

Appendix

Test Data

for BTEK241111036A02E17

Start date	2024/11/30	Finish date	2024/12/2
Temperature	22.0 °C	Humidity	45%
RF specifications	2.4G WIFI- Module 2 GTV	Test Engineer	Zora



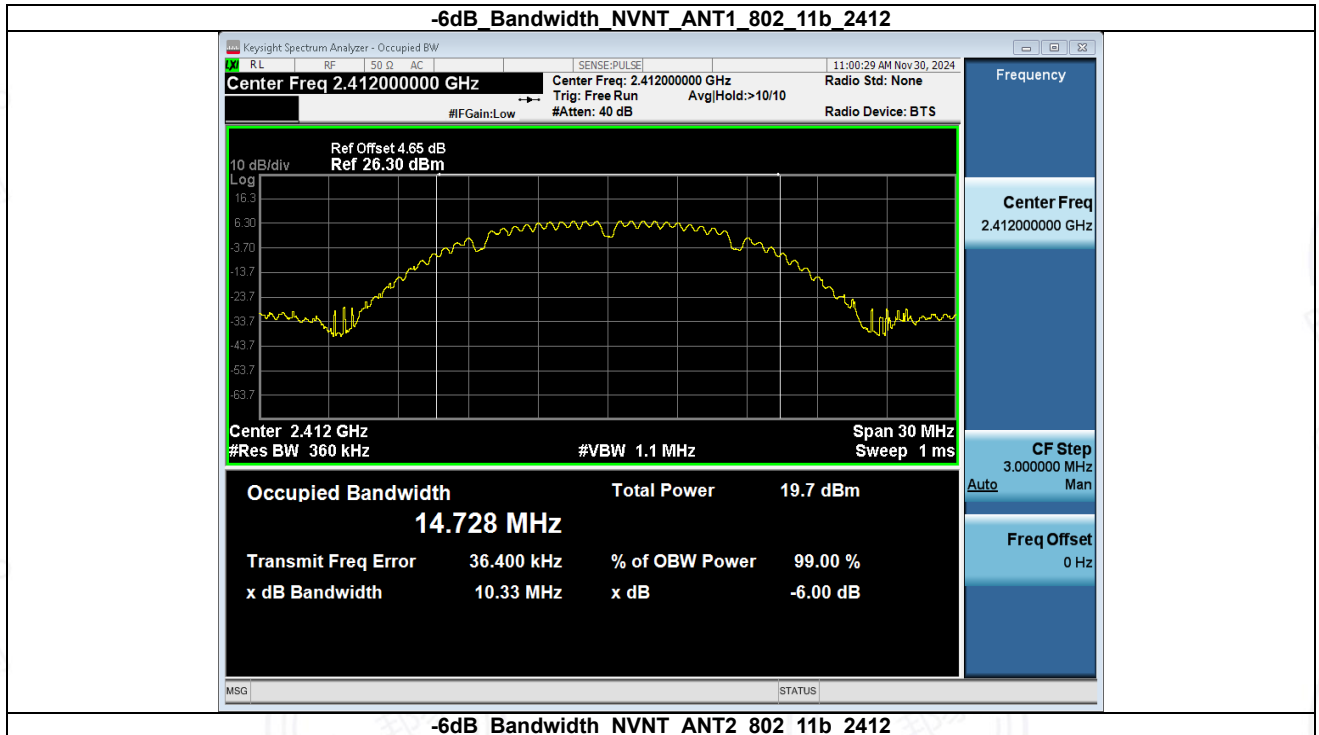
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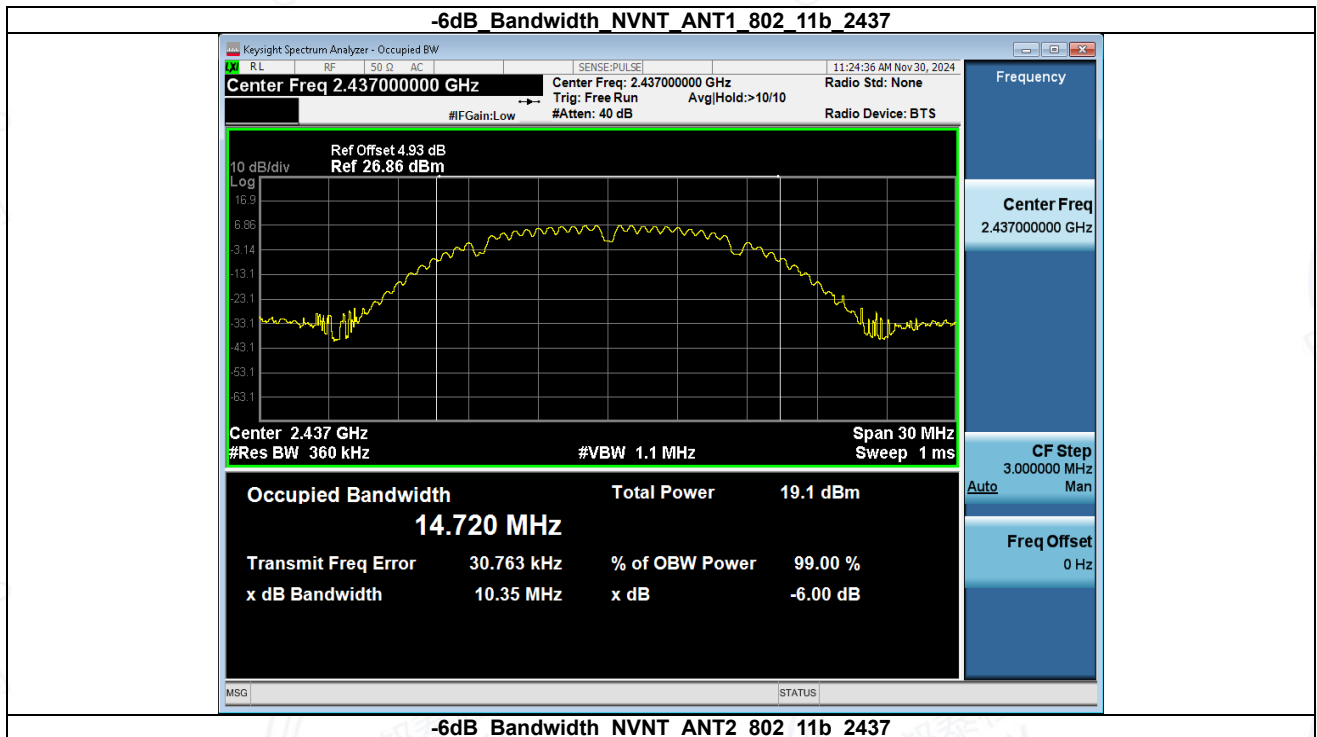
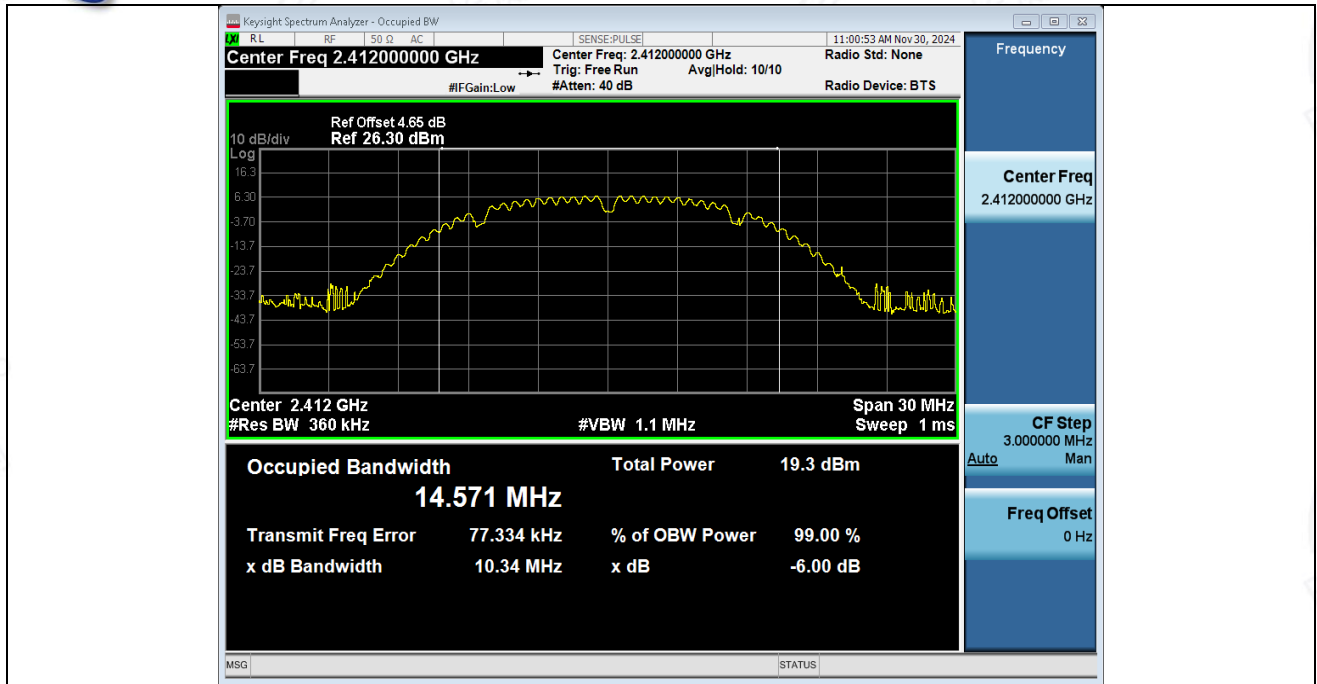
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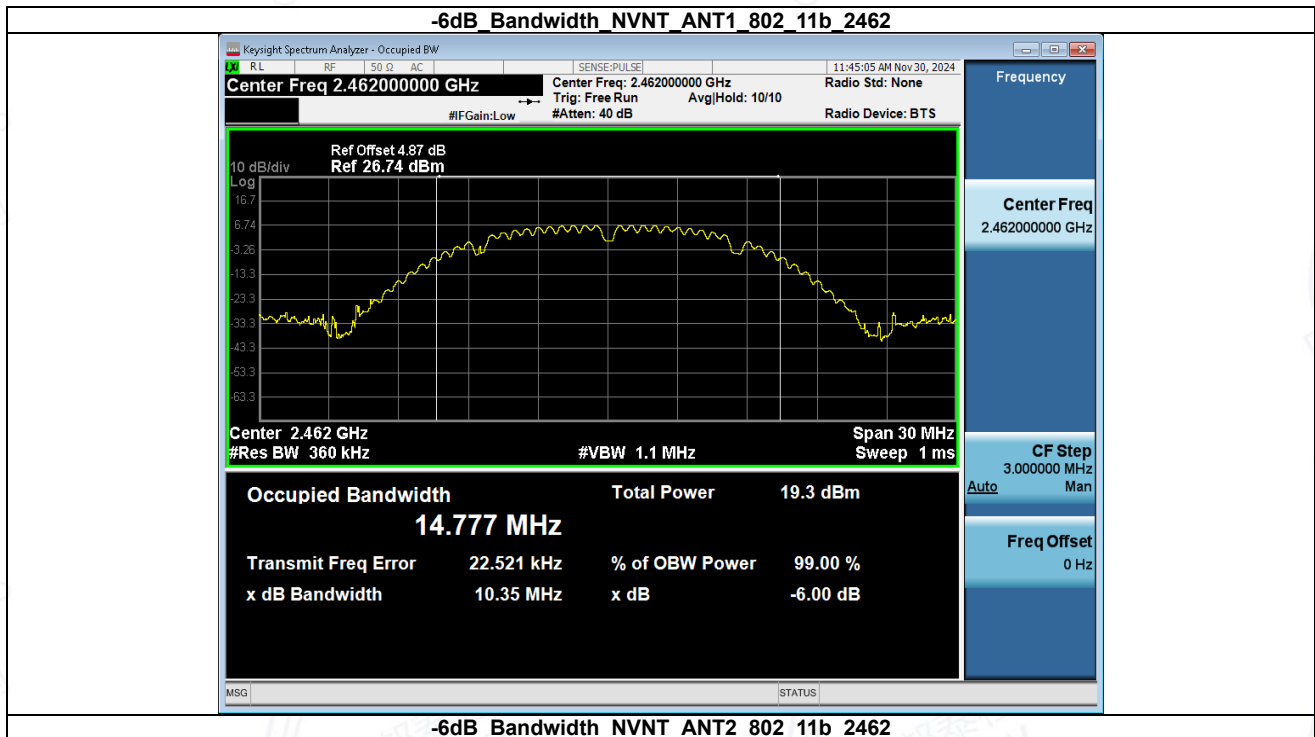
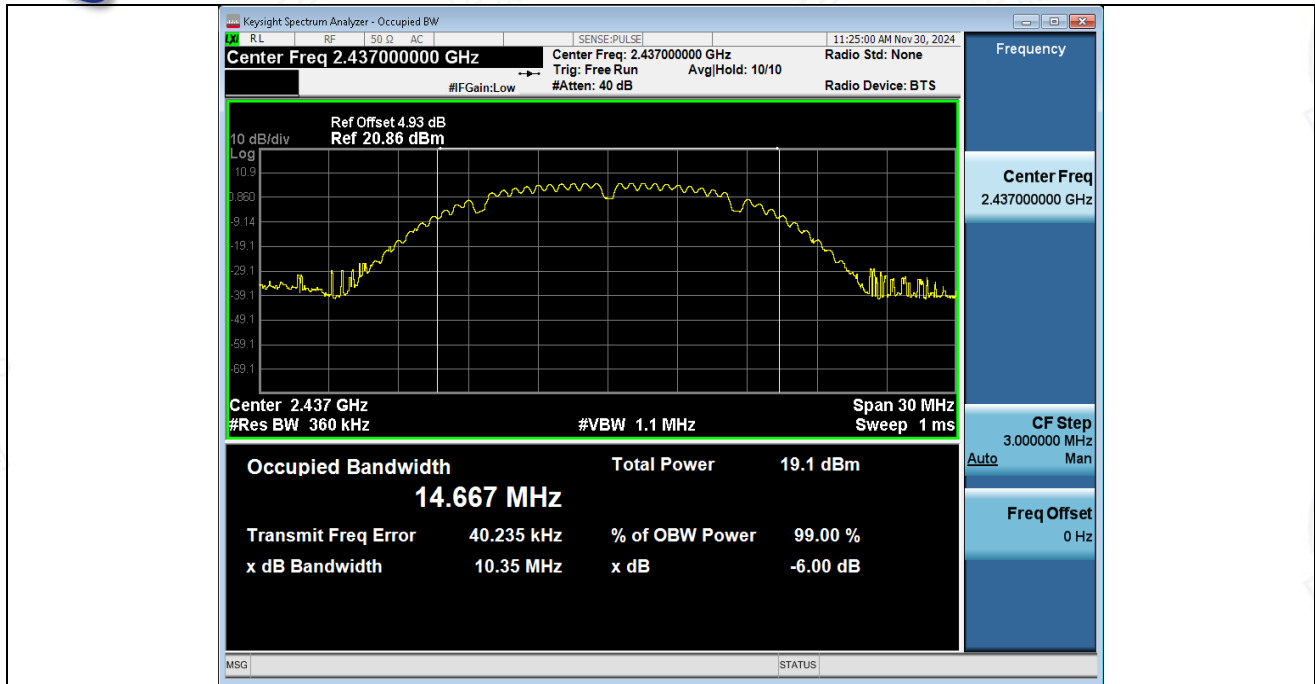


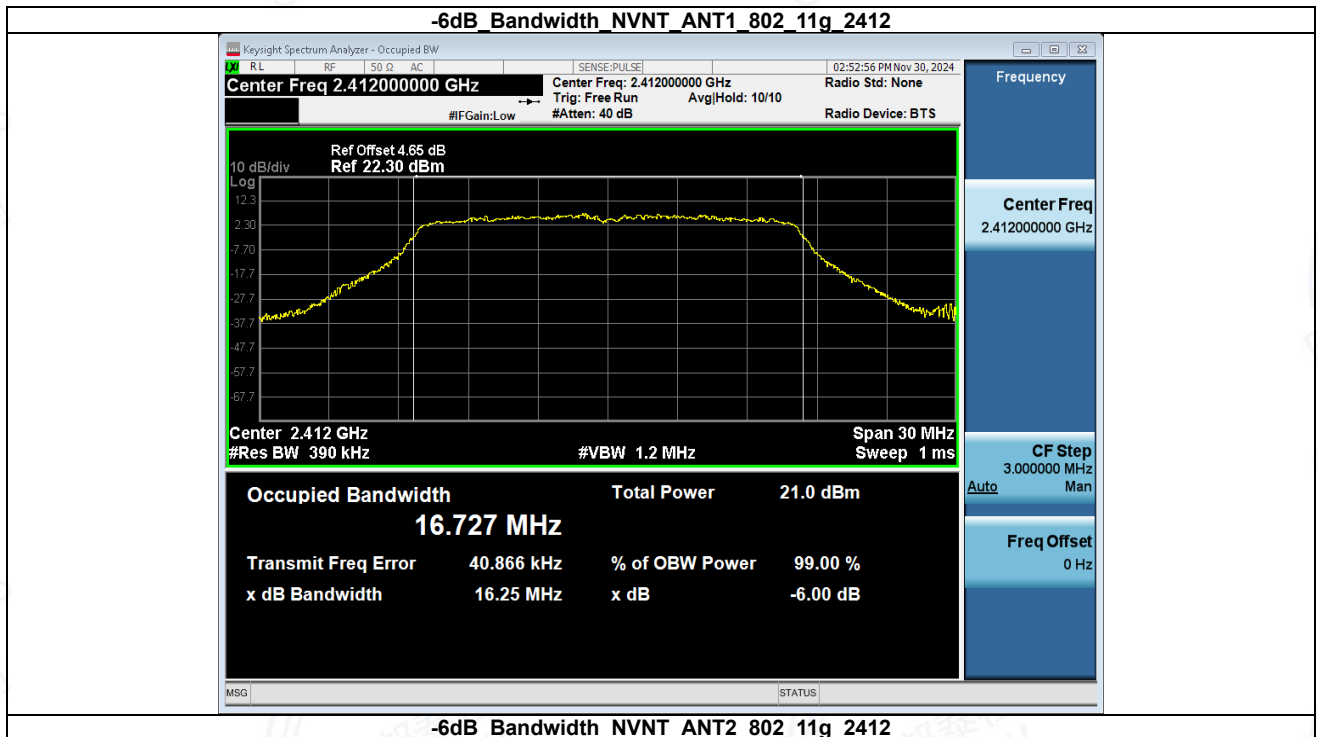
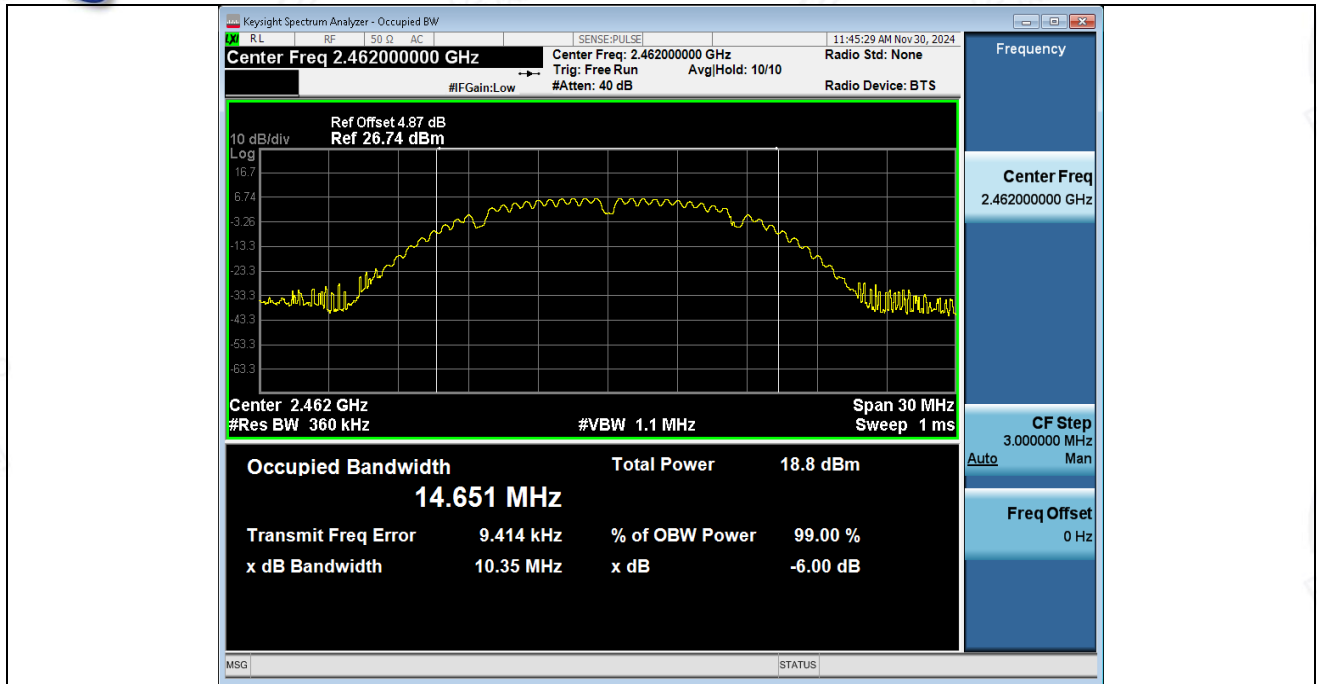
1. -6dB Bandwidth

