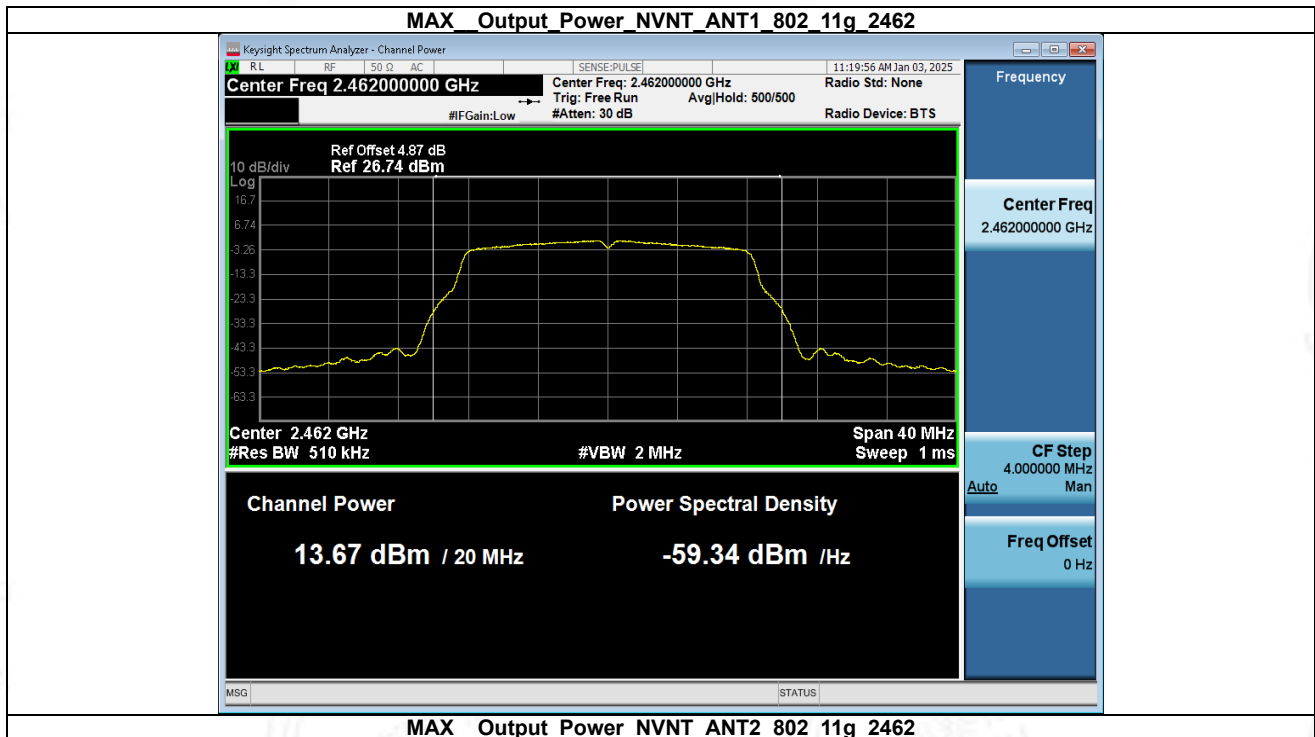
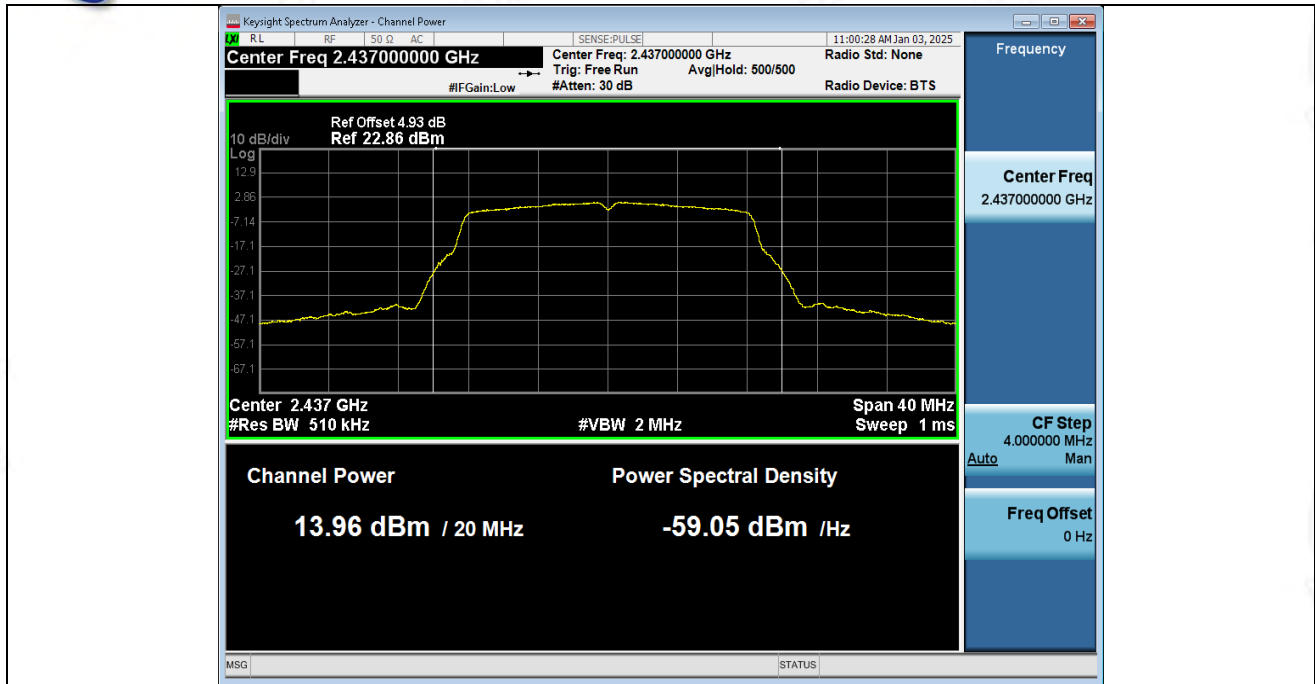


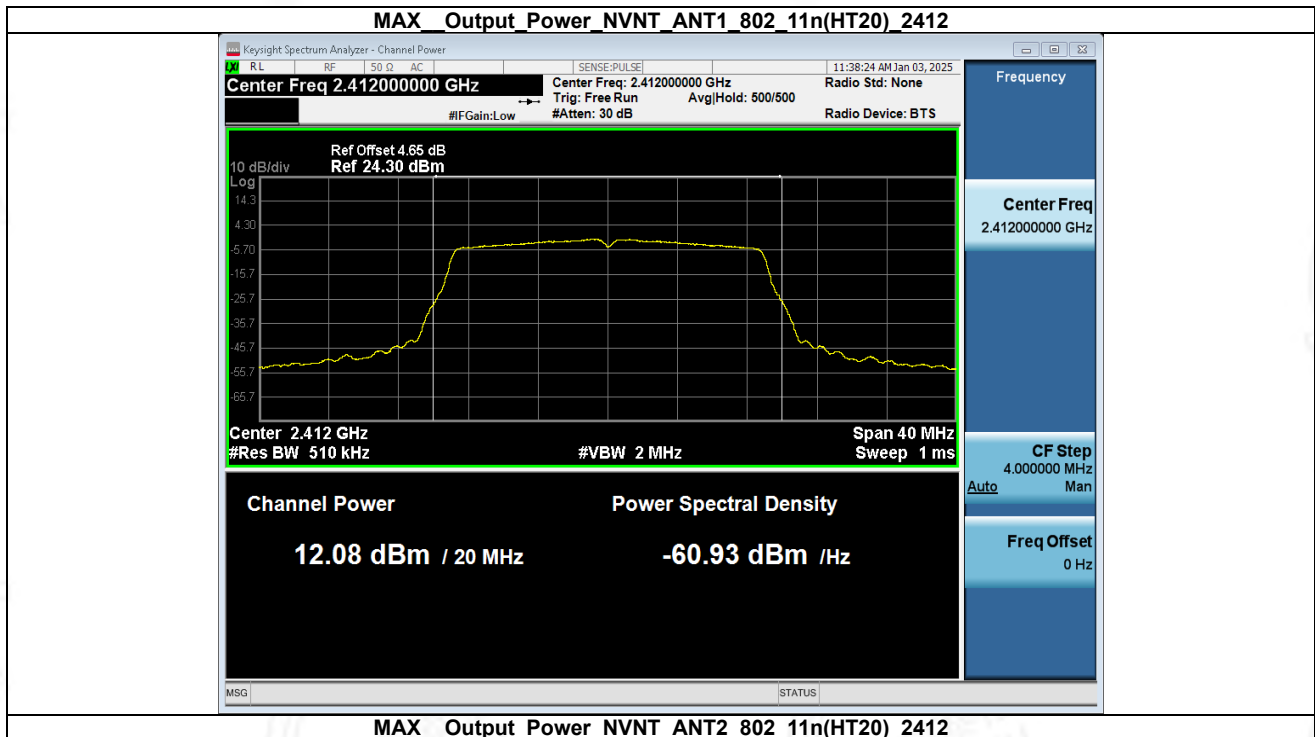
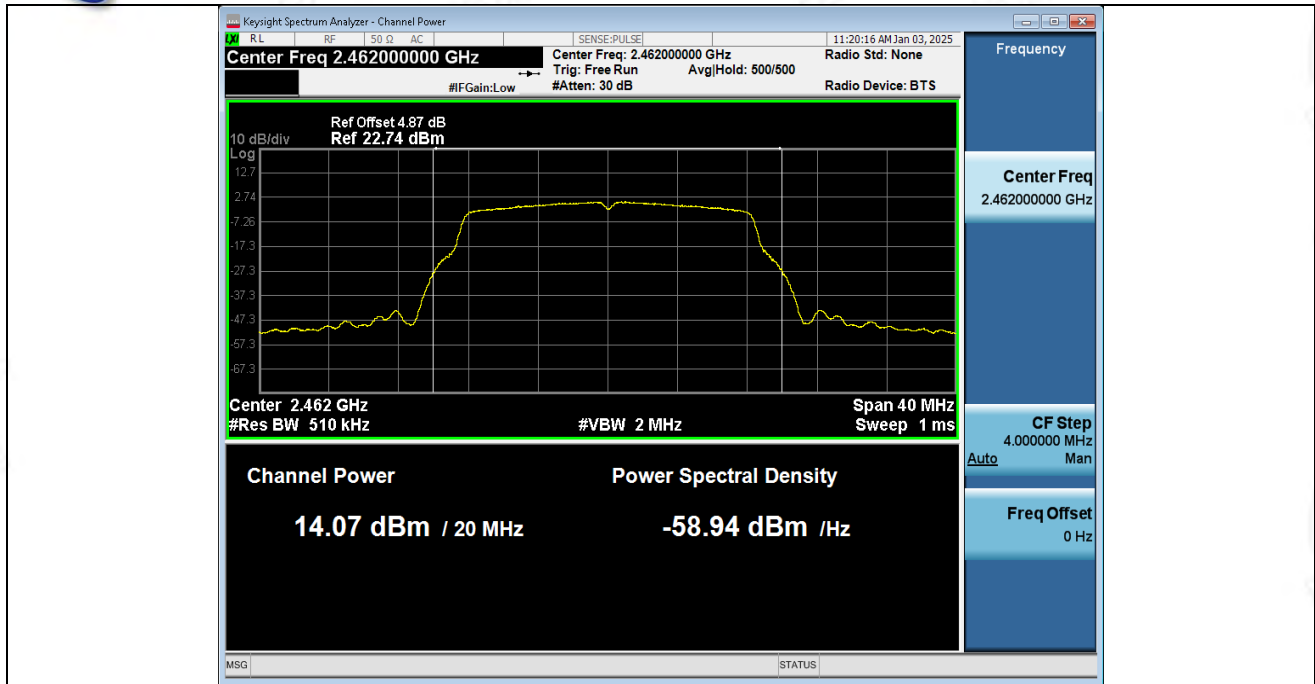


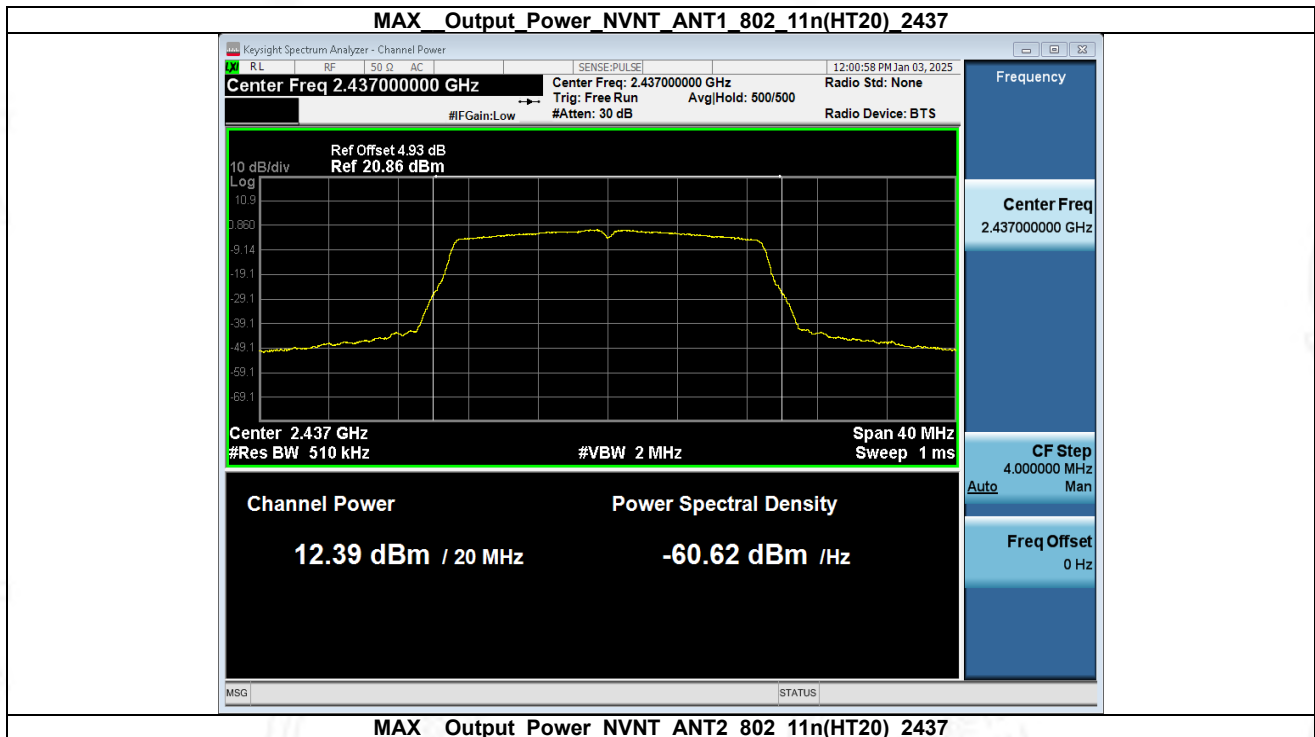
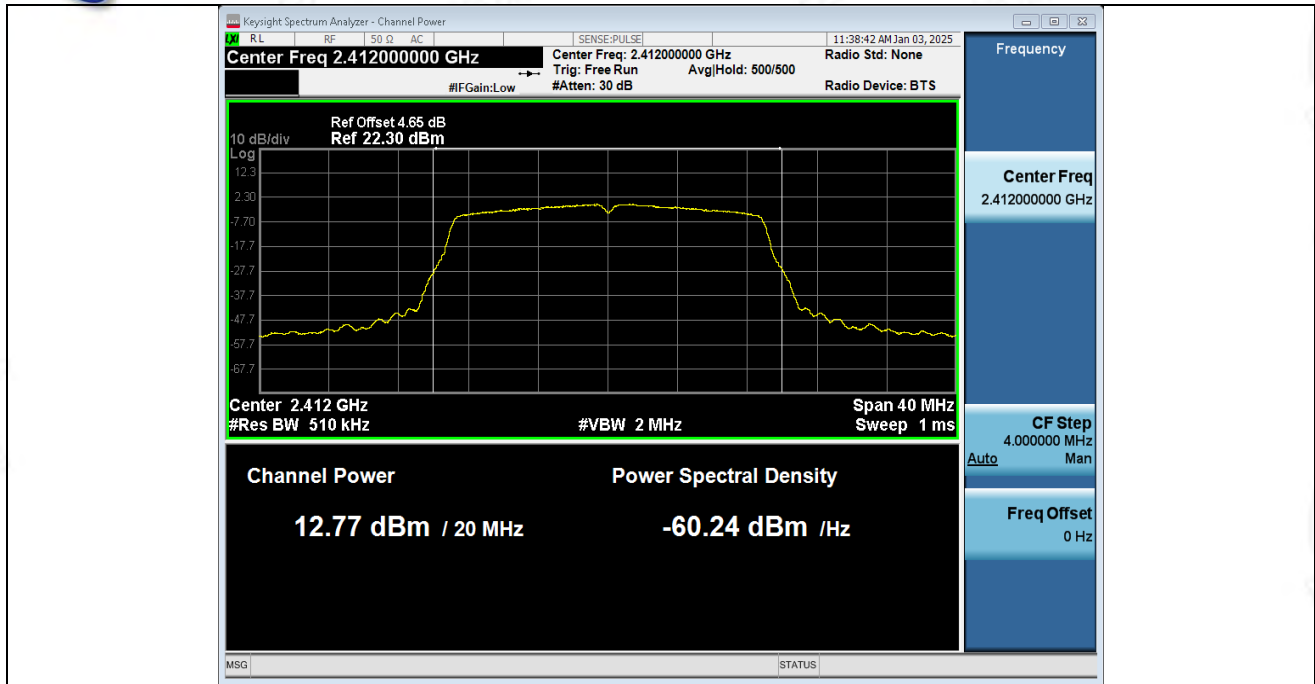


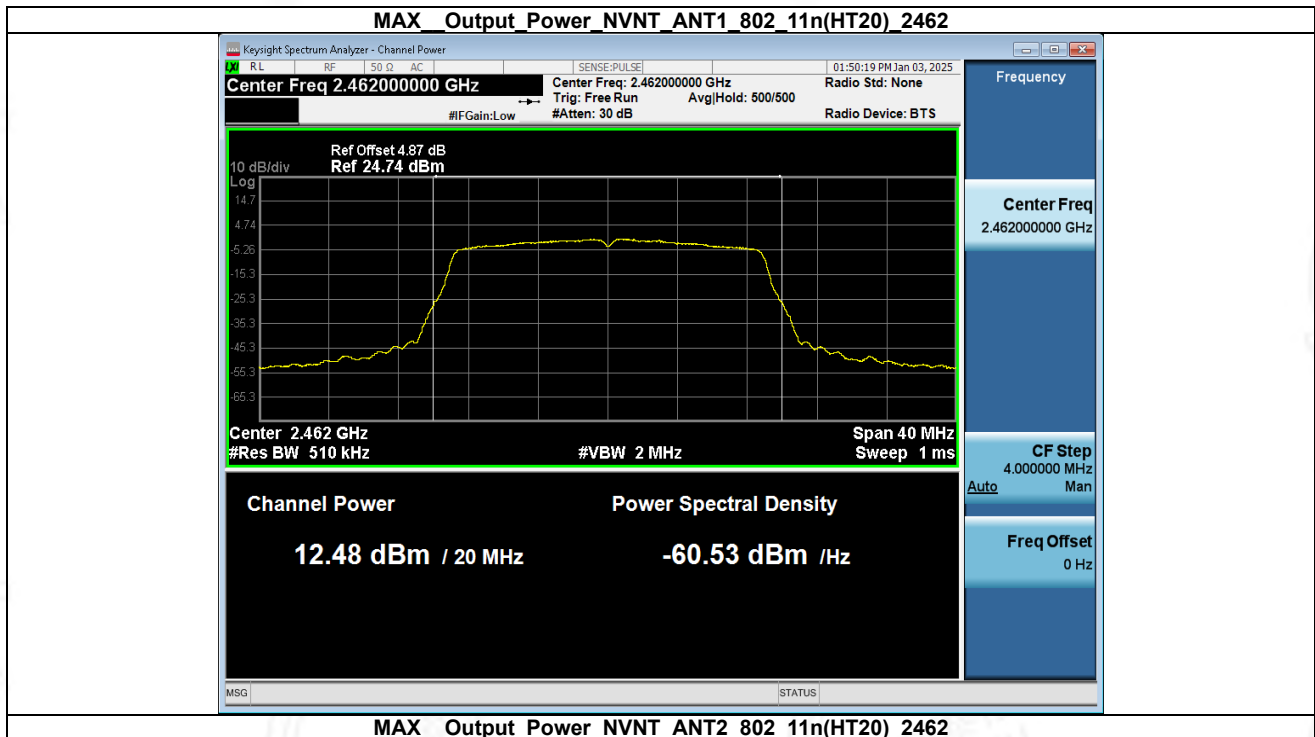
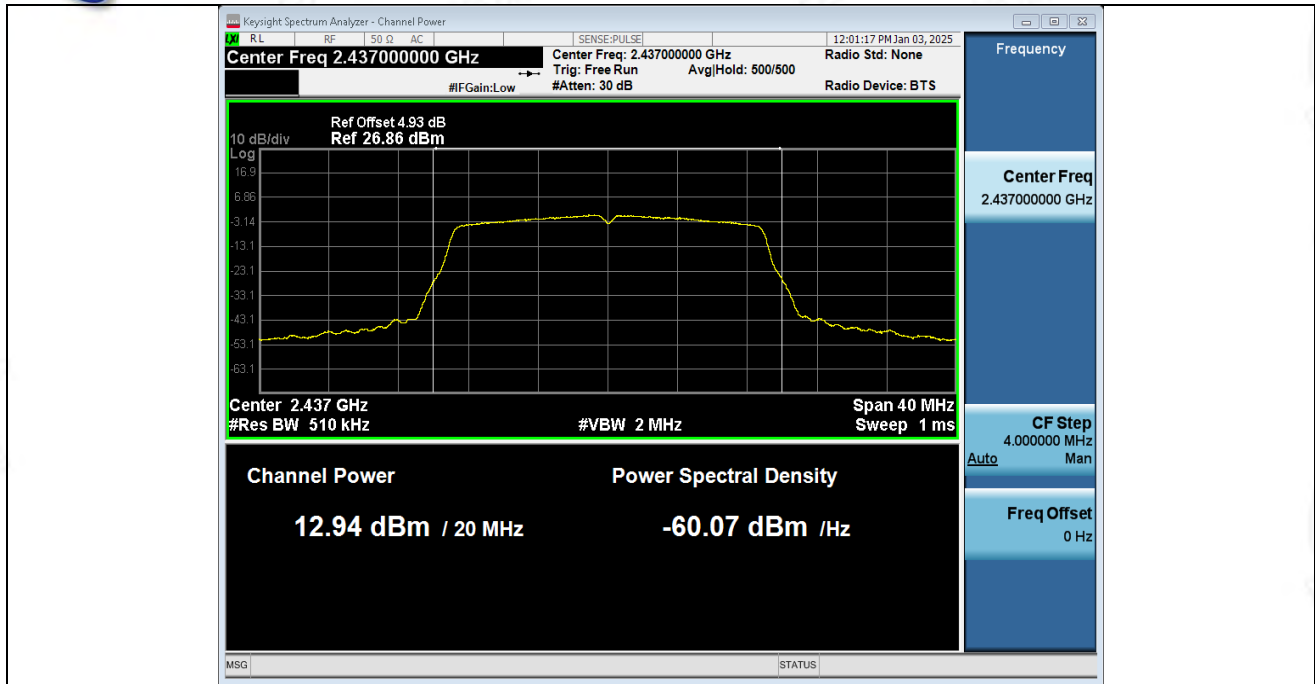


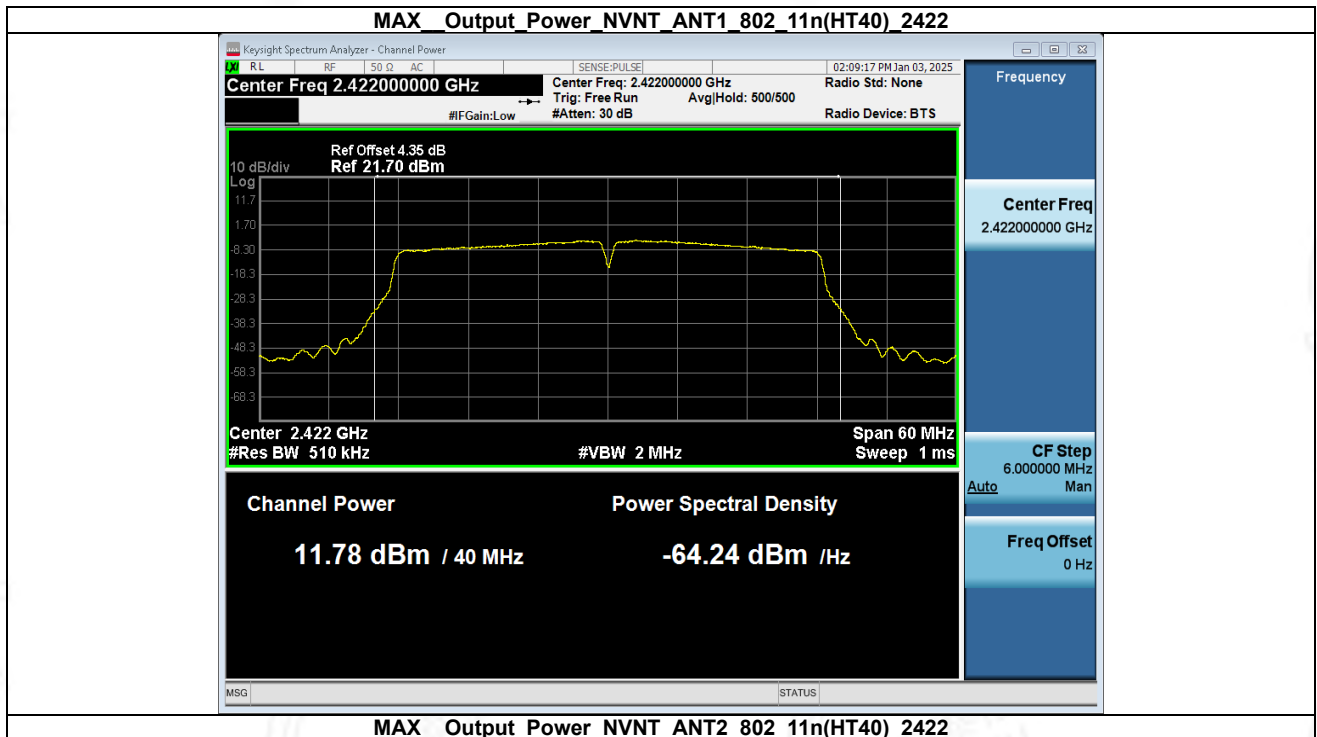