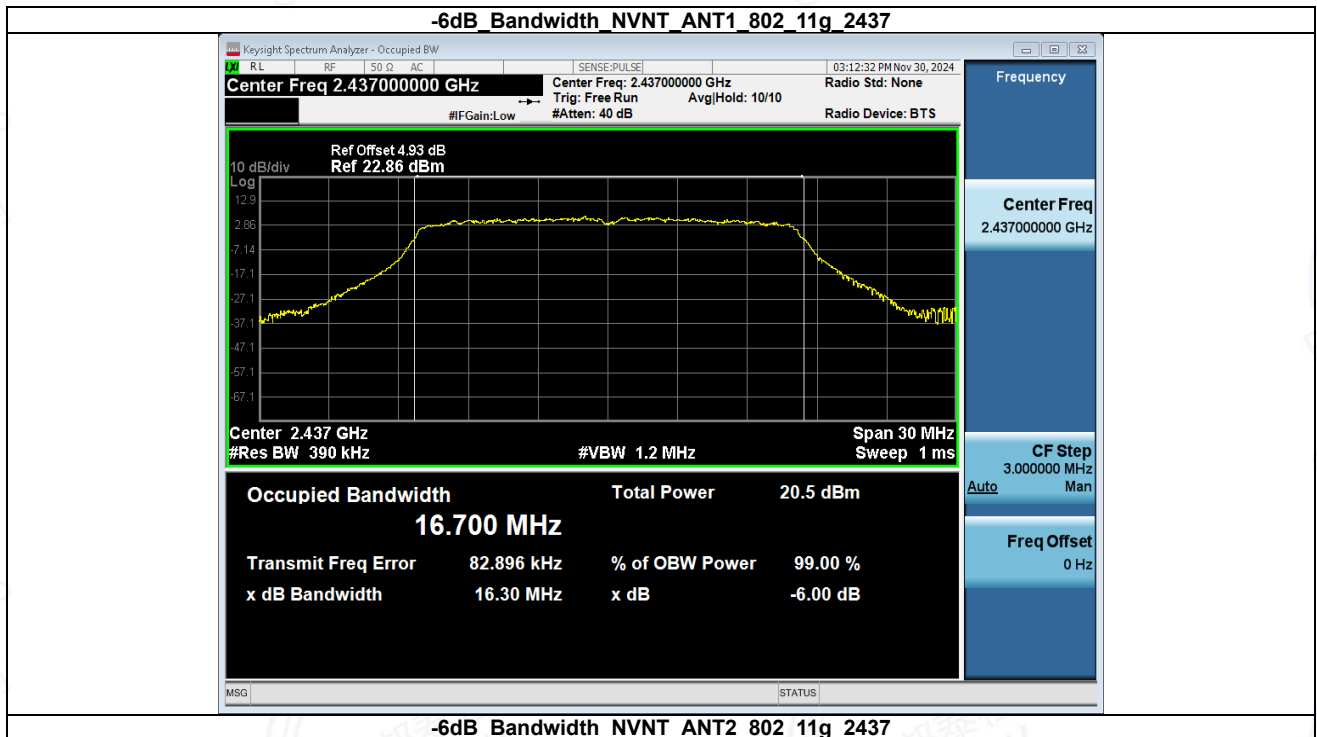
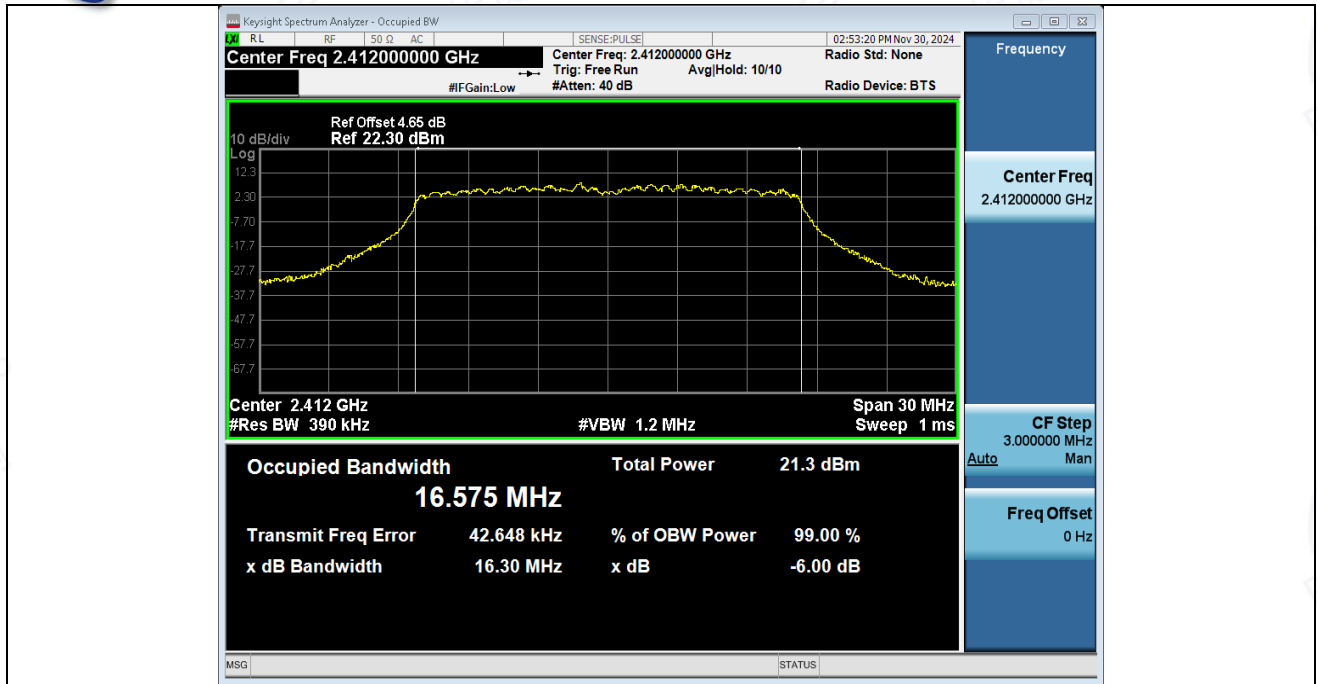
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	10.33	500	Pass
NVNT	ANT2	802.11b	2412.00	10.34	500	Pass
NVNT	ANT1	802.11b	2437.00	10.35	500	Pass
NVNT	ANT2	802.11b	2437.00	10.35	500	Pass
NVNT	ANT1	802.11b	2462.00	10.35	500	Pass
NVNT	ANT2	802.11b	2462.00	10.35	500	Pass
NVNT	ANT1	802.11g	2412.00	16.25	500	Pass
NVNT	ANT2	802.11g	2412.00	16.30	500	Pass
NVNT	ANT1	802.11g	2437.00	16.30	500	Pass
NVNT	ANT2	802.11g	2437.00	16.36	500	Pass
NVNT	ANT1	802.11g	2462.00	16.29	500	Pass
NVNT	ANT2	802.11g	2462.00	16.39	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.53	500	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	17.59	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.55	500	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	17.59	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.57	500	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	17.52	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	36.27	500	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	36.46	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	36.30	500	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	36.62	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	36.01	500	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	36.19	500	Pass

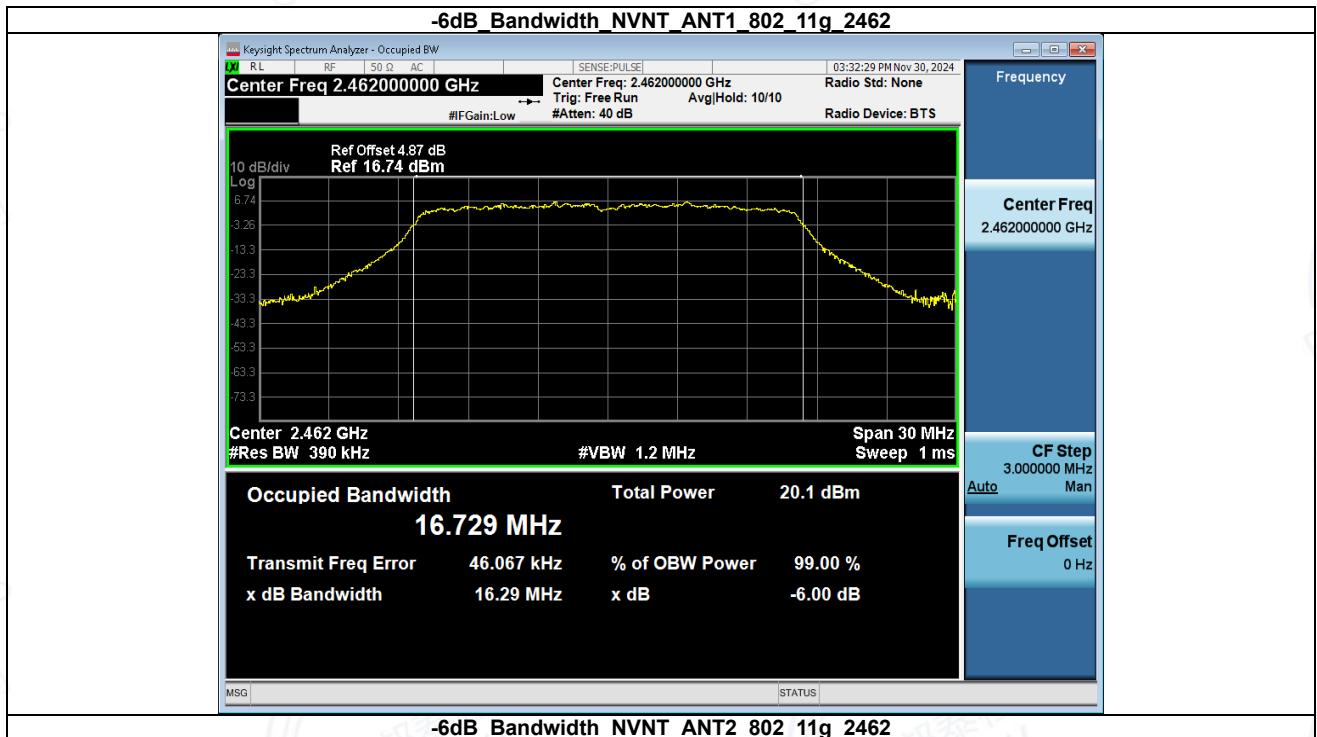
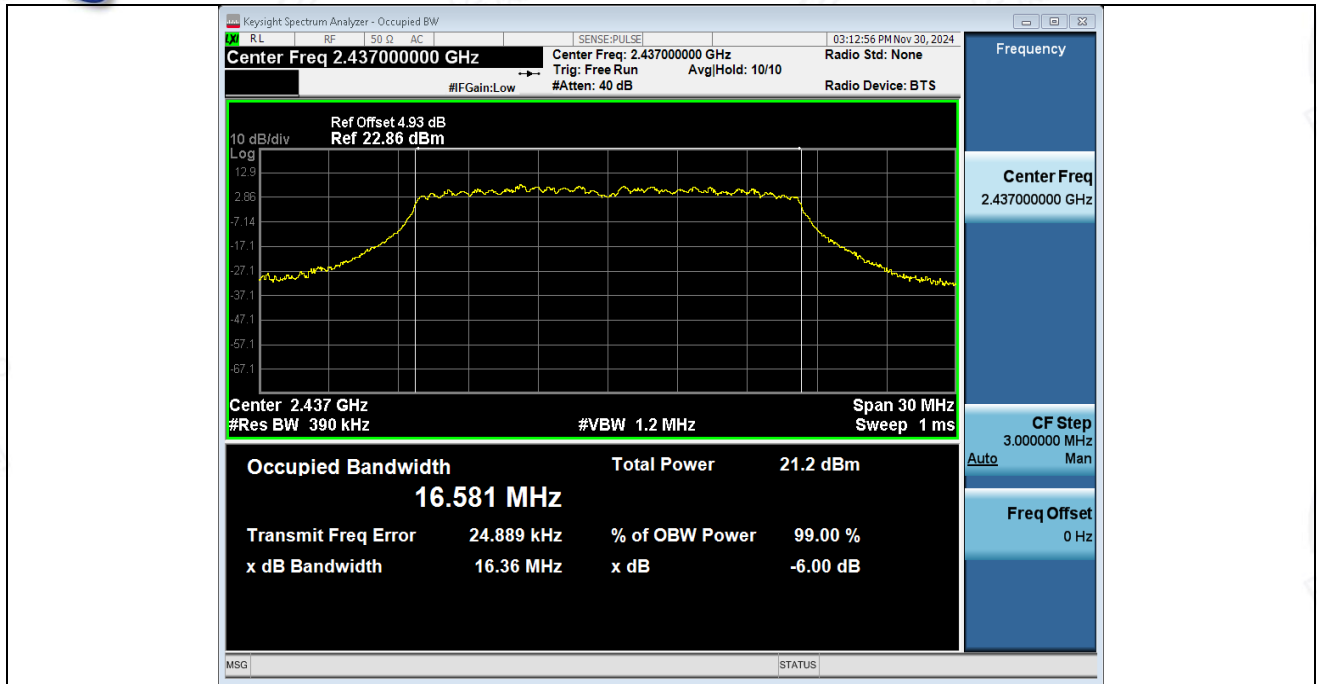


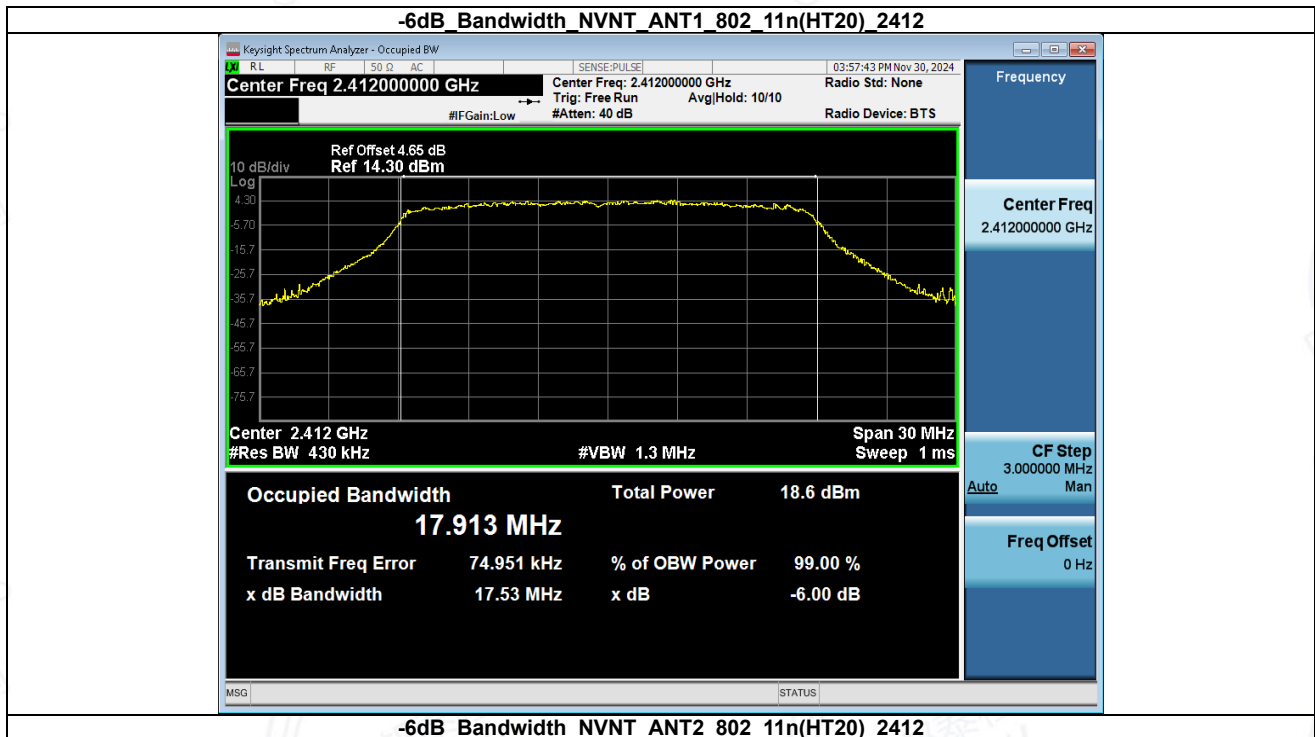
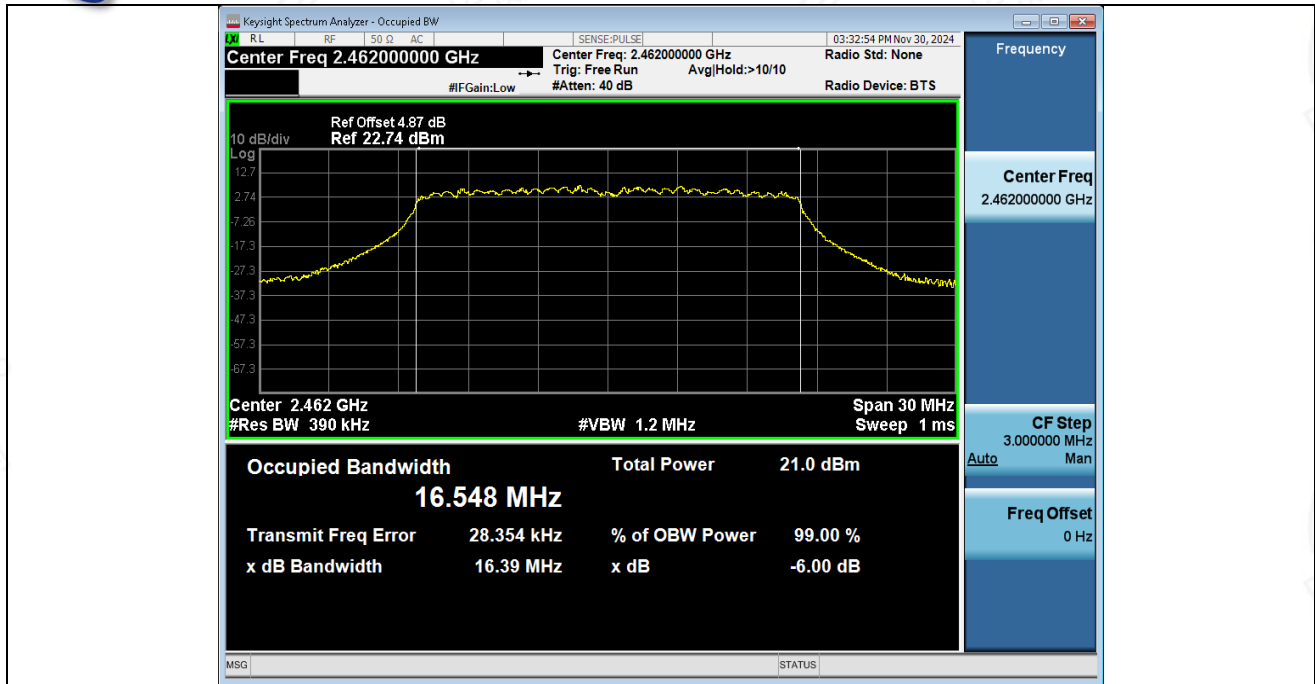


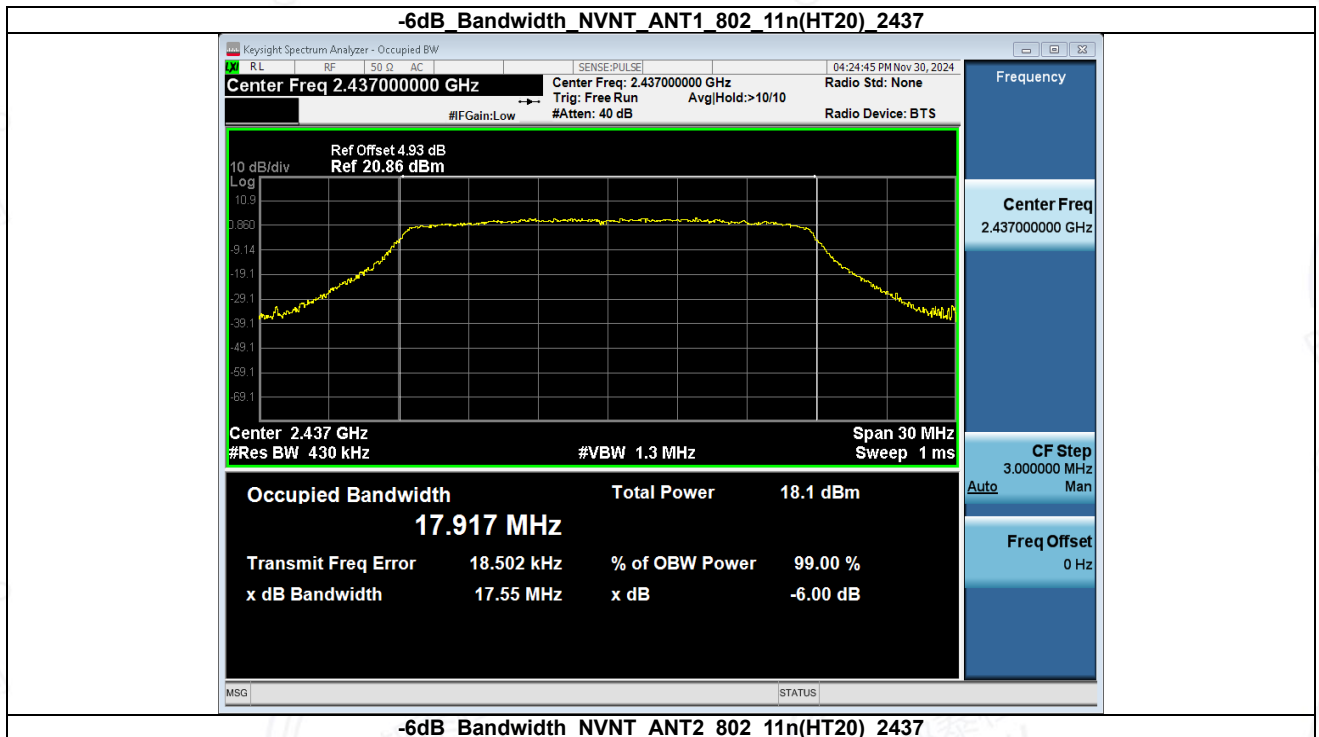


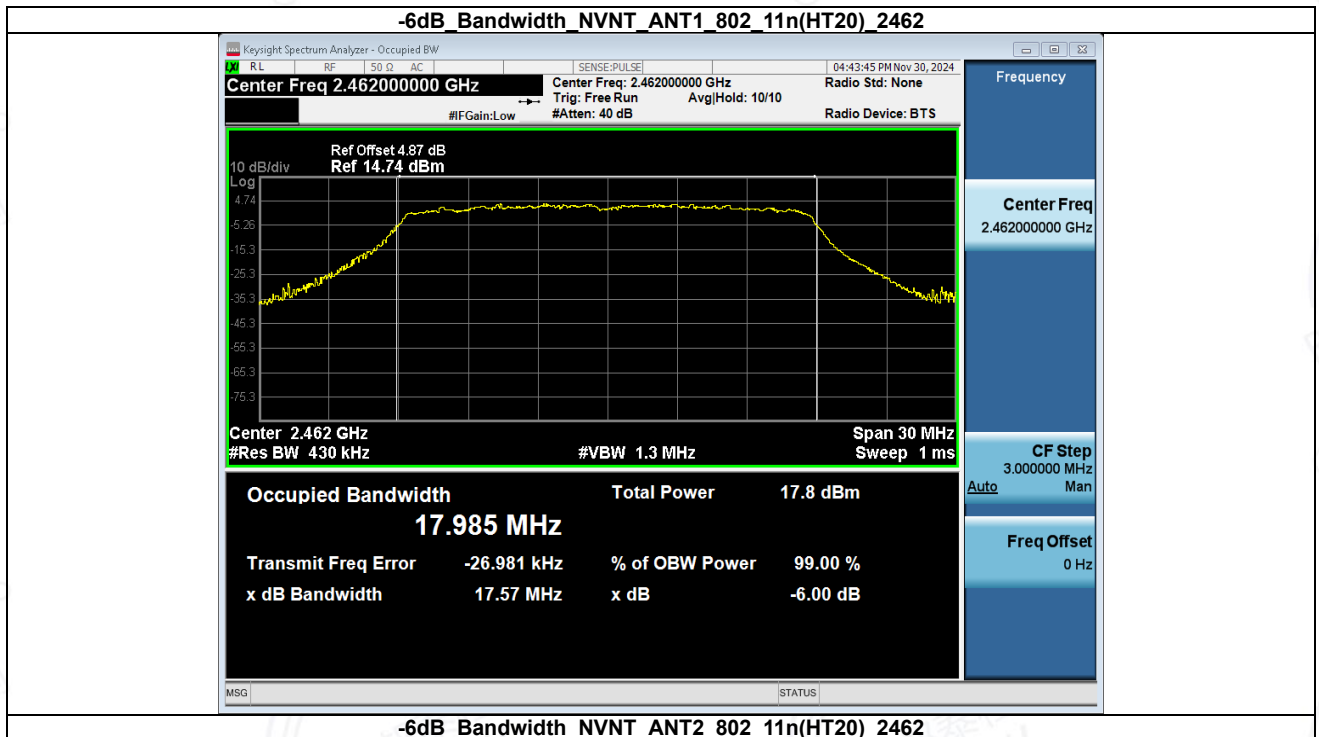
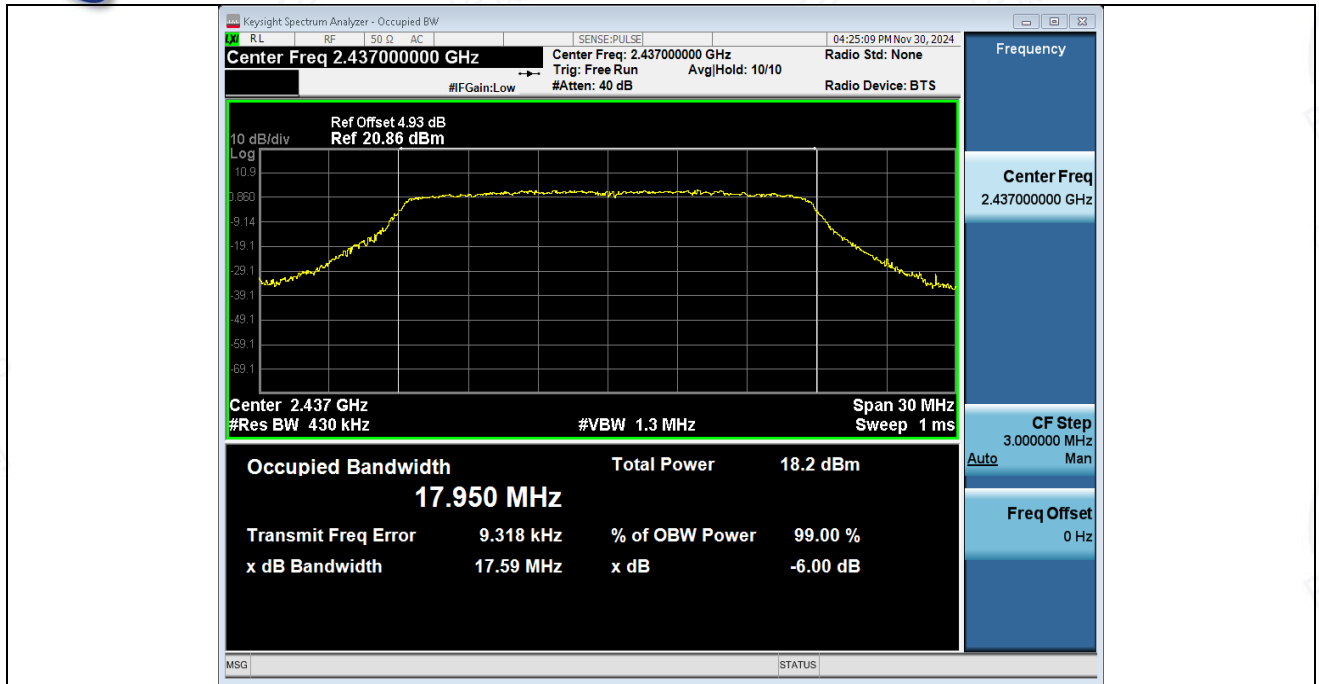


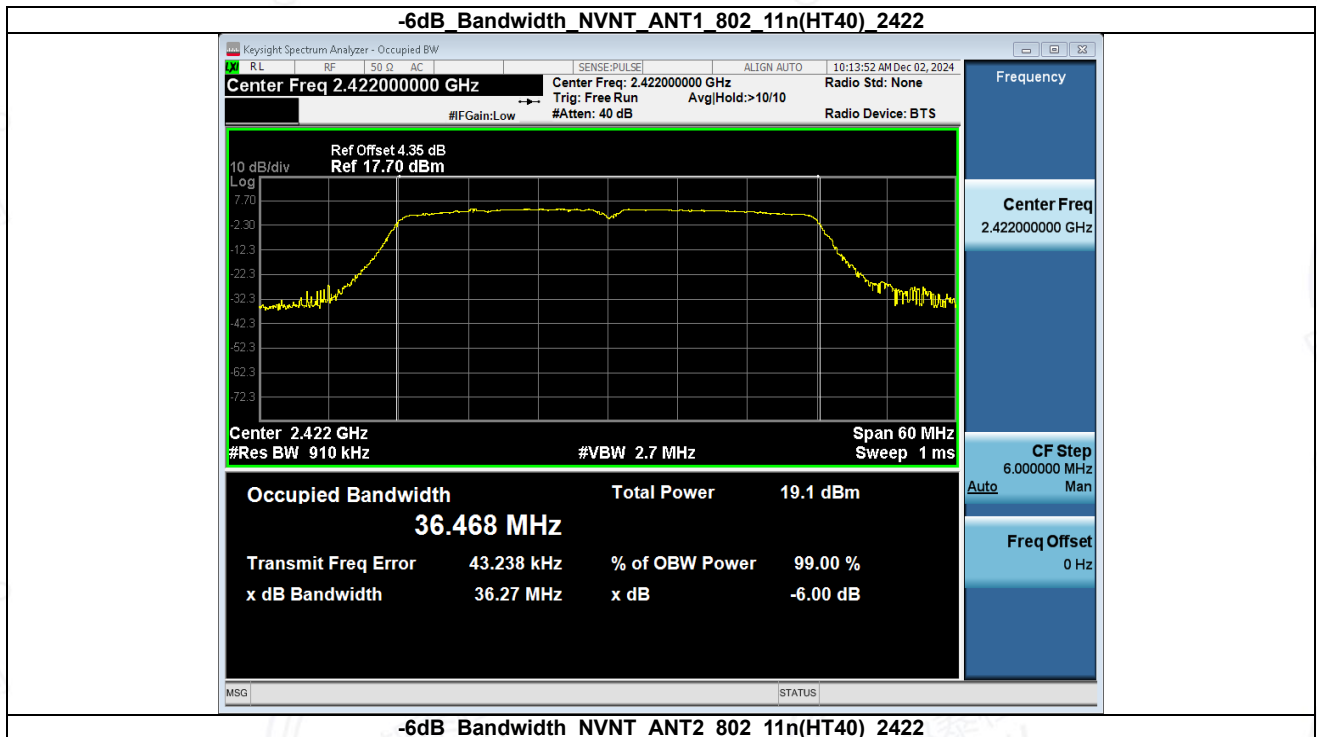
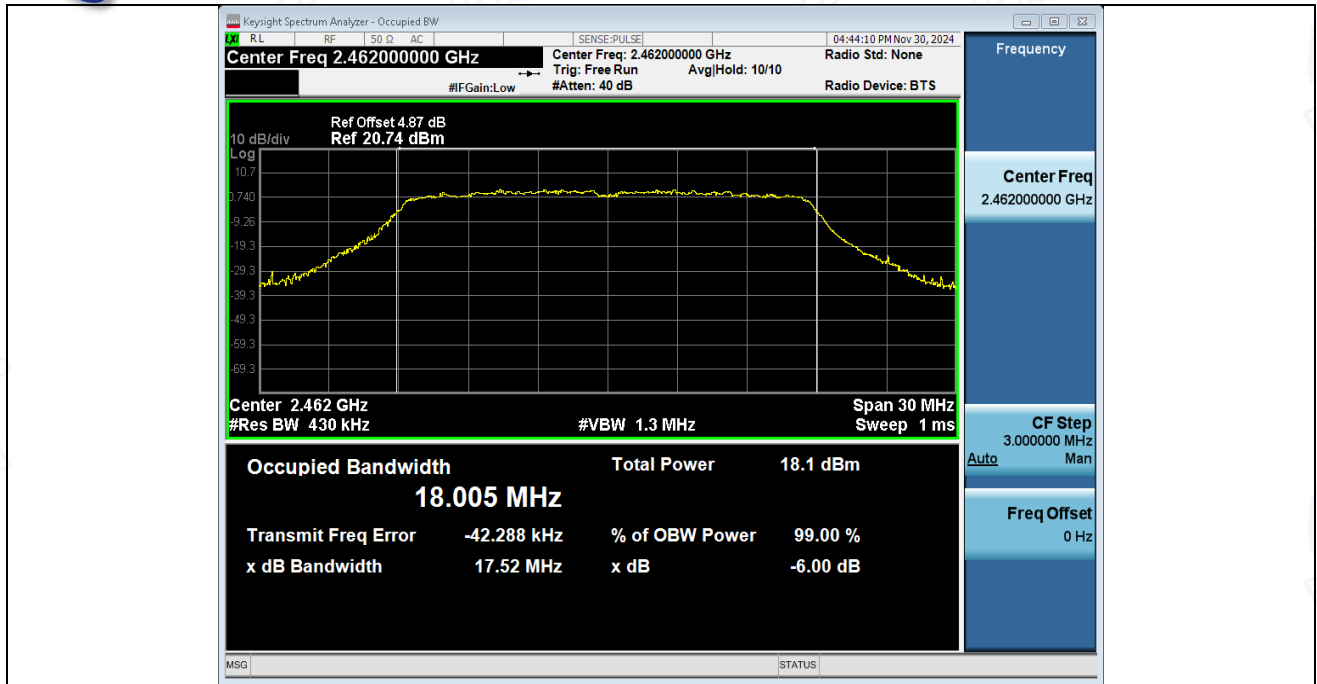


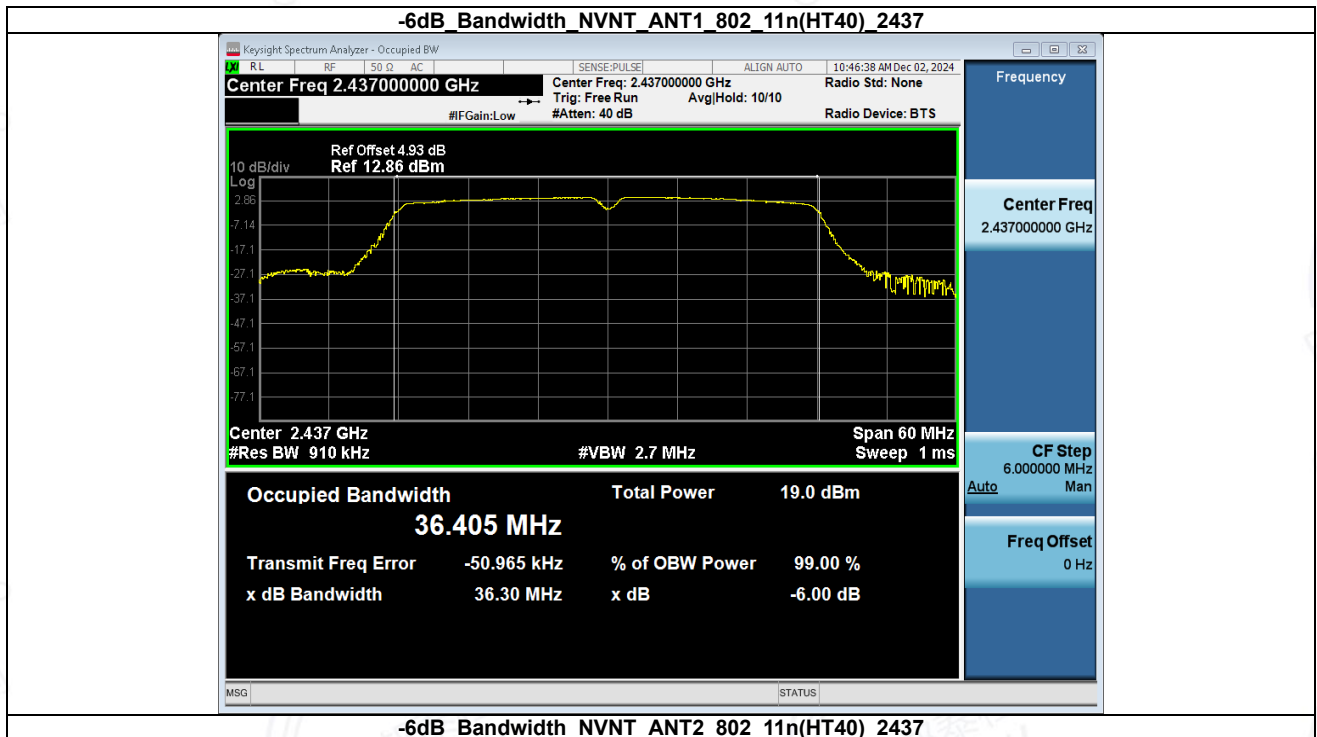
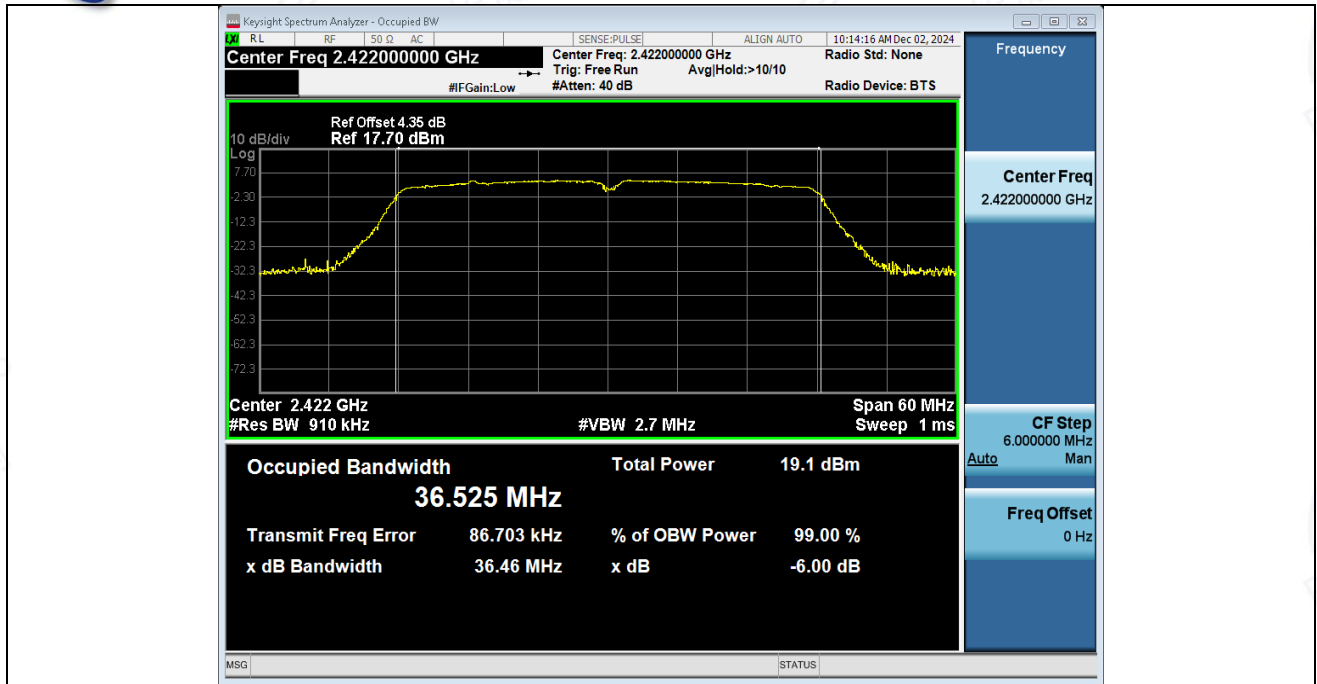