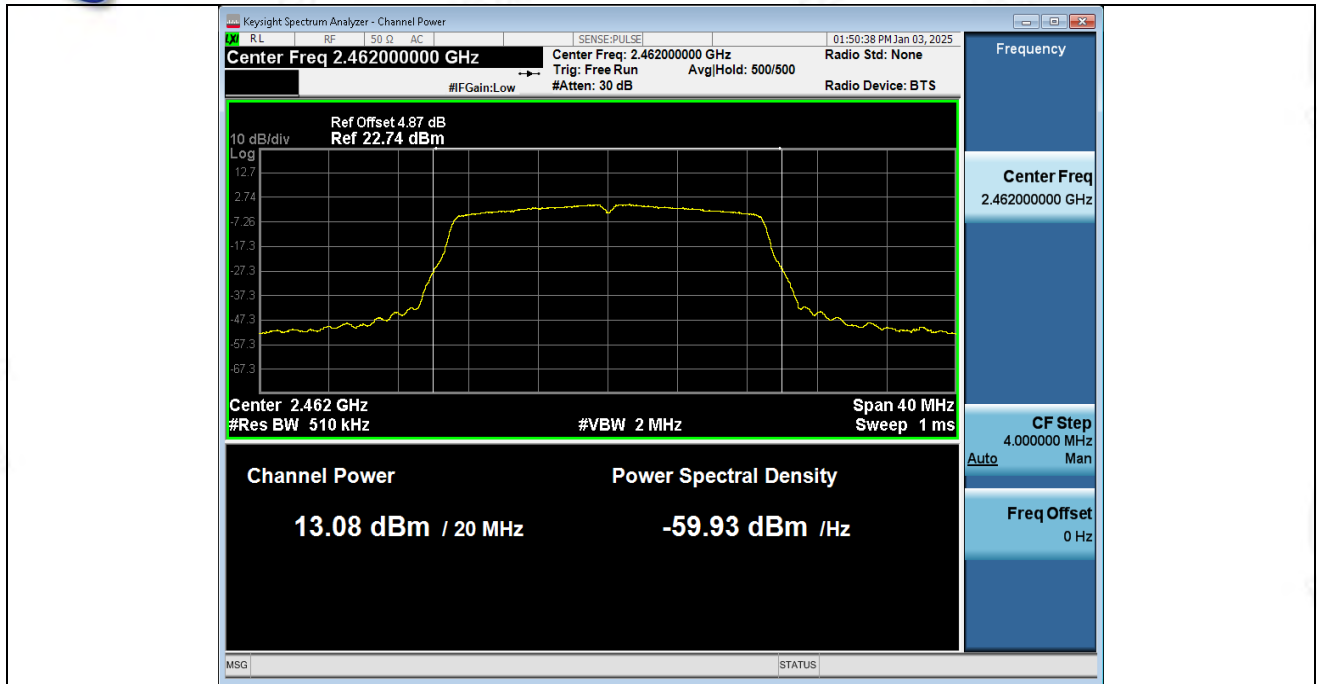


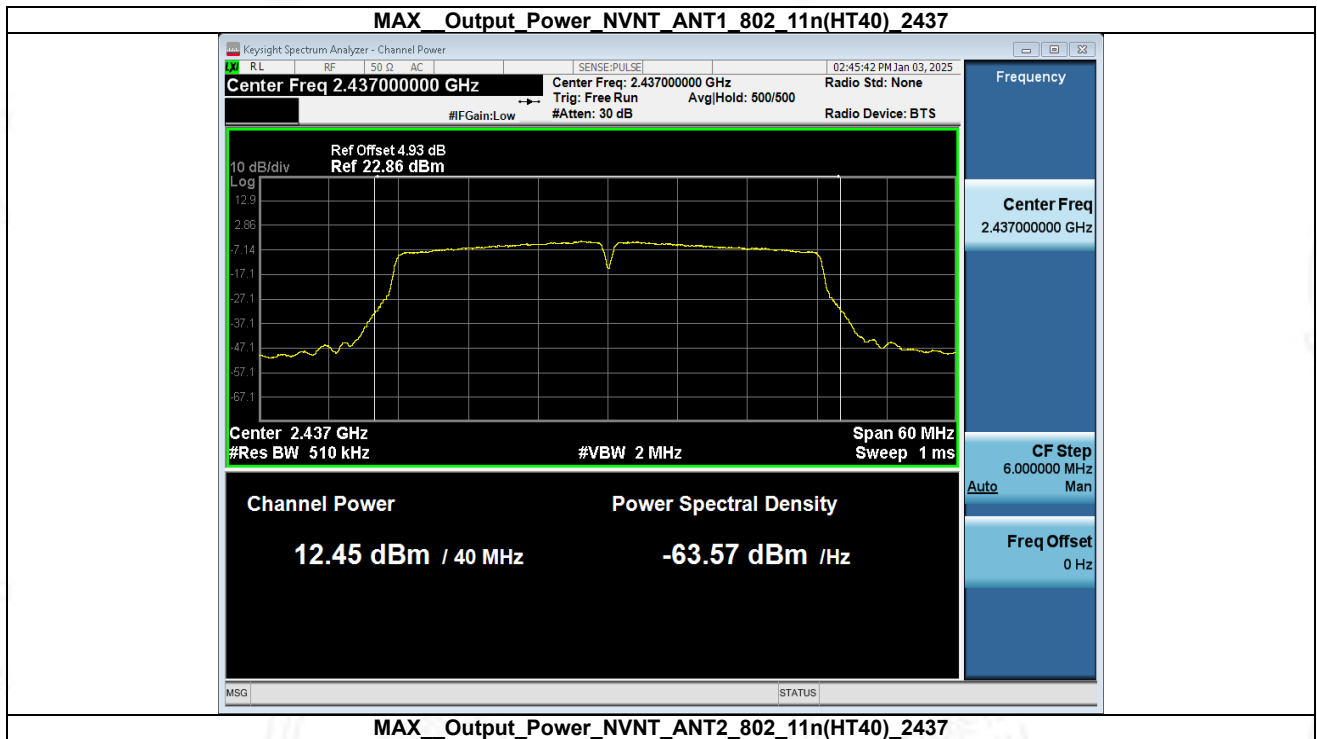
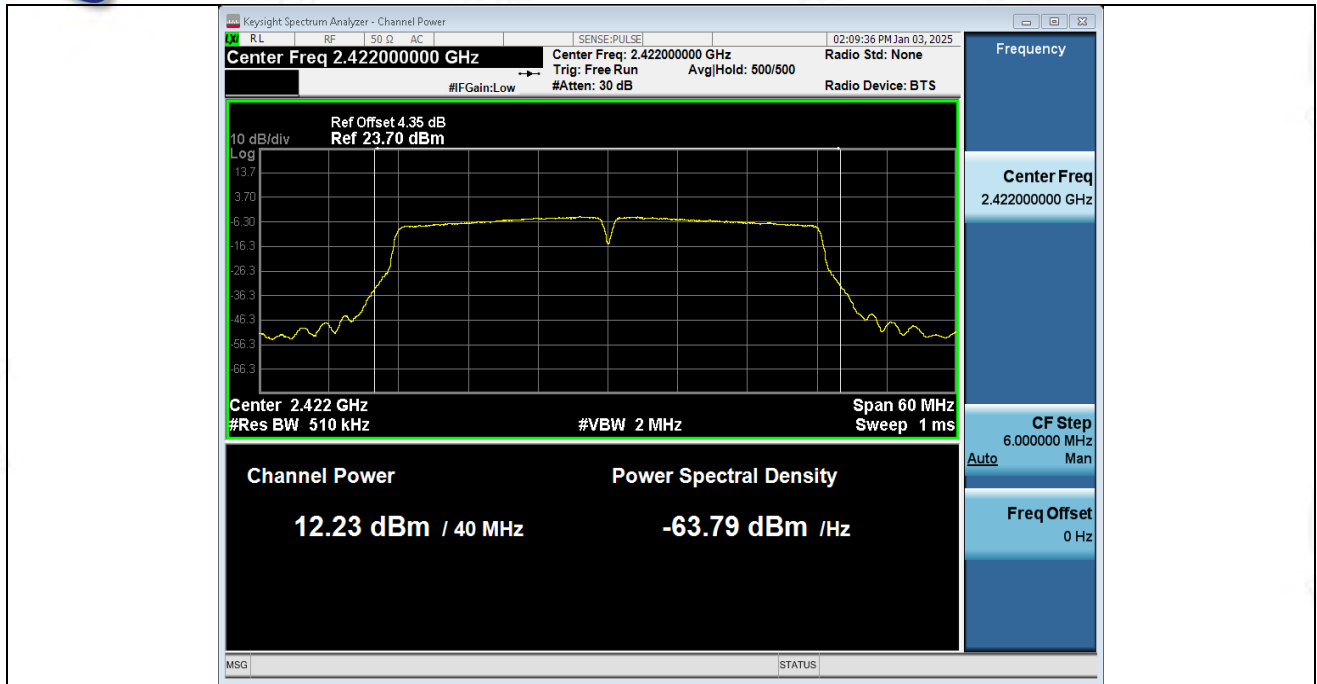


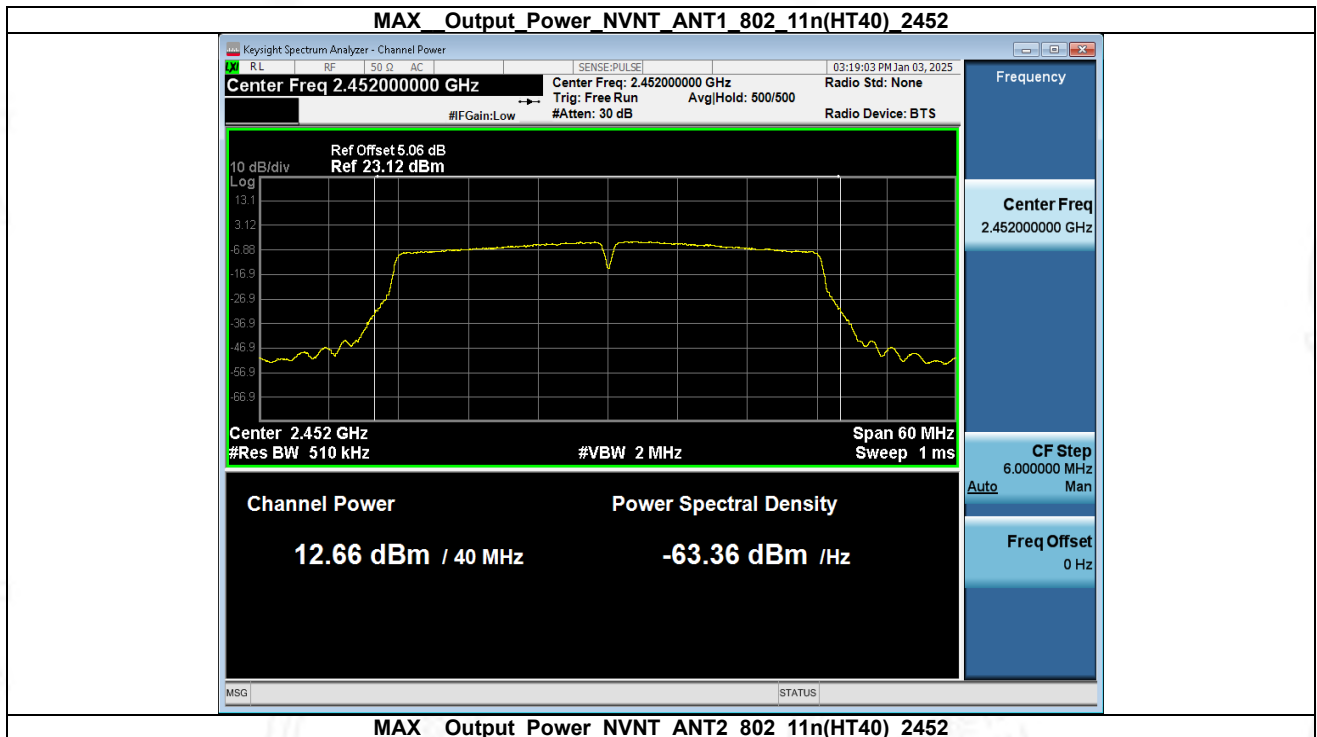
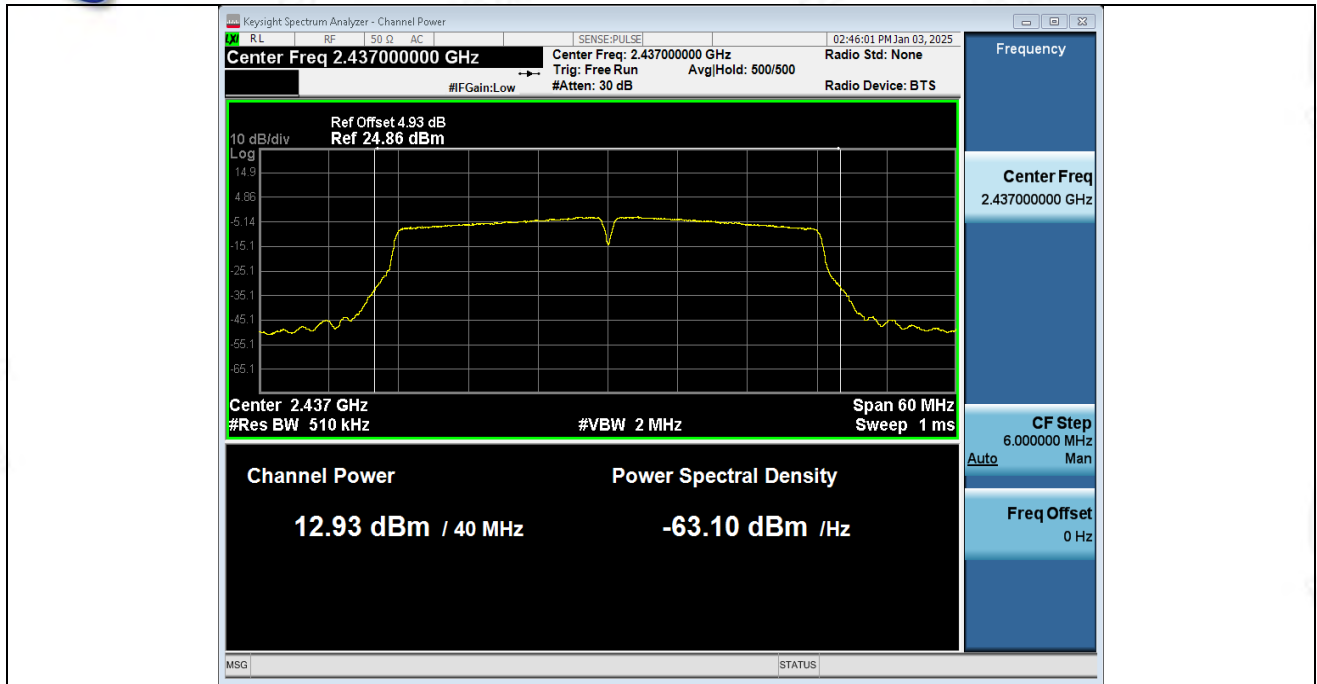


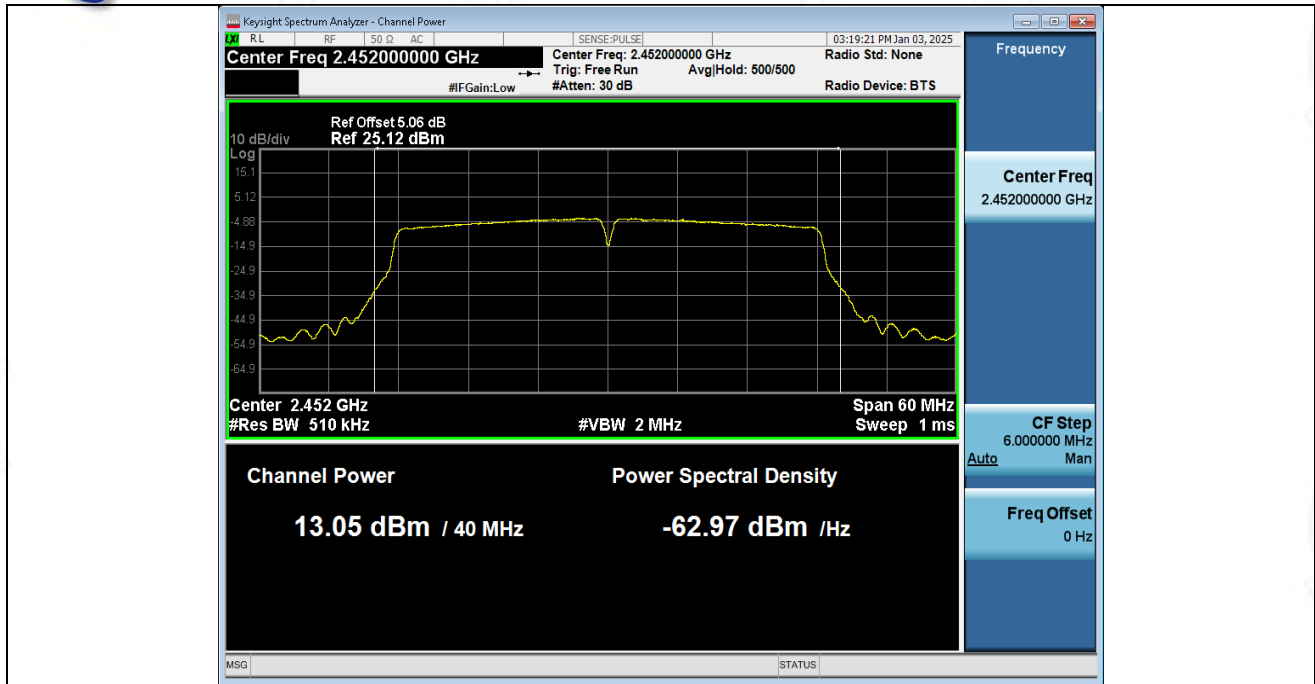












Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted_Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	2412.00	15.58	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2437.00	15.69	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2462.00	15.93	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2422.00	15.28	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2437.00	15.97	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2452.00	16.00	30	Pass



5. Power Spectral Density

Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/3kHz)	Duty factor(dB)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	-14.83	0.00	0.00	-14.83	8	Pass
NVNT	ANT2	802.11b	2412.00	-14.49	0.00	0.00	-14.49	8	Pass
NVNT	ANT1	802.11b	2437.00	-14.03	0.00	0.00	-14.03	8	Pass
NVNT	ANT2	802.11b	2437.00	-13.68	0.00	0.00	-13.68	8	Pass
NVNT	ANT1	802.11b	2462.00	-14.20	0.00	0.00	-14.20	8	Pass
NVNT	ANT2	802.11b	2462.00	-13.89	0.00	0.00	-13.89	8	Pass
NVNT	ANT1	802.11g	2412.00	-20.33	0.12	0.00	-20.21	8	Pass
NVNT	ANT2	802.11g	2412.00	-19.60	0.12	0.00	-19.48	8	Pass
NVNT	ANT1	802.11g	2437.00	-19.27	0.12	0.00	-19.15	8	Pass
NVNT	ANT2	802.11g	2437.00	-18.94	0.12	0.00	-18.82	8	Pass
NVNT	ANT1	802.11g	2462.00	-19.77	0.12	0.00	-19.65	8	Pass
NVNT	ANT2	802.11g	2462.00	-19.19	0.12	0.00	-19.07	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-21.87	0.13	0.00	-21.74	8	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	-21.03	0.13	0.00	-20.90	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-21.41	0.00	0.00	-21.41	8	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	-21.05	0.00	0.00	-21.05	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-21.51	0.13	0.00	-21.38	8	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	-21.10	0.13	0.00	-20.97	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-25.36	0.26	0.00	-25.10	8	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	-25.04	0.26	0.00	-24.78	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-24.95	0.26	0.00	-24.69	8	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	-26.60	0.26	0.00	-26.34	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-24.53	0.13	0.00	-24.40	8	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	-24.13	0.13	0.00	-24.00	8	Pass