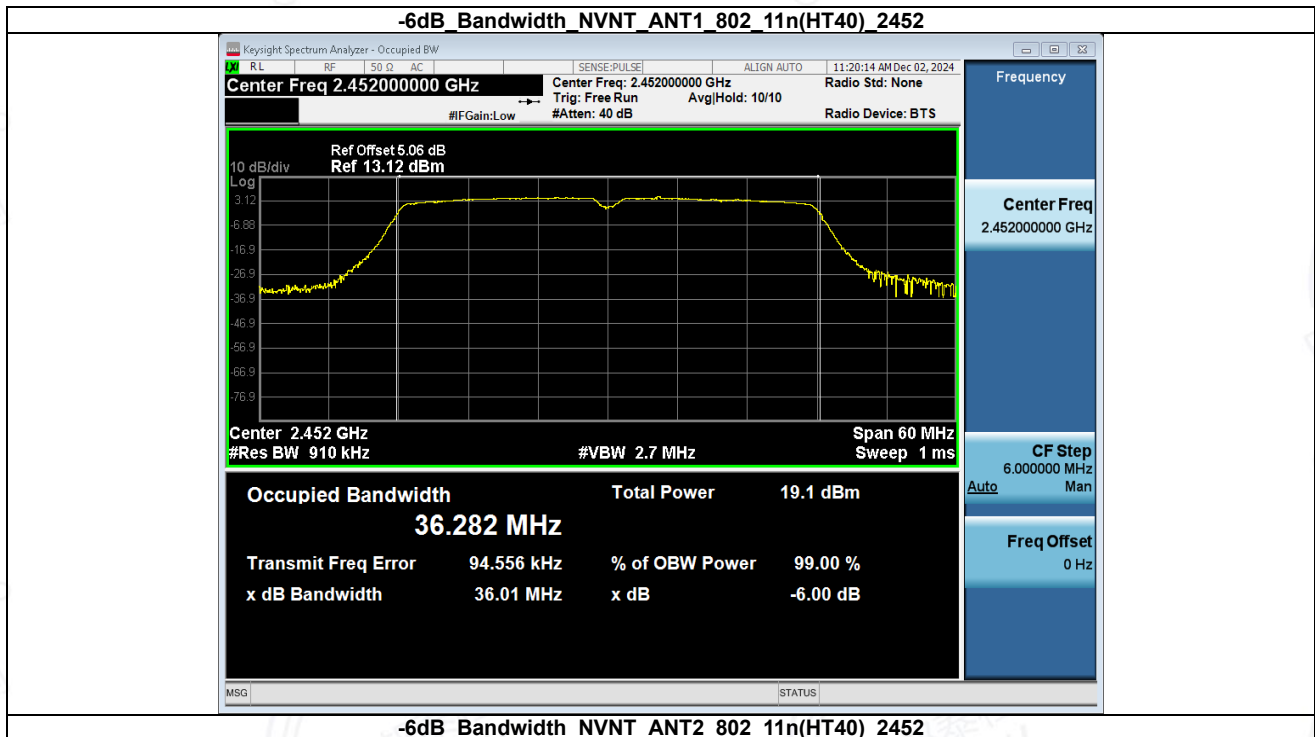
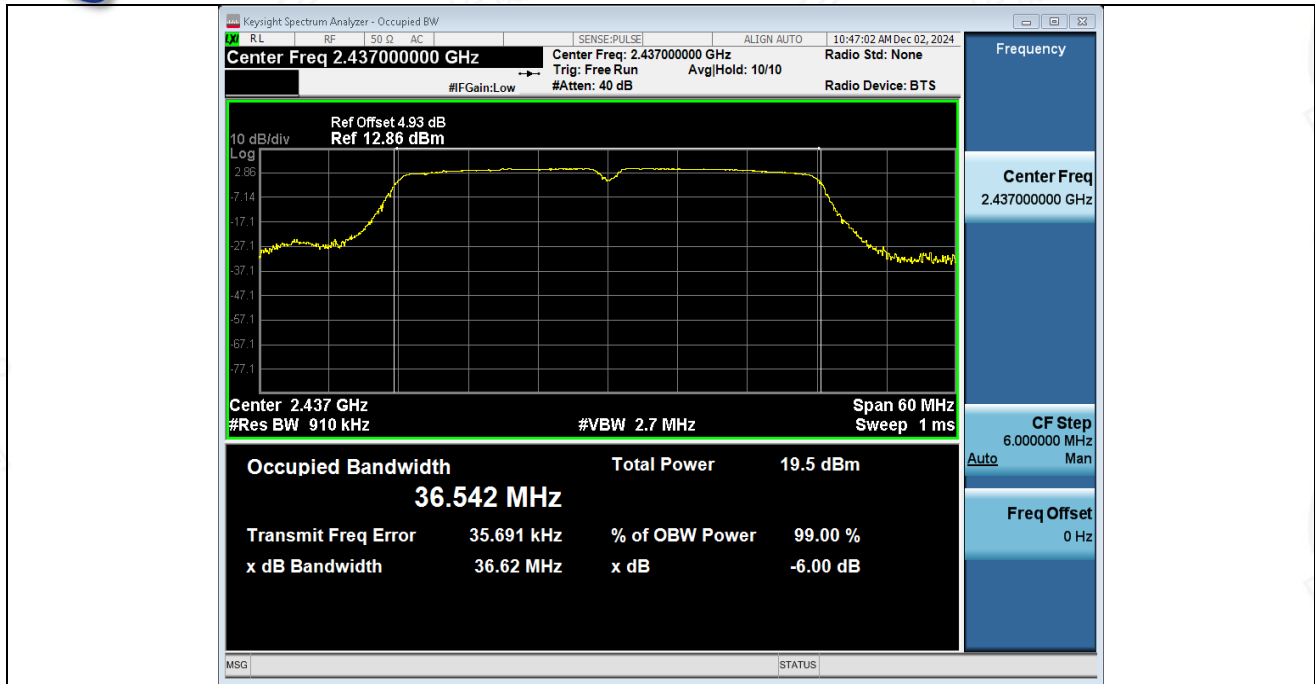


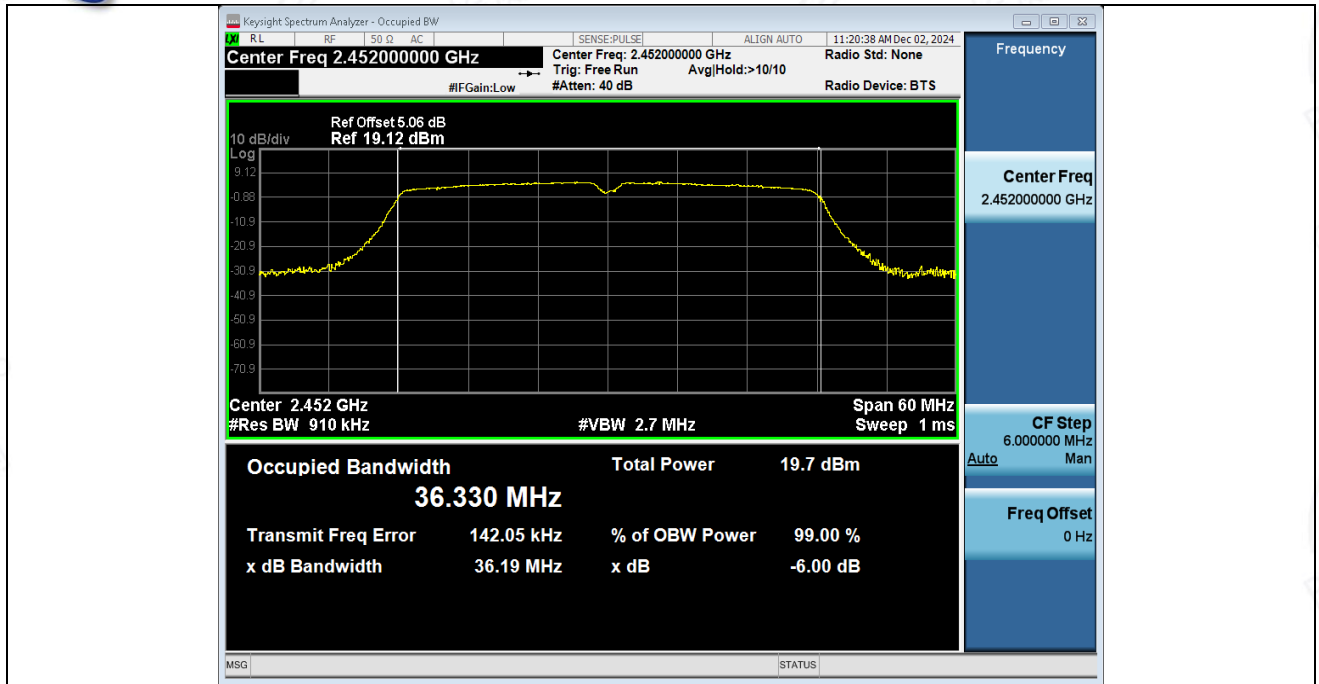








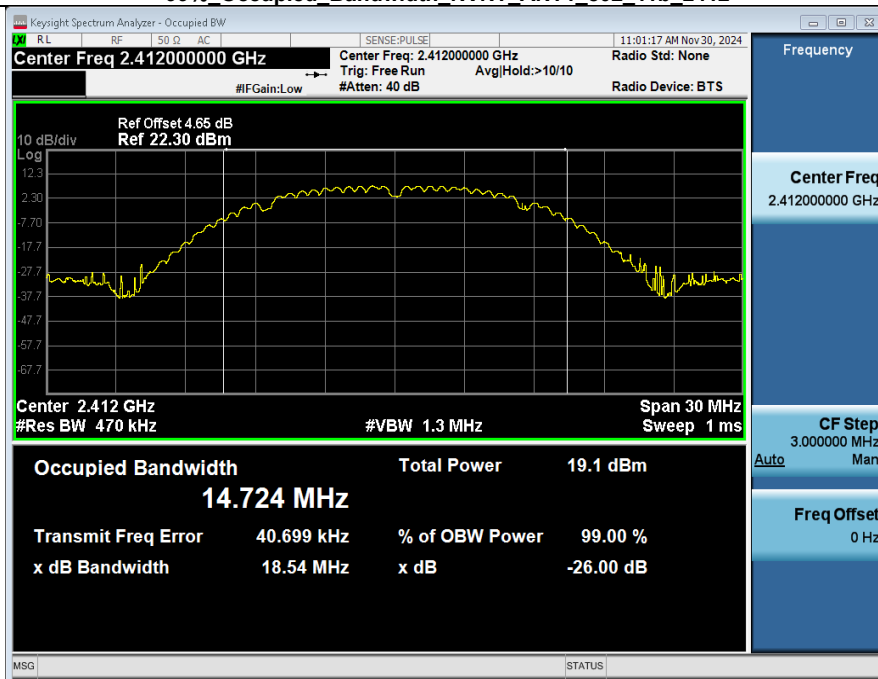




2. 99% Occupied Bandwidth

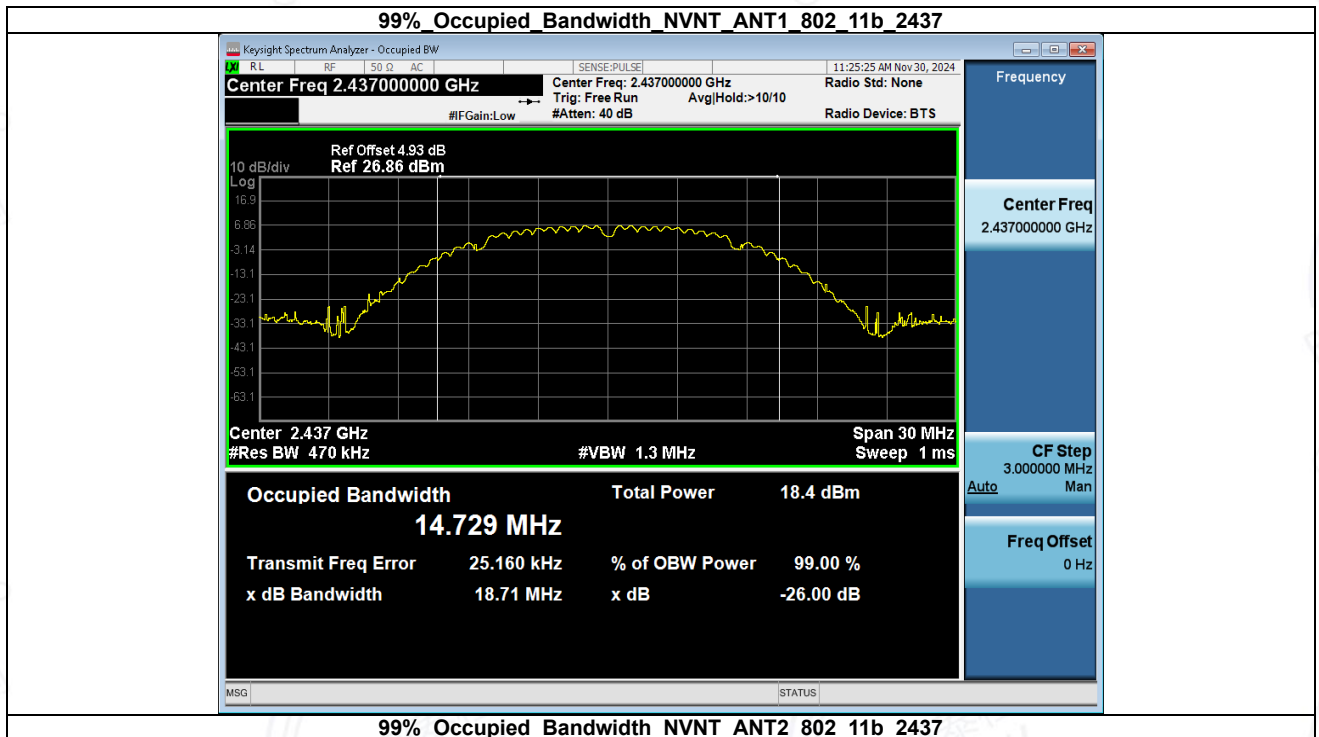
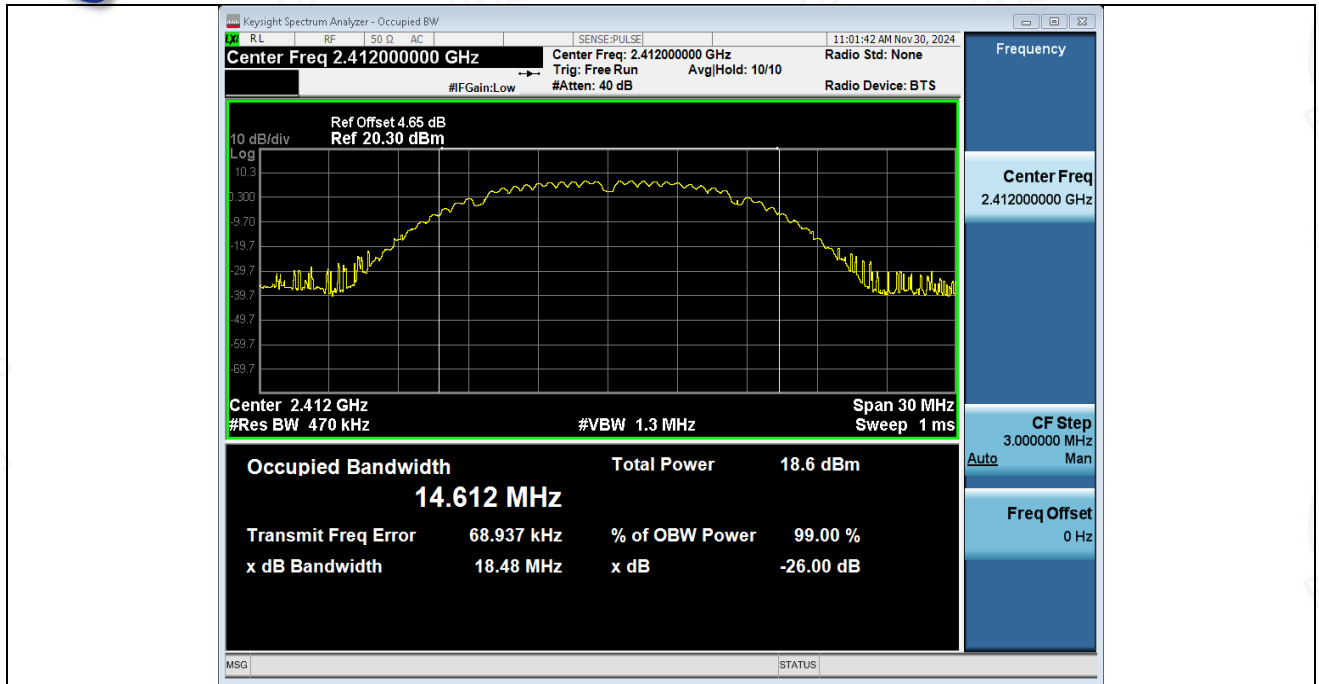
Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	14.724
NVNT	ANT2	802.11b	2412.00	14.612
NVNT	ANT1	802.11b	2437.00	14.729
NVNT	ANT2	802.11b	2437.00	14.670
NVNT	ANT1	802.11b	2462.00	14.793
NVNT	ANT2	802.11b	2462.00	14.680
NVNT	ANT1	802.11g	2412.00	16.887
NVNT	ANT2	802.11g	2412.00	16.664
NVNT	ANT1	802.11g	2437.00	16.846
NVNT	ANT2	802.11g	2437.00	16.687
NVNT	ANT1	802.11g	2462.00	16.909
NVNT	ANT2	802.11g	2462.00	16.659
NVNT	ANT1	802.11n(HT20)	2412.00	18.066
NVNT	ANT2	802.11n(HT20)	2412.00	18.082
NVNT	ANT1	802.11n(HT20)	2437.00	17.994
NVNT	ANT2	802.11n(HT20)	2437.00	18.115
NVNT	ANT1	802.11n(HT20)	2462.00	18.147
NVNT	ANT2	802.11n(HT20)	2462.00	18.160
NVNT	ANT1	802.11n(HT40)	2422.00	36.433
NVNT	ANT2	802.11n(HT40)	2422.00	36.561
NVNT	ANT1	802.11n(HT40)	2437.00	36.416
NVNT	ANT2	802.11n(HT40)	2437.00	36.558
NVNT	ANT1	802.11n(HT40)	2452.00	36.320
NVNT	ANT2	802.11n(HT40)	2452.00	36.332

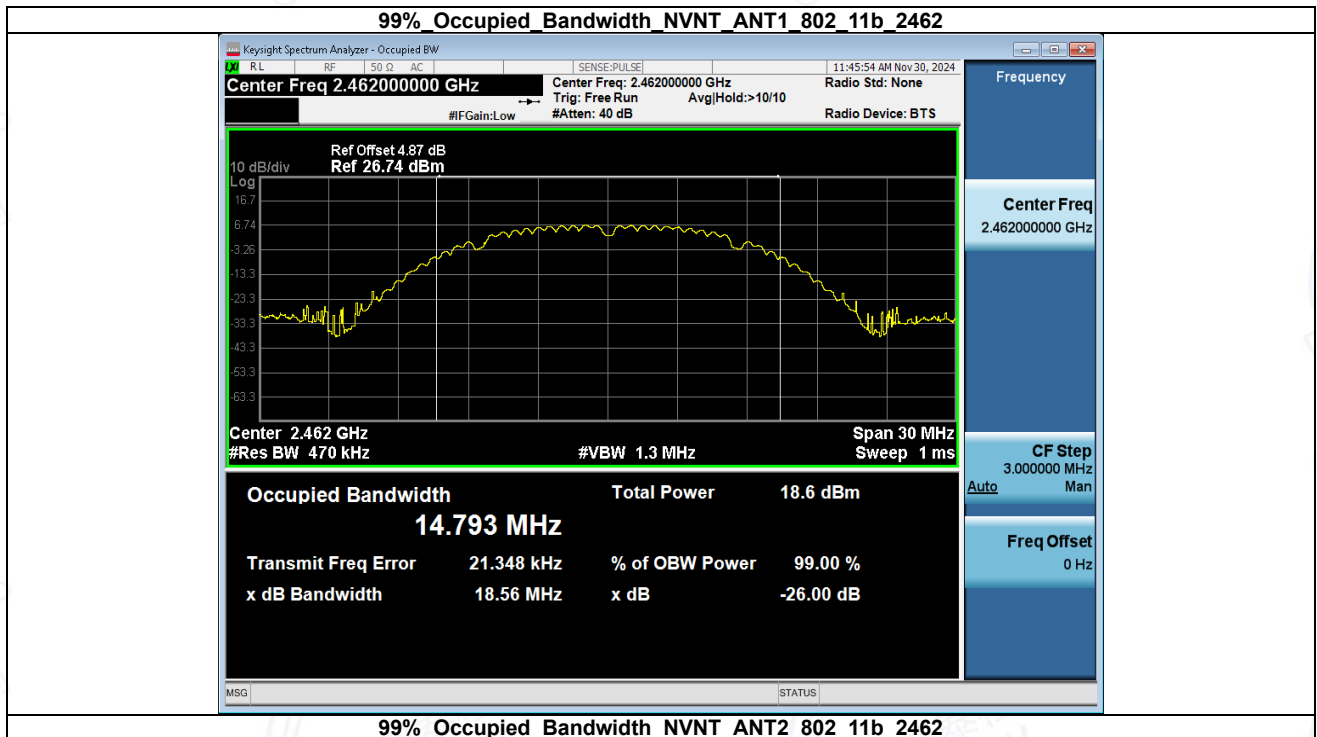
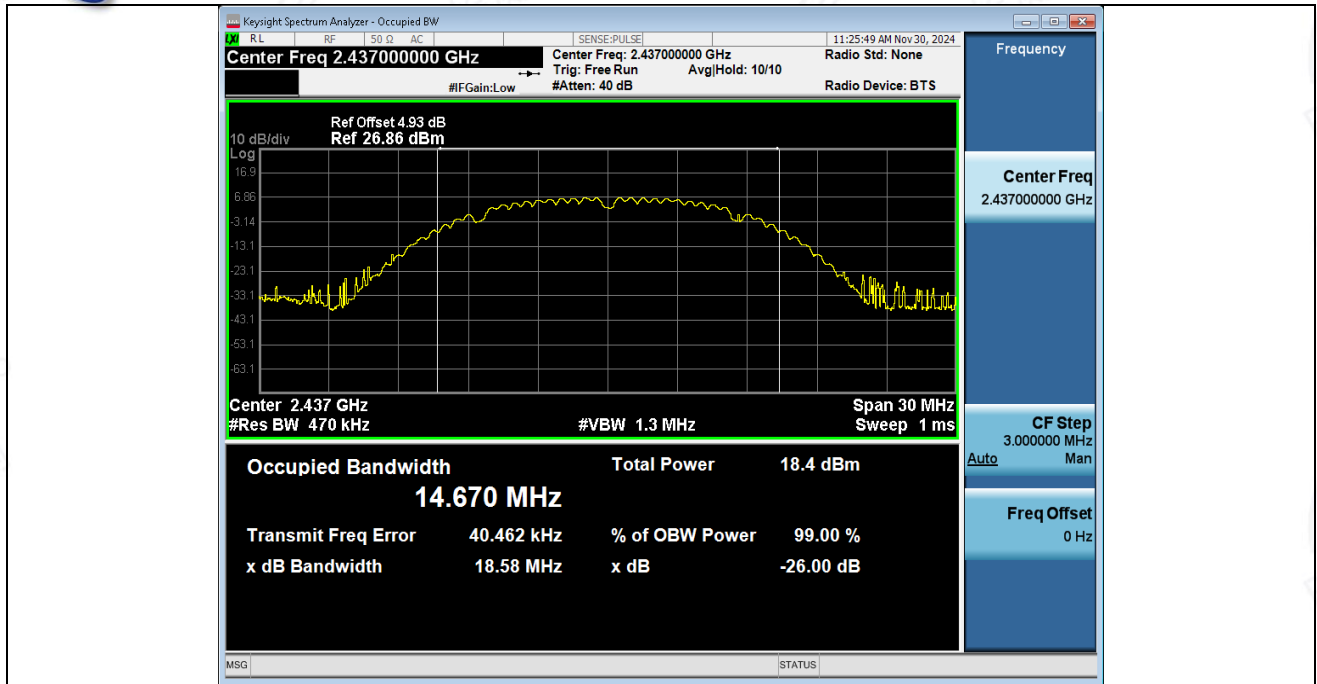
99% Occupied Bandwidth NVNT ANT1 802_11b 2412

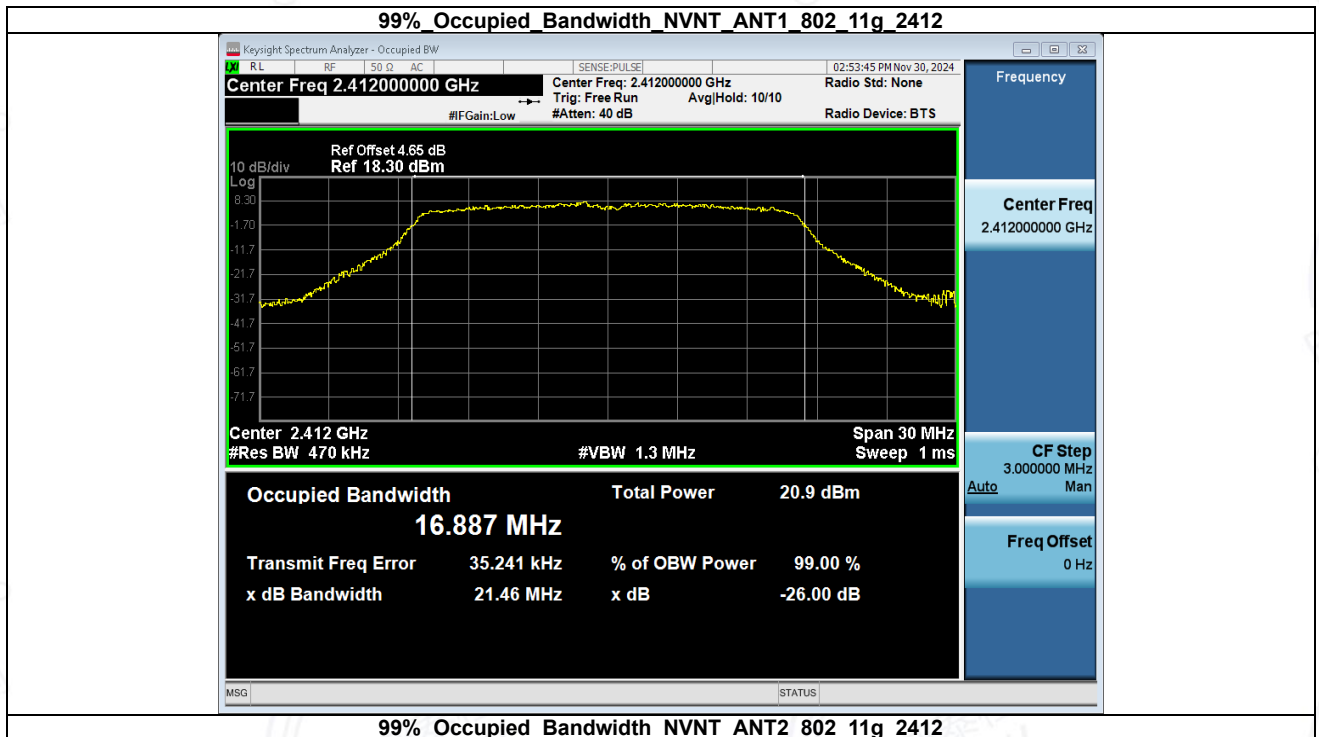
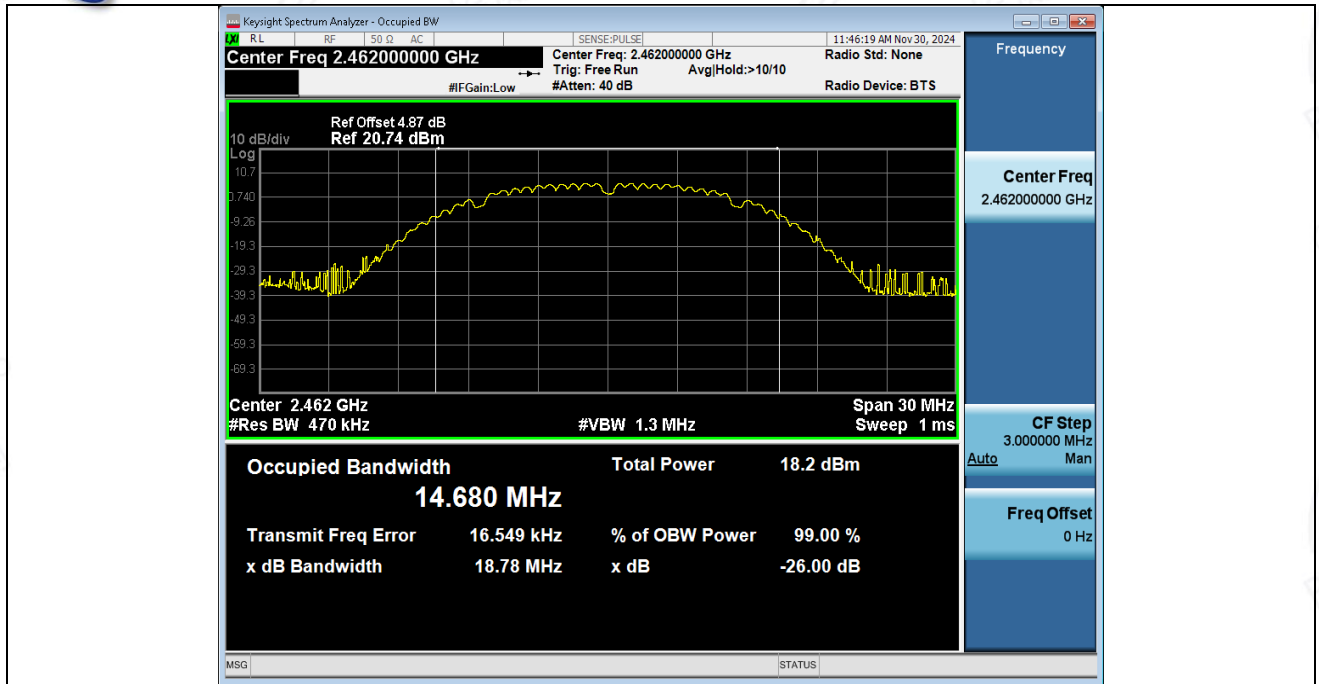


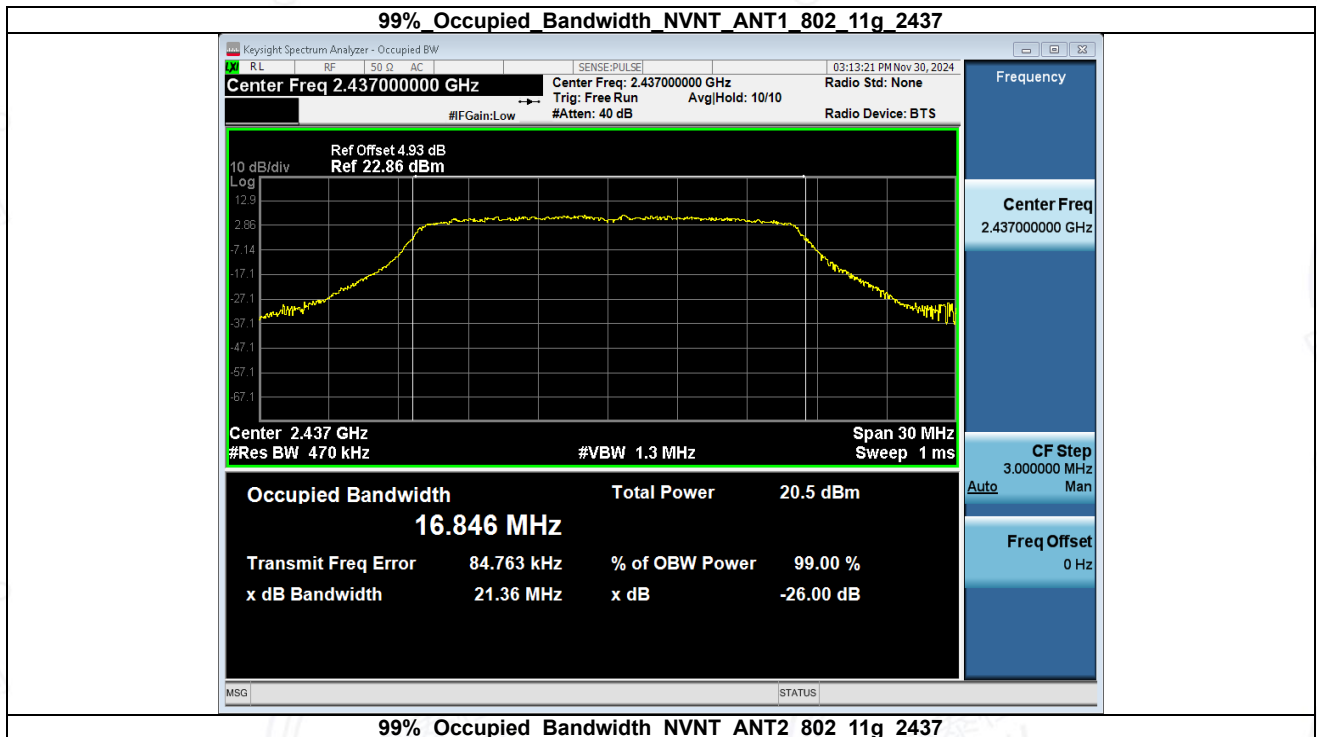
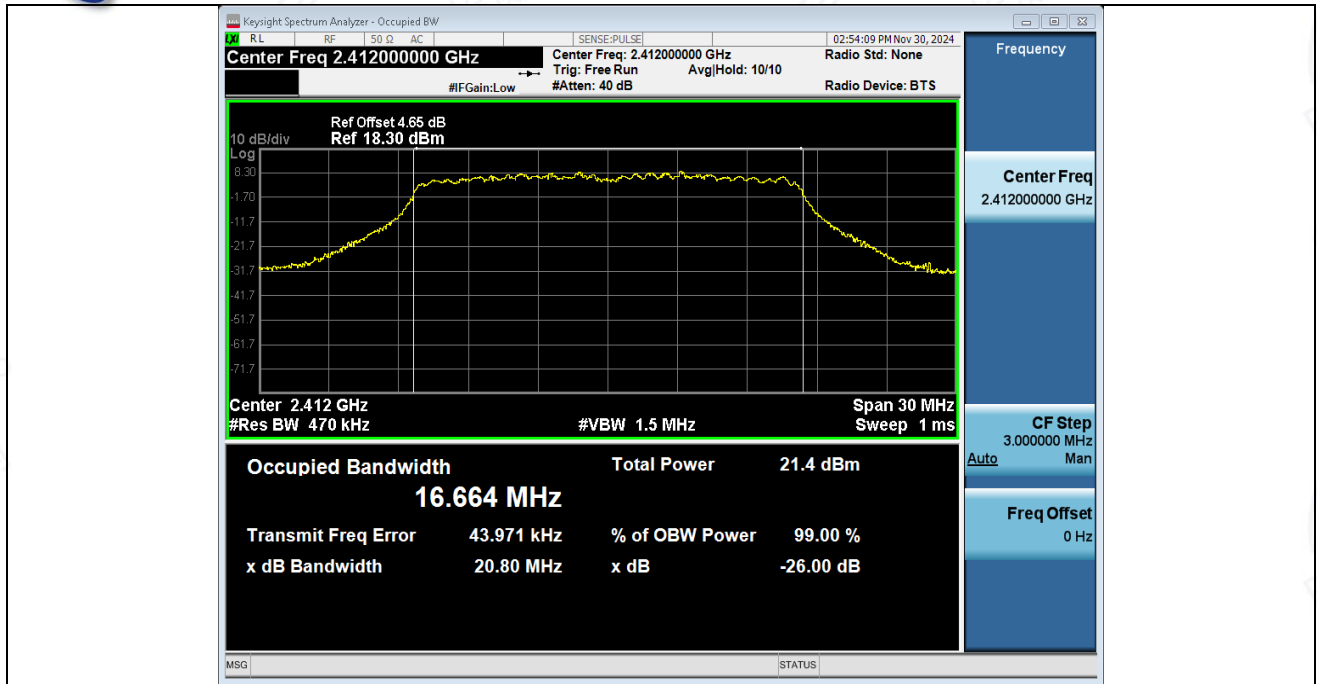
99% Occupied Bandwidth NVNT ANT2 802_11b 2412

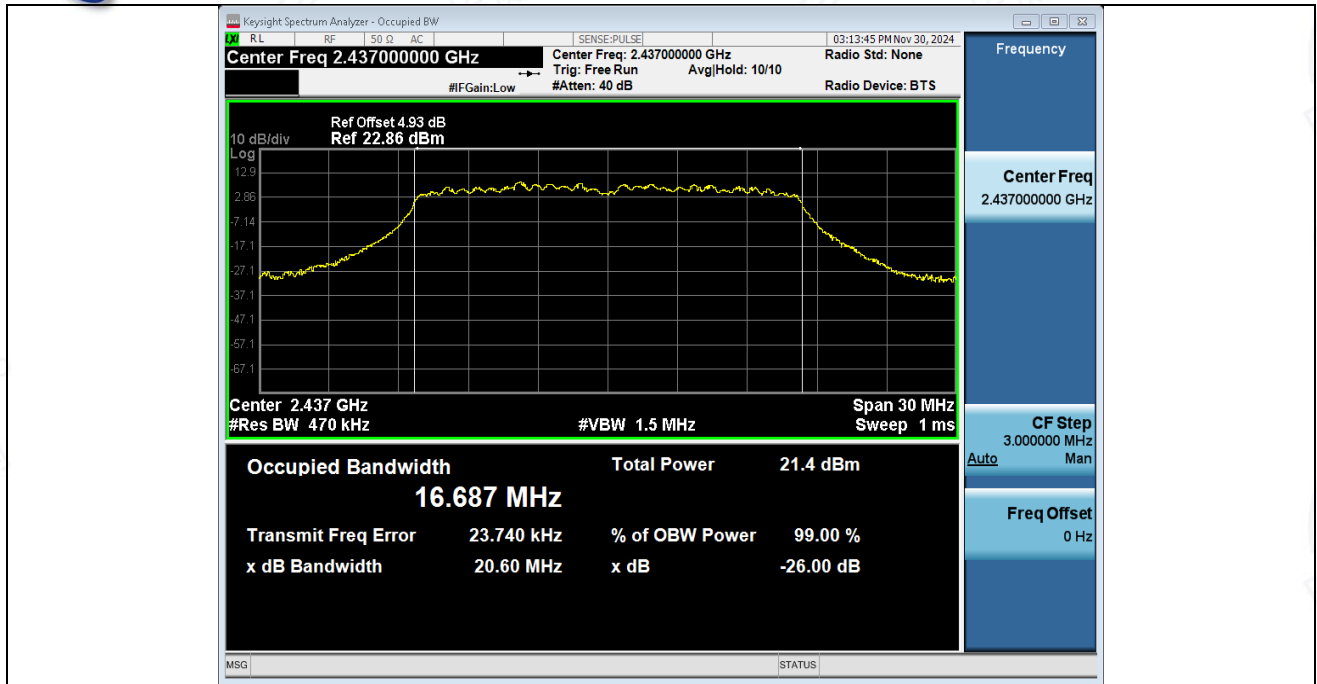


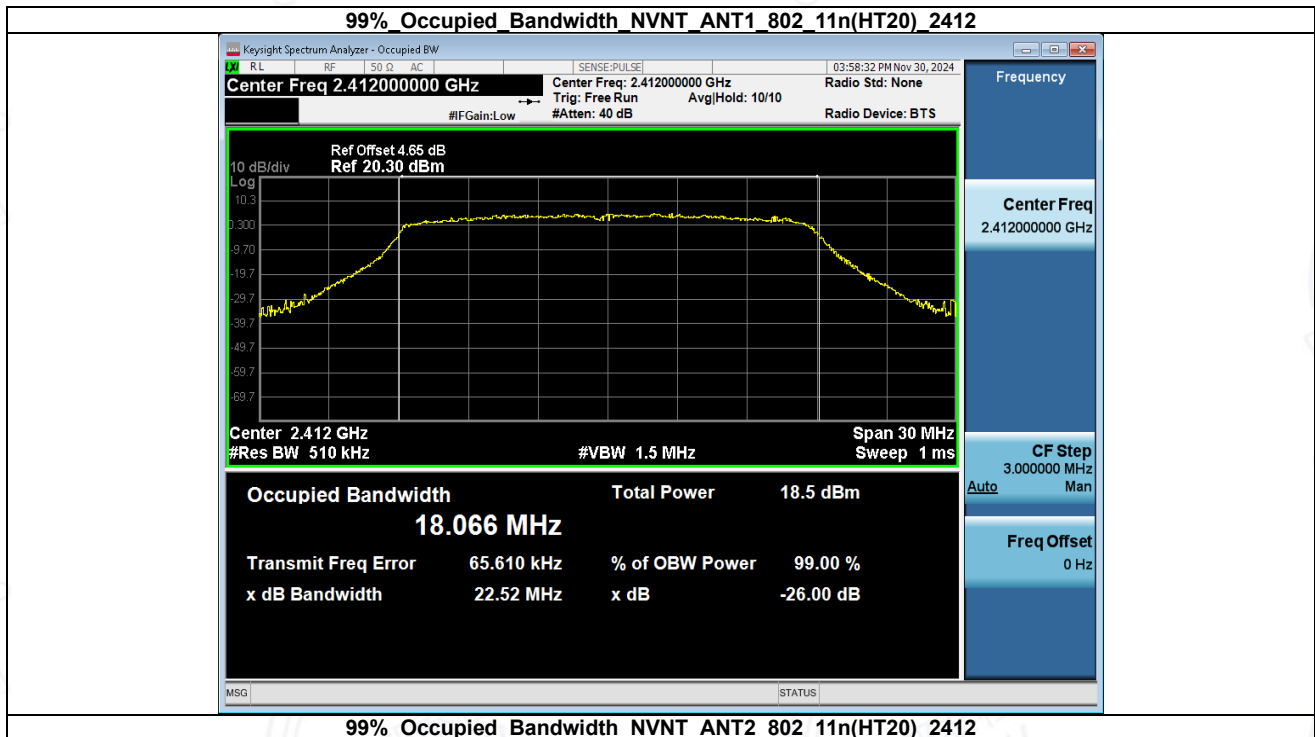
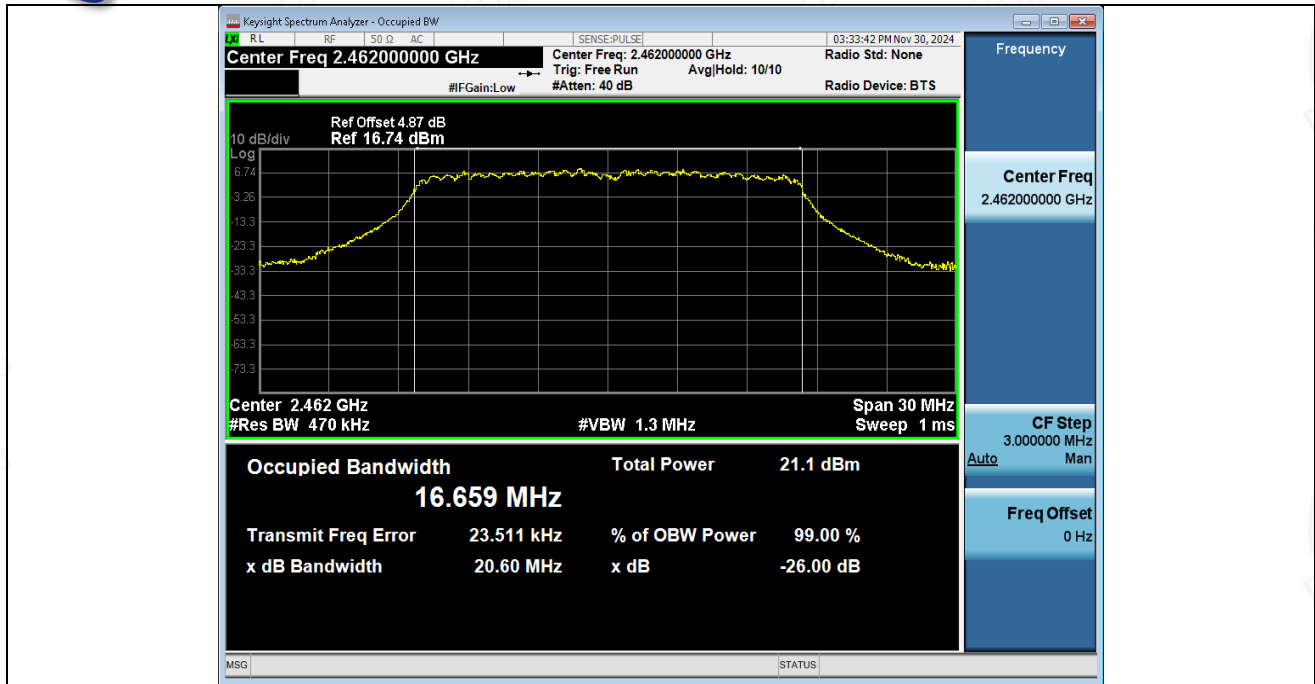


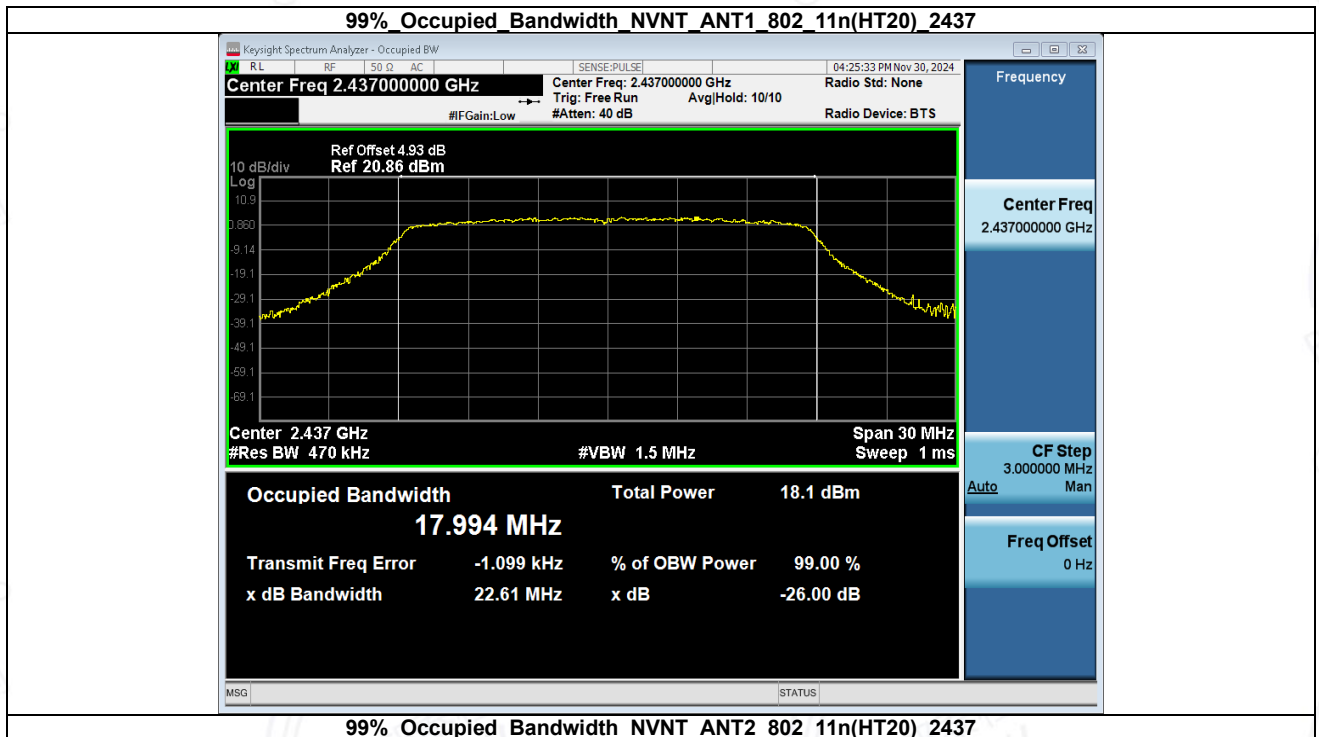


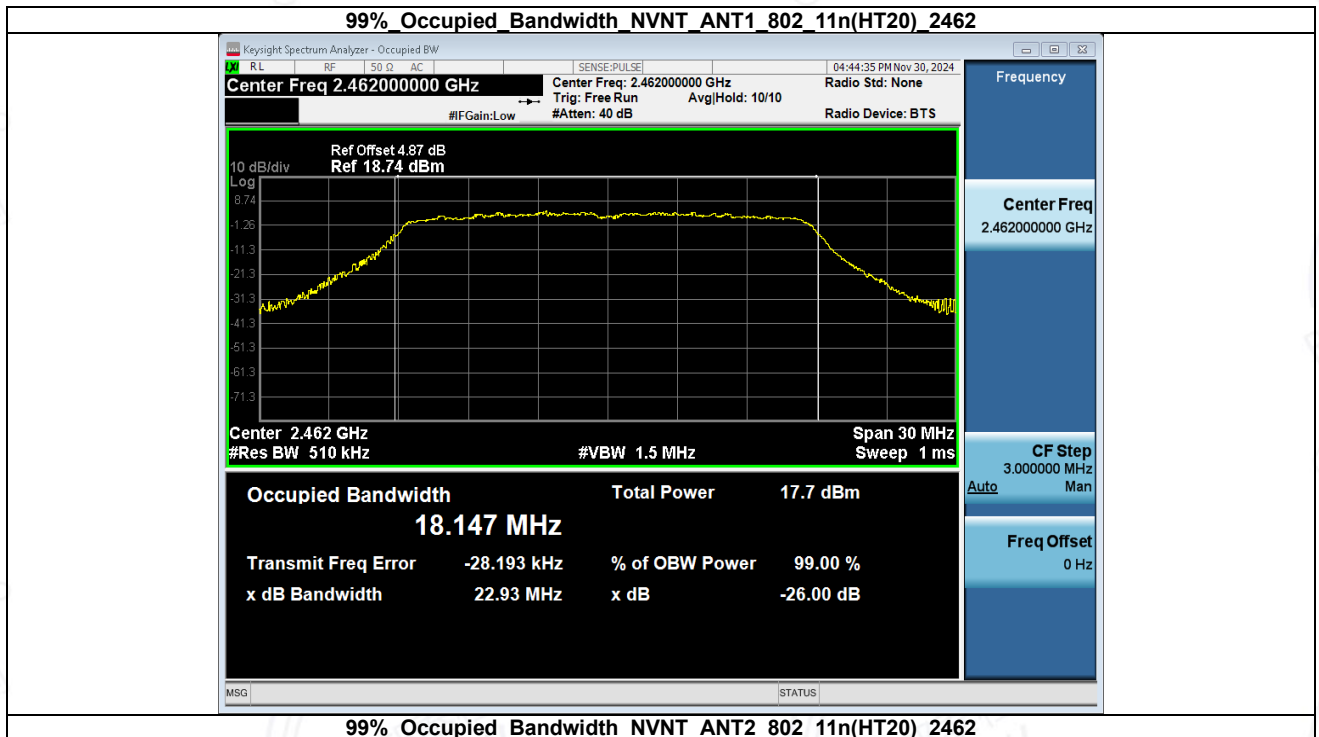
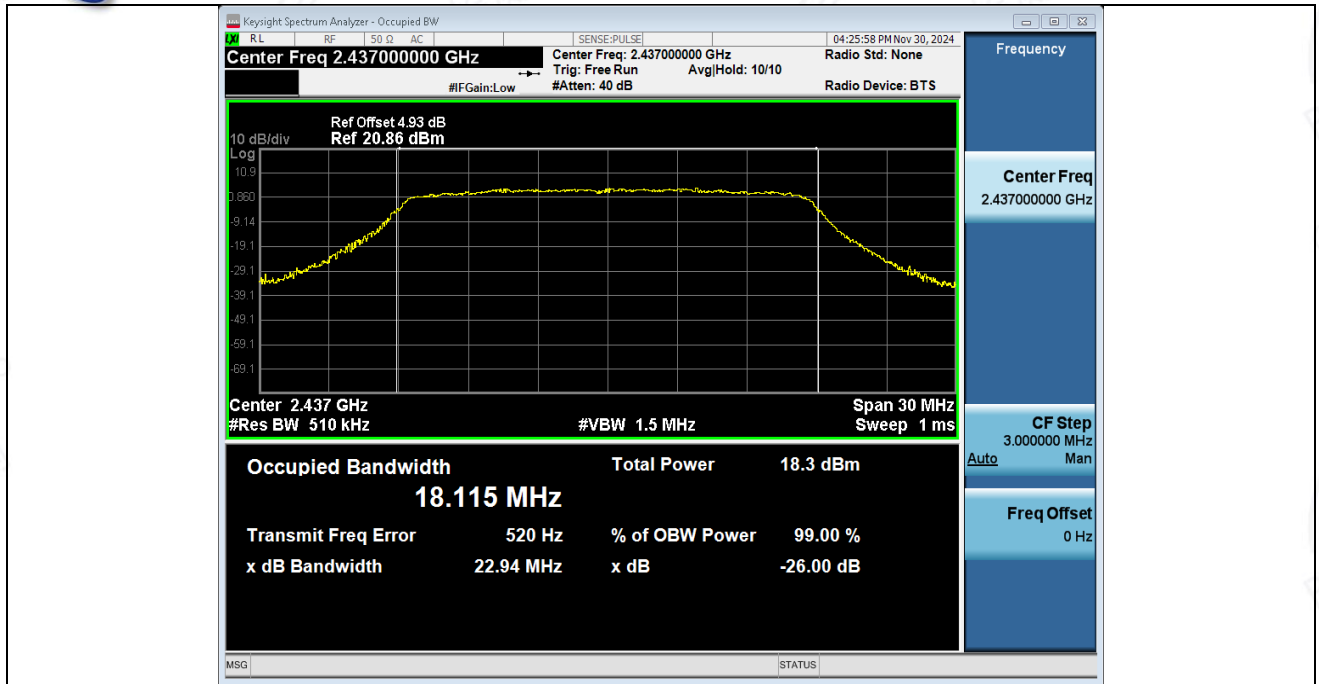


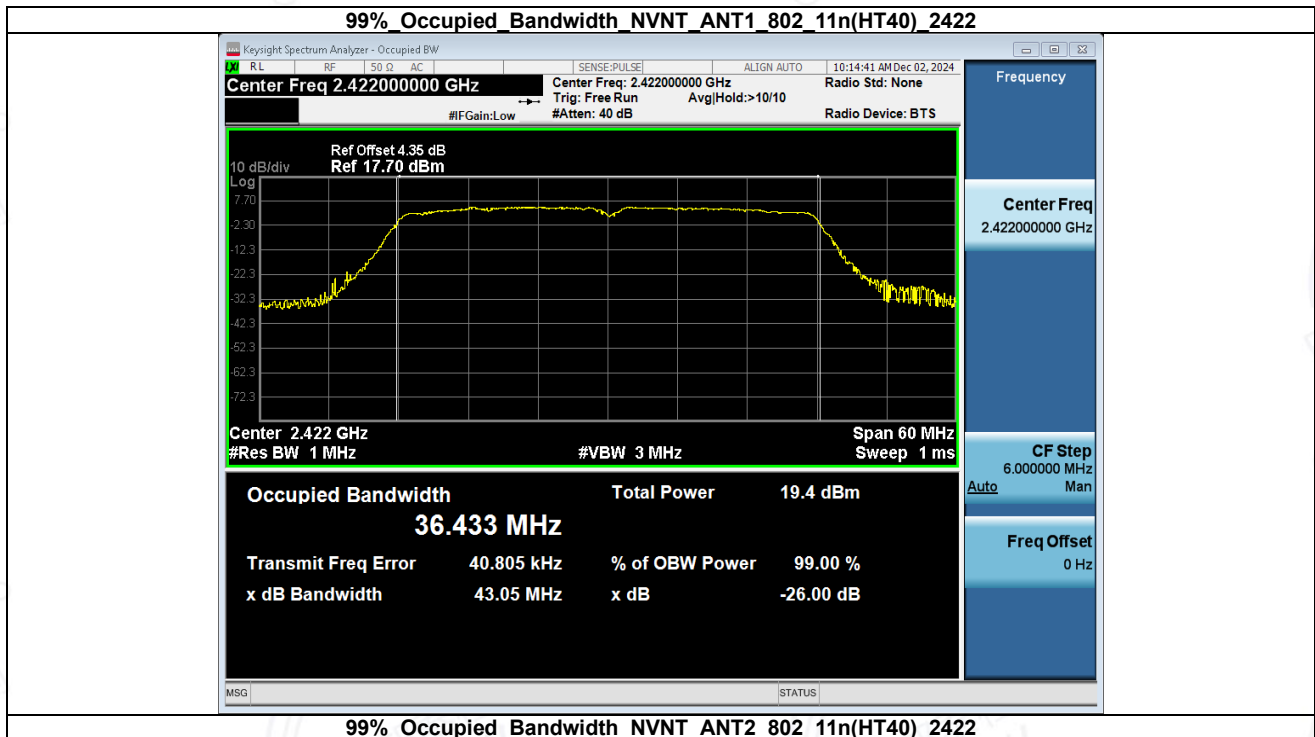
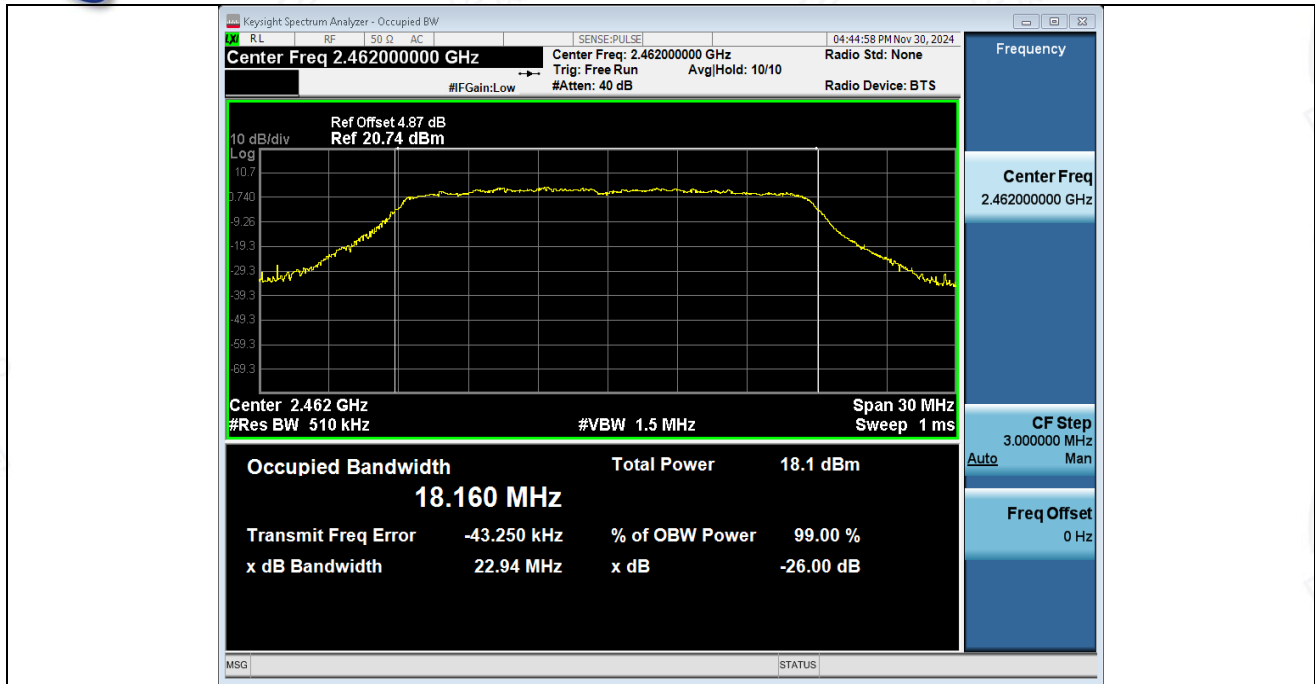


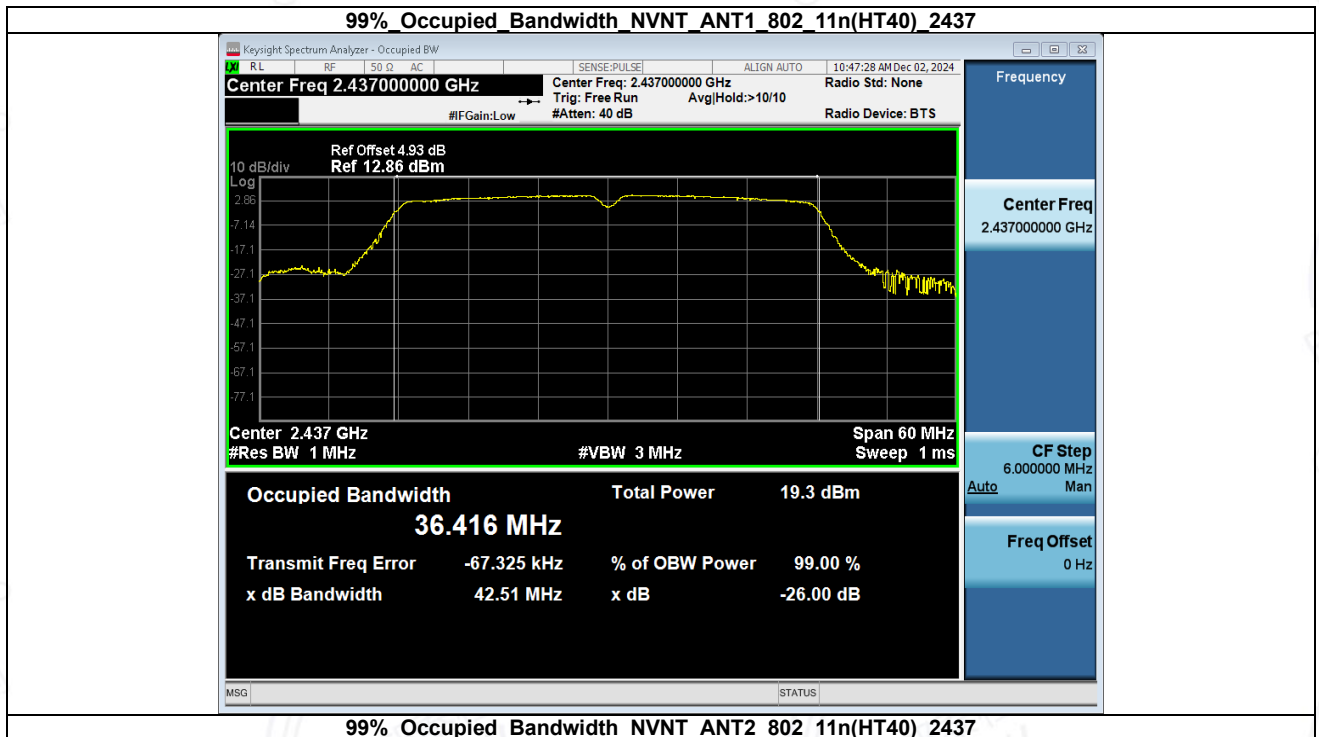
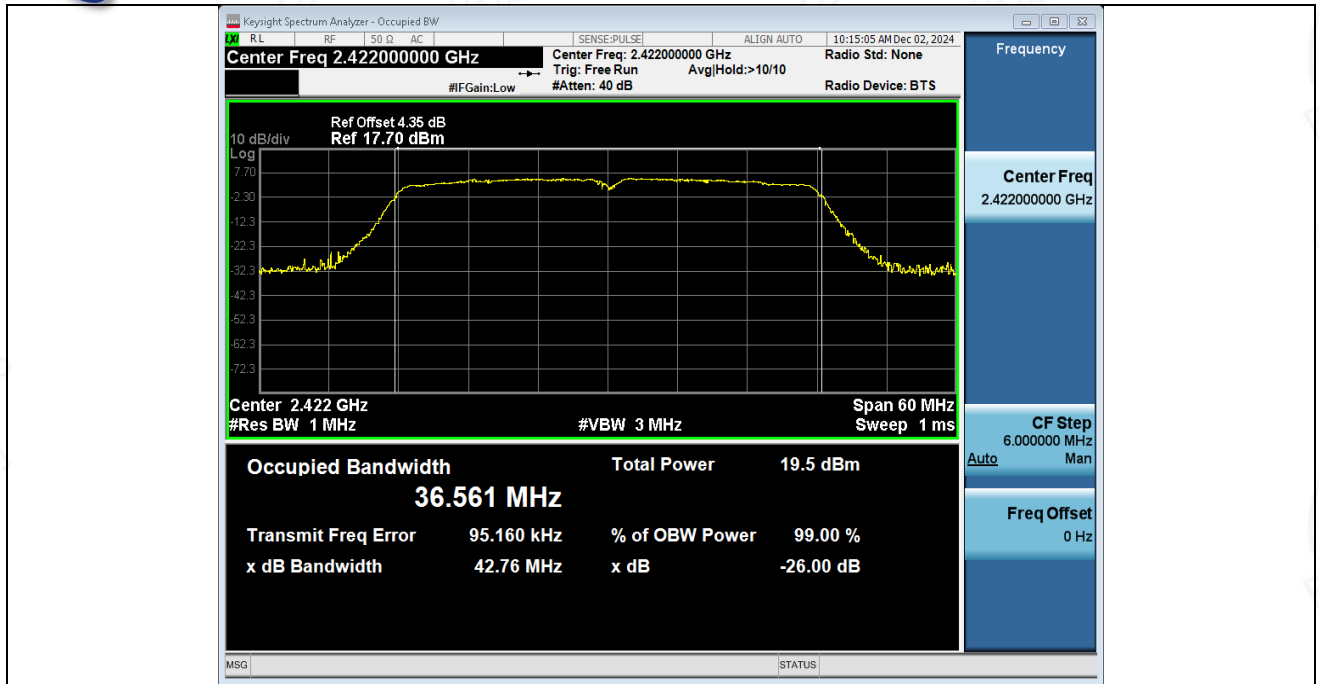


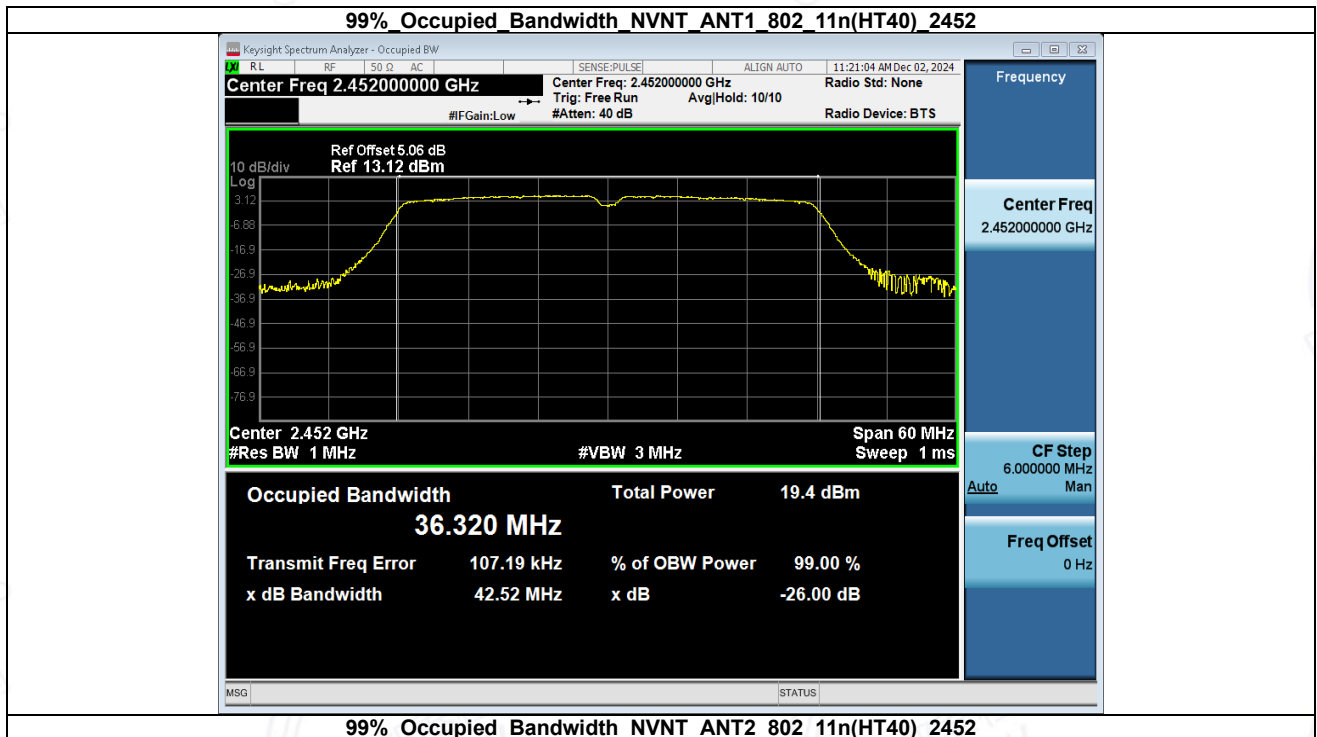
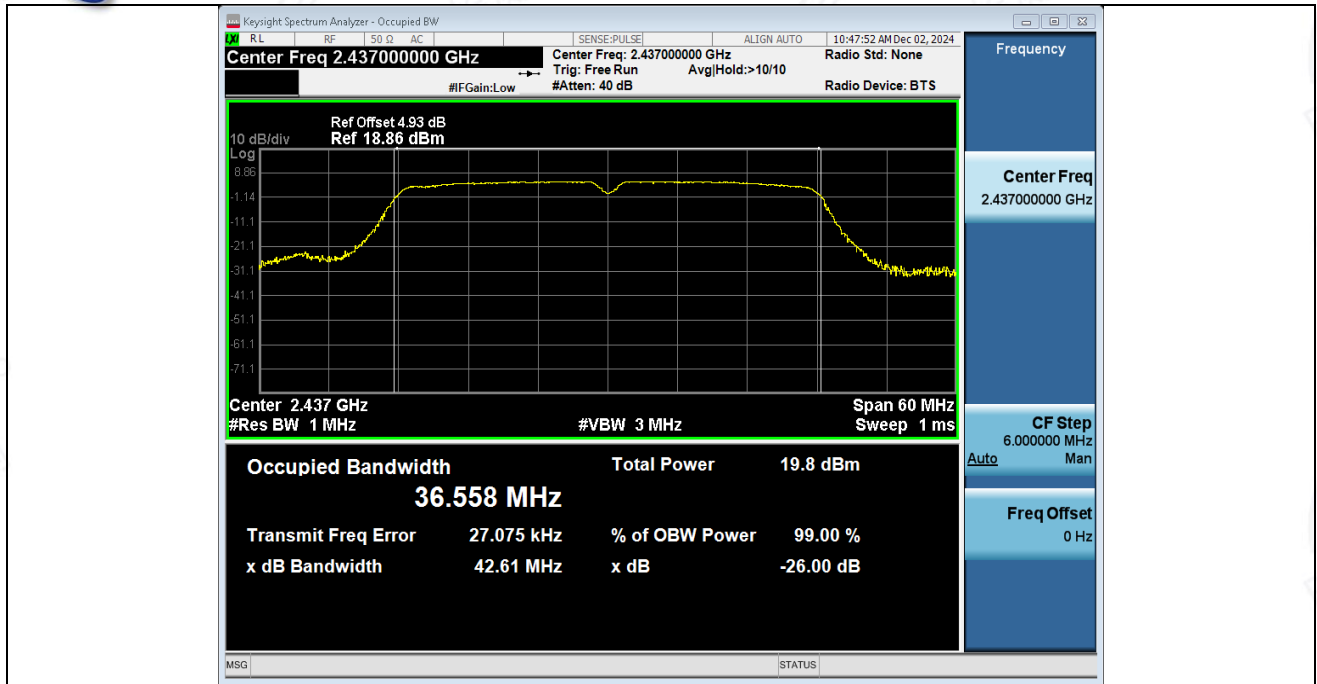


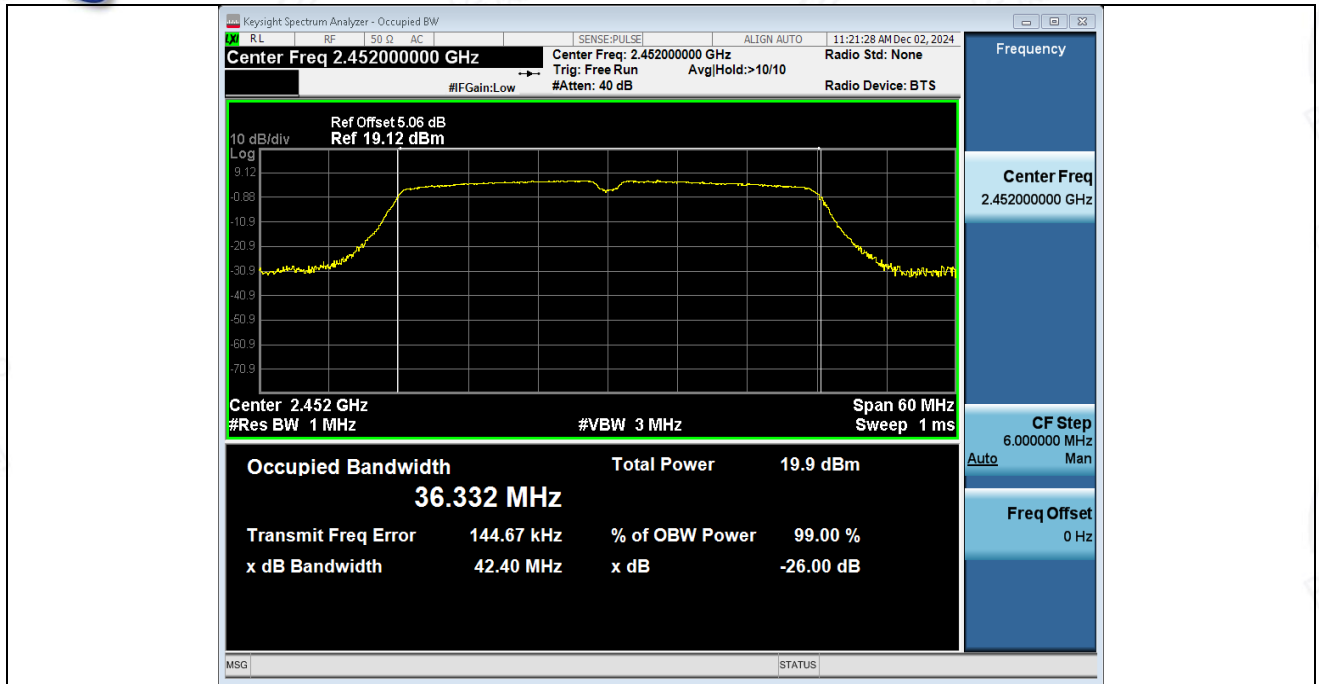






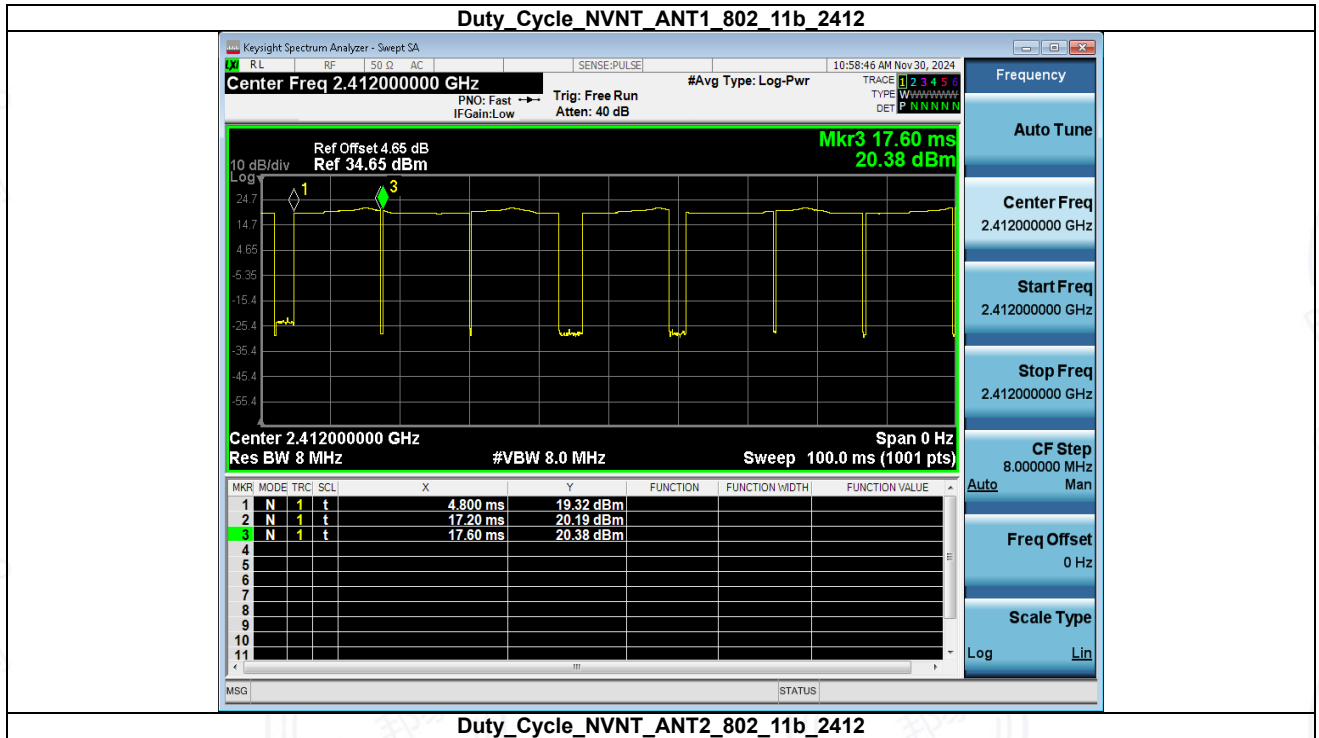


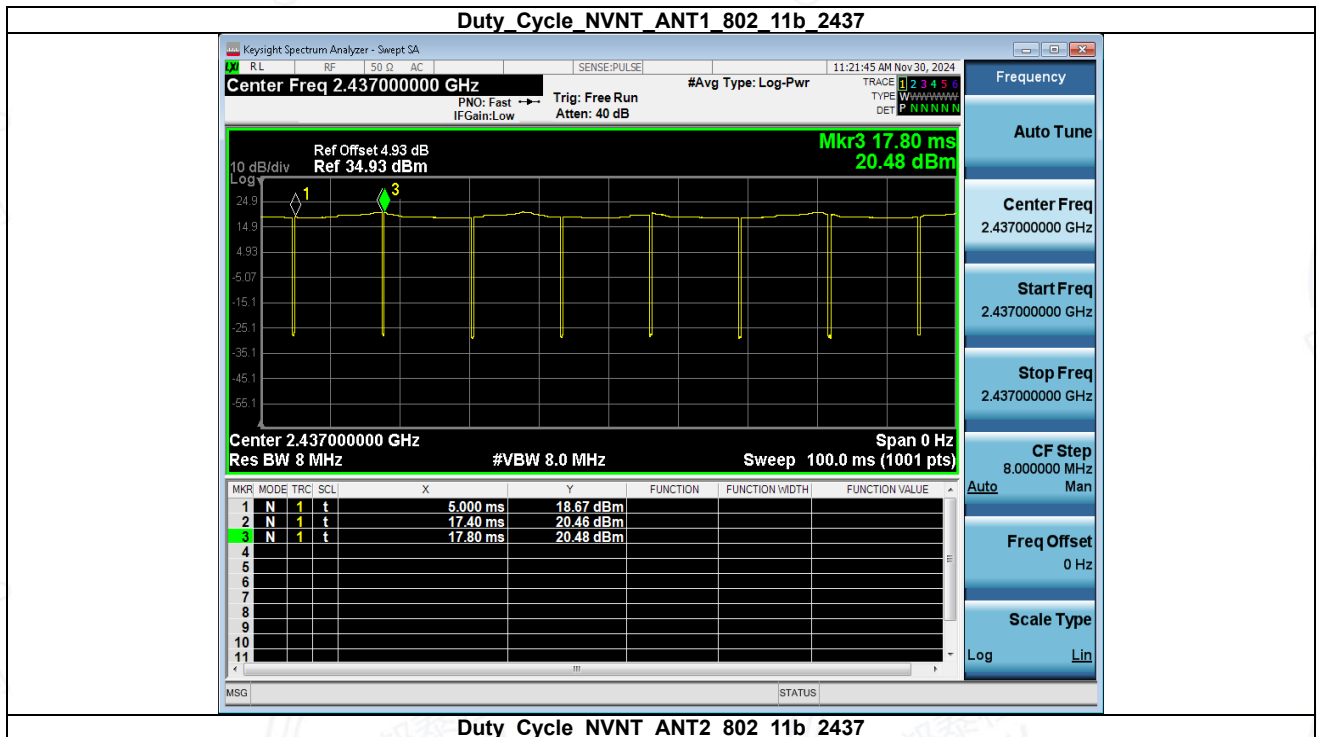
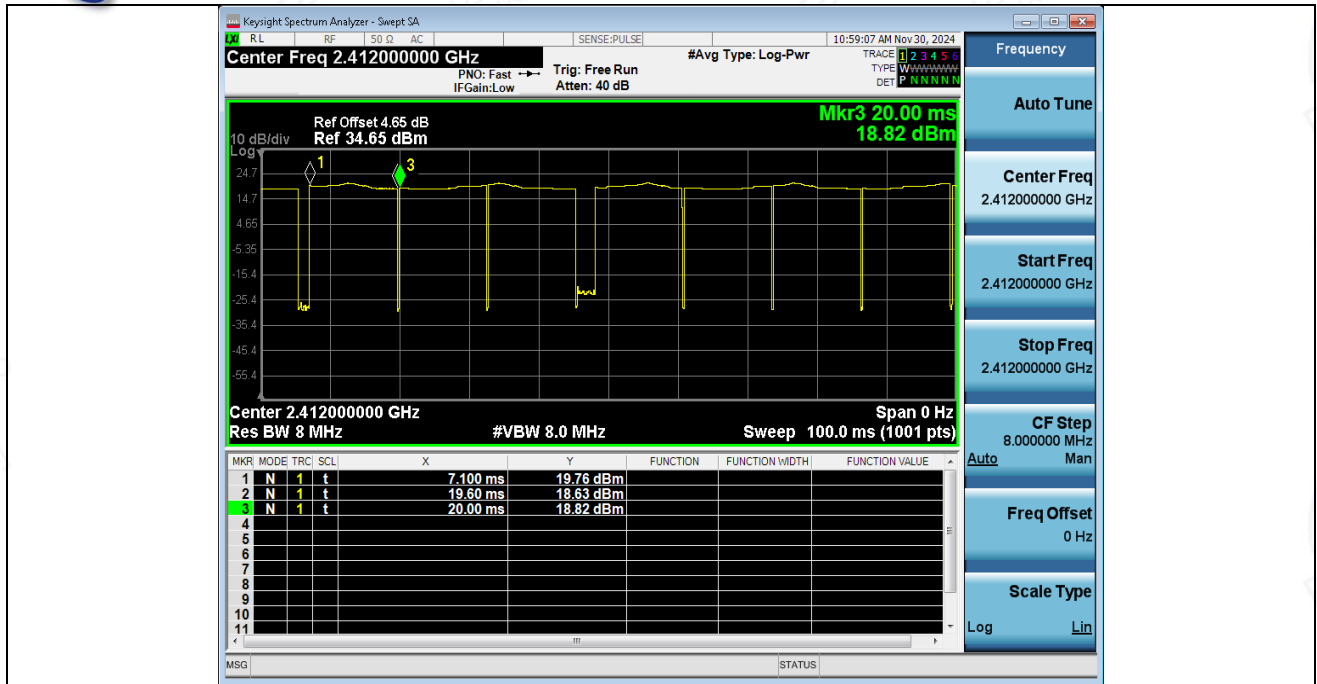


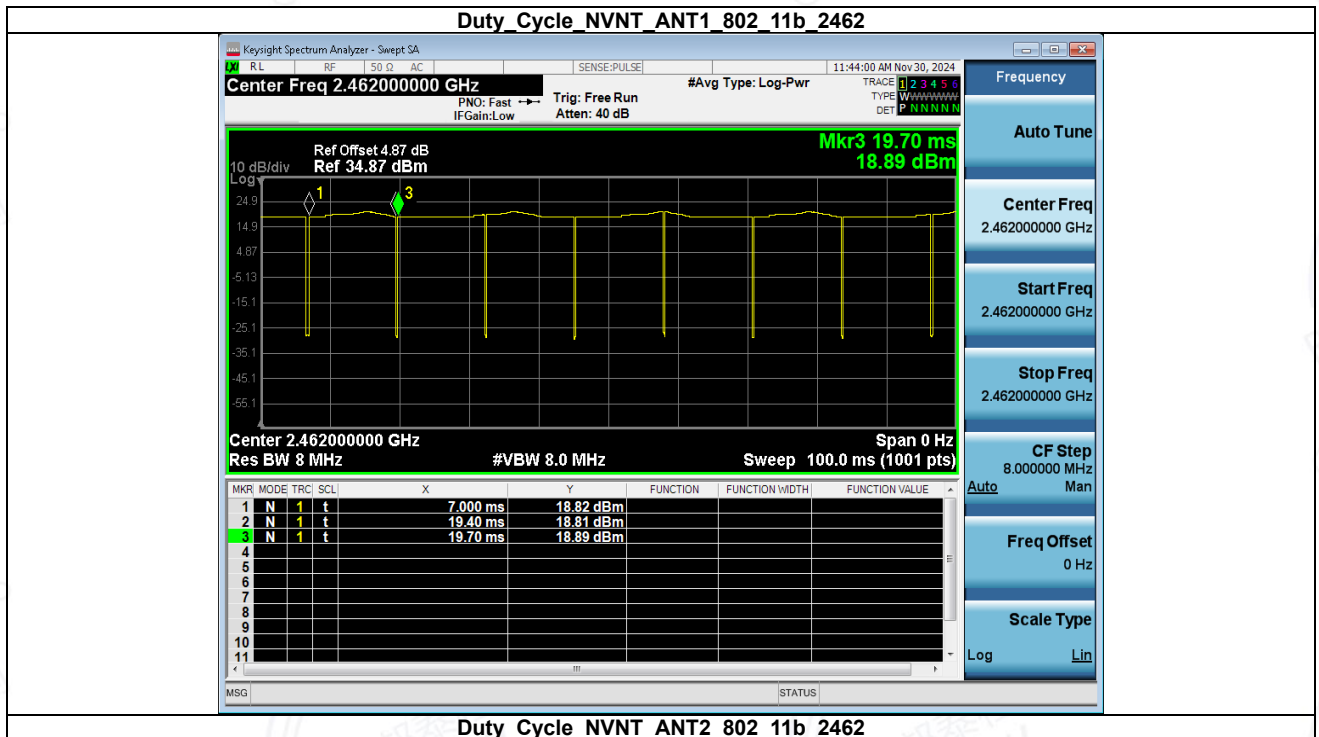
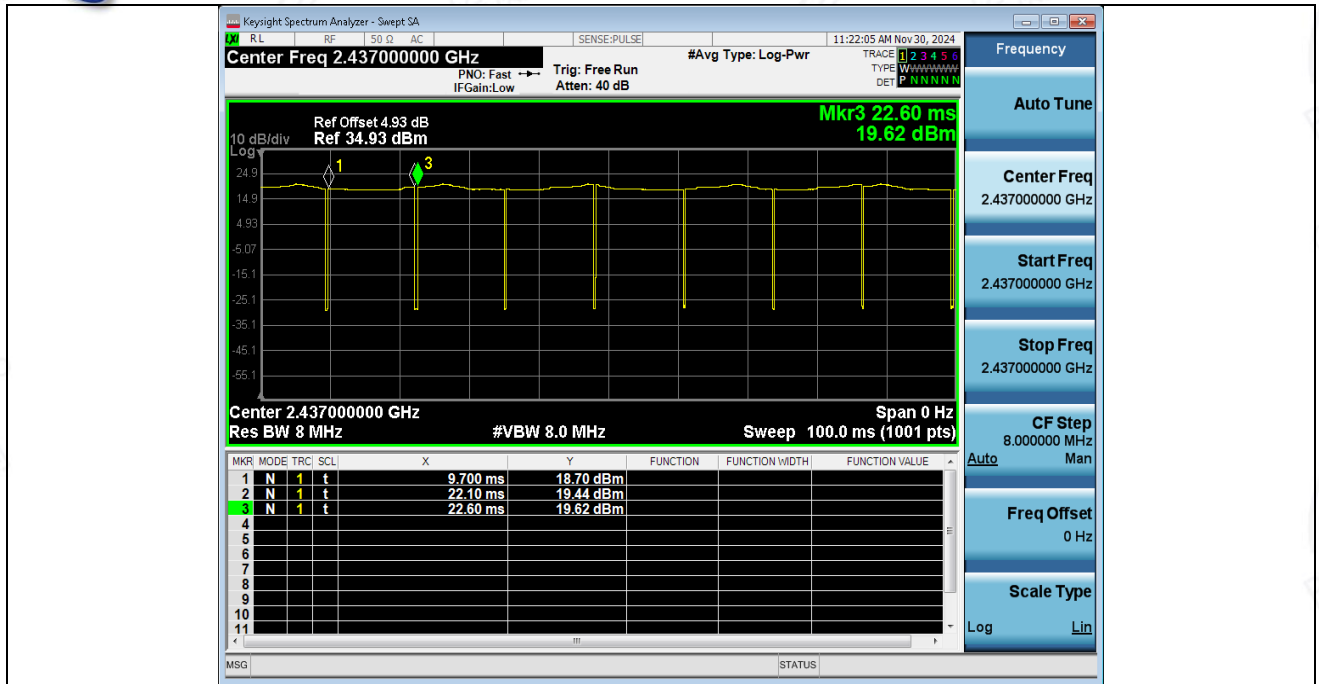


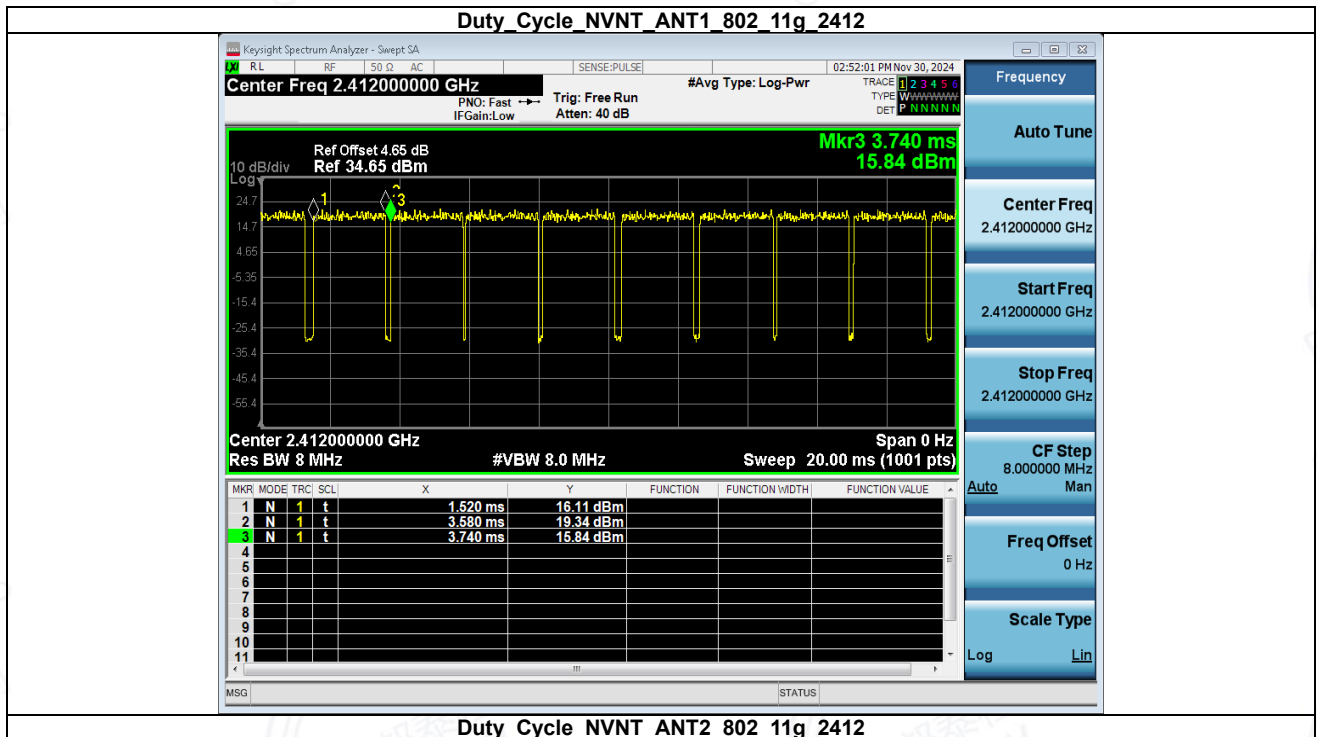
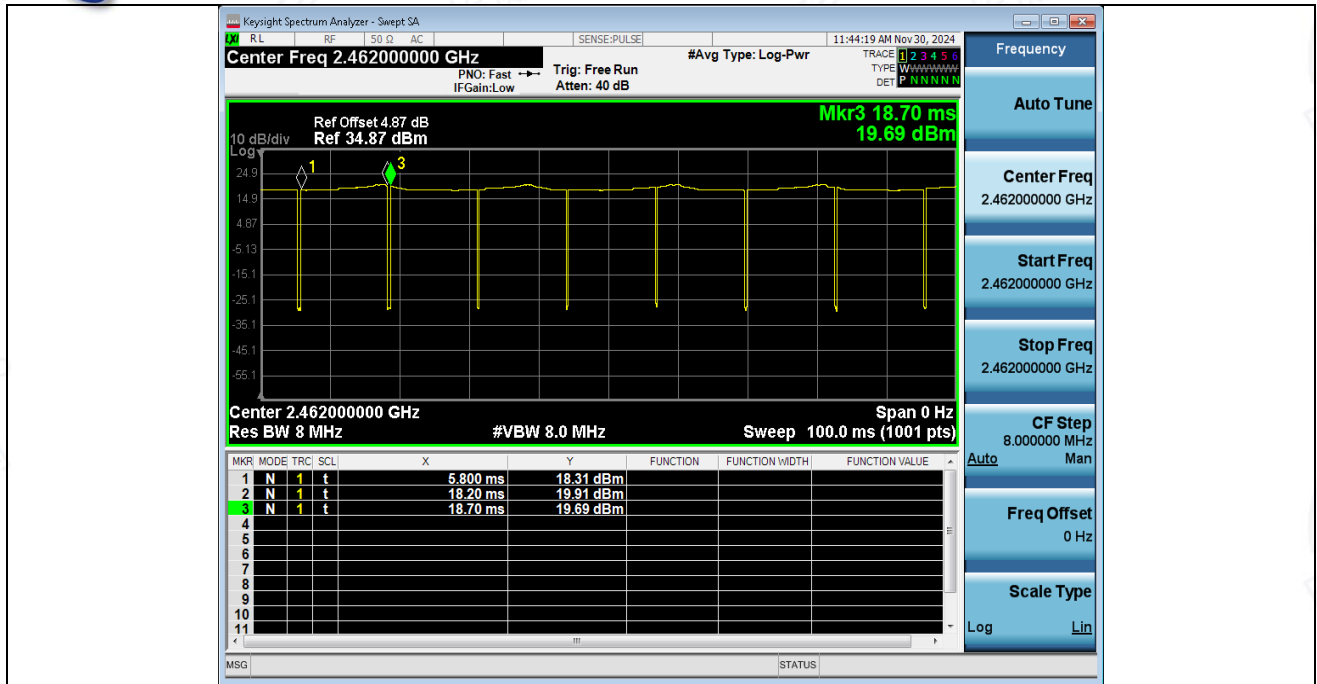
3. Duty Cycle

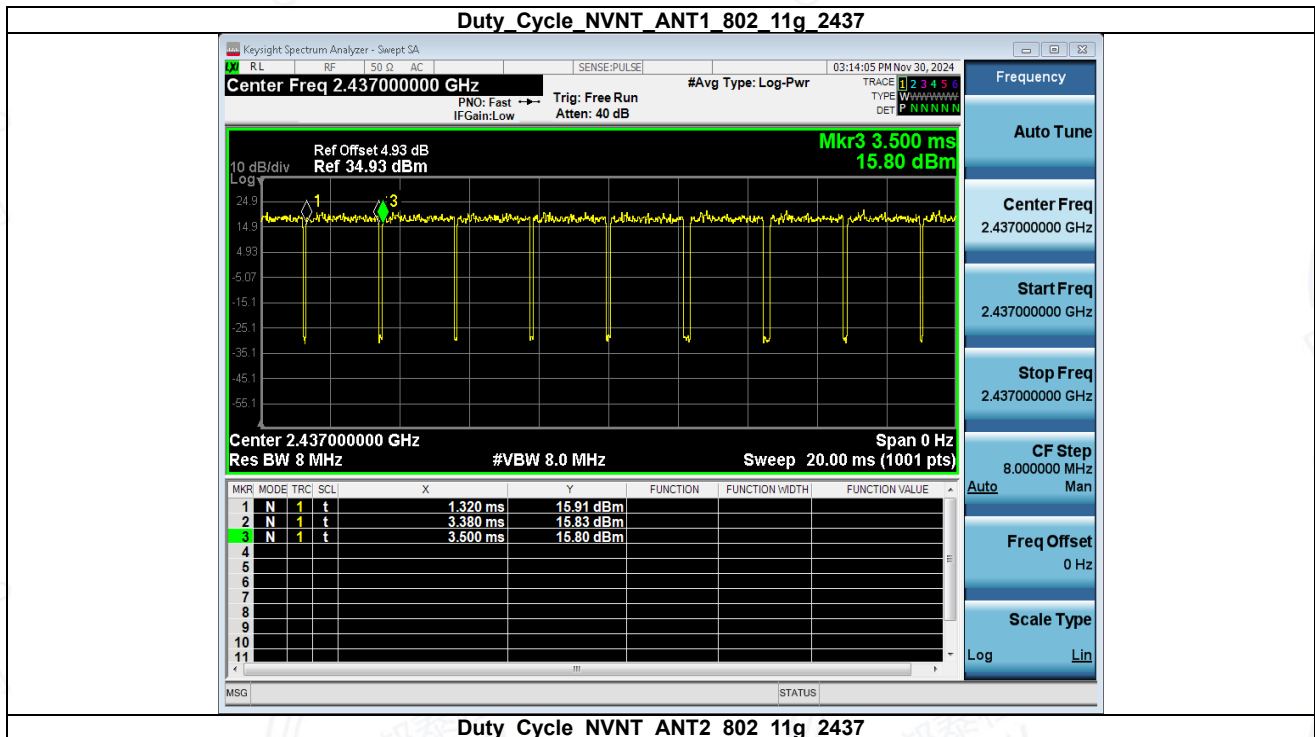
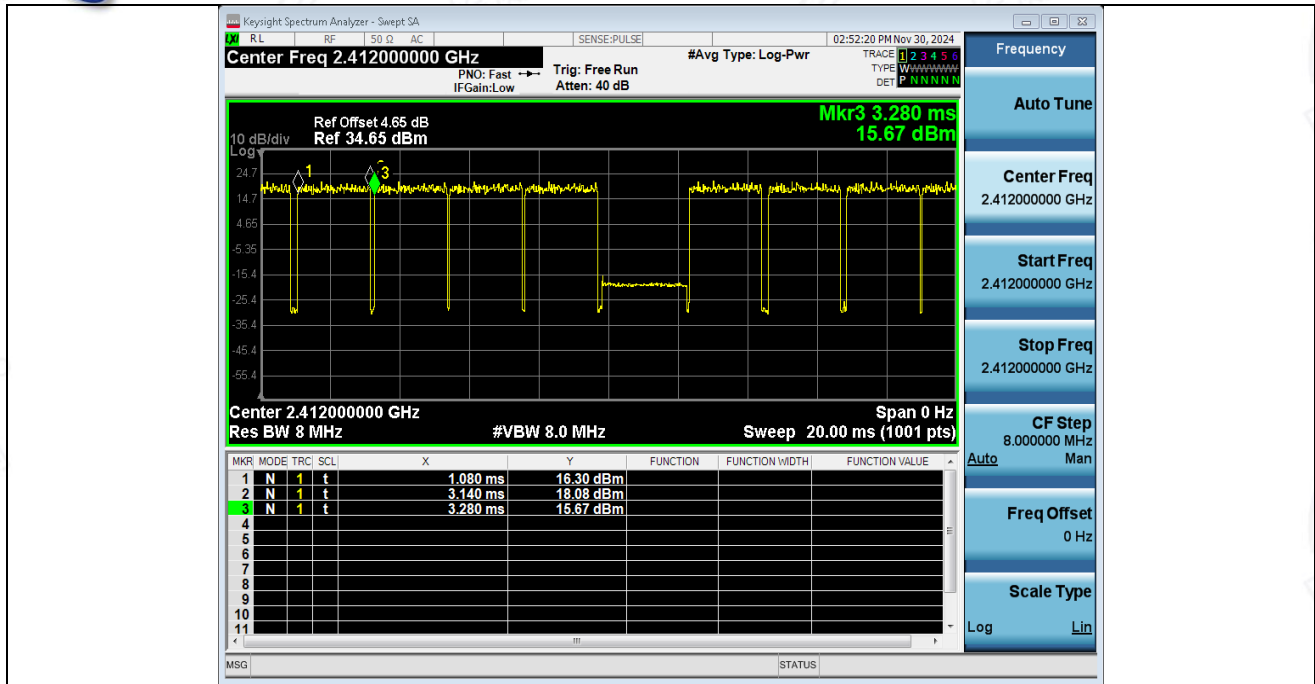
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	97.66	0.10
NVNT	ANT2	802.11b	2412.00	97.67	0.10
NVNT	ANT1	802.11b	2437.00	97.66	0.10
NVNT	ANT2	802.11b	2437.00	96.90	0.14
NVNT	ANT1	802.11b	2462.00	98.43	0.00
NVNT	ANT2	802.11b	2462.00	96.90	0.14
NVNT	ANT1	802.11g	2412.00	93.69	0.28
NVNT	ANT2	802.11g	2412.00	94.55	0.24
NVNT	ANT1	802.11g	2437.00	95.41	0.20
NVNT	ANT2	802.11g	2437.00	93.75	0.28
NVNT	ANT1	802.11g	2462.00	91.23	0.40
NVNT	ANT2	802.11g	2462.00	92.04	0.36
NVNT	ANT1	802.11n(HT20)	2412.00	95.10	0.22
NVNT	ANT2	802.11n(HT20)	2412.00	90.65	0.43
NVNT	ANT1	802.11n(HT20)	2437.00	96.04	0.18
NVNT	ANT2	802.11n(HT20)	2437.00	91.51	0.39
NVNT	ANT1	802.11n(HT20)	2462.00	92.38	0.34
NVNT	ANT2	802.11n(HT20)	2462.00	94.17	0.26
NVNT	ANT1	802.11n(HT40)	2422.00	85.71	0.67
NVNT	ANT2	802.11n(HT40)	2422.00	81.36	0.90
NVNT	ANT1	802.11n(HT40)	2437.00	88.89	0.51
NVNT	ANT2	802.11n(HT40)	2437.00	90.57	0.43
NVNT	ANT1	802.11n(HT40)	2452.00	84.21	0.75
NVNT	ANT2	802.11n(HT40)	2452.00	90.57	0.43

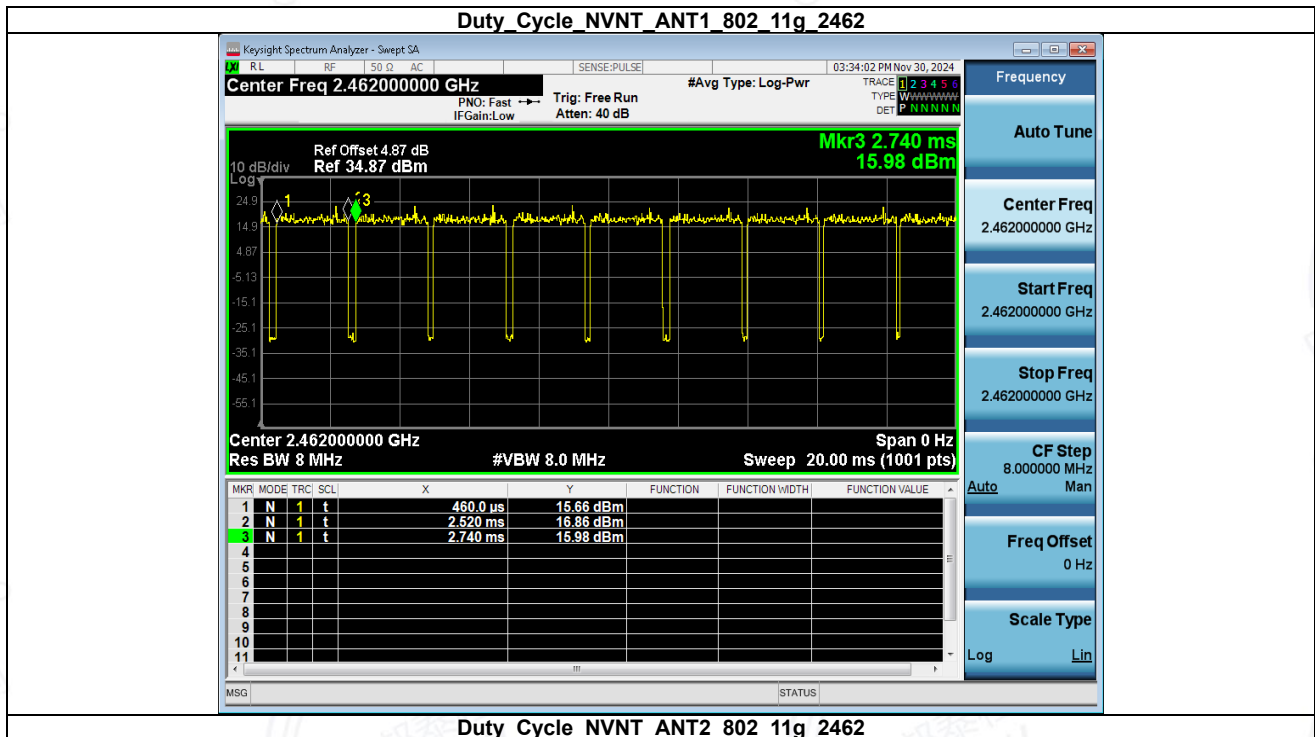
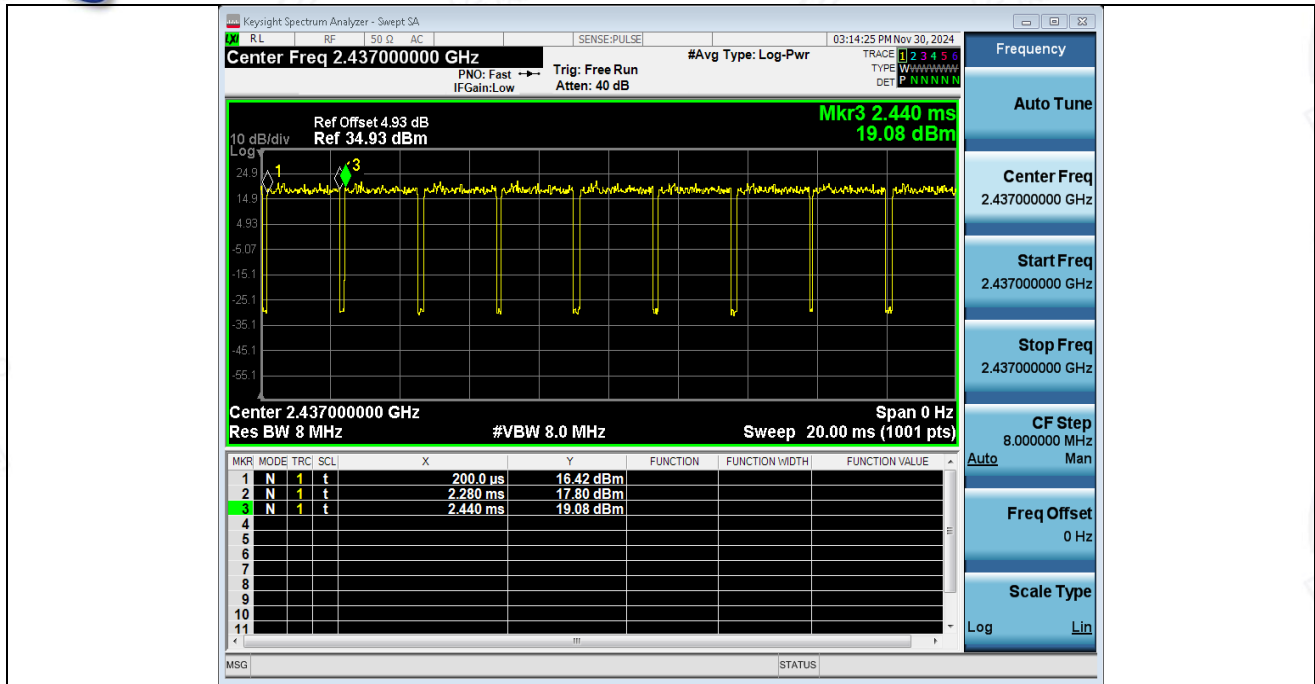


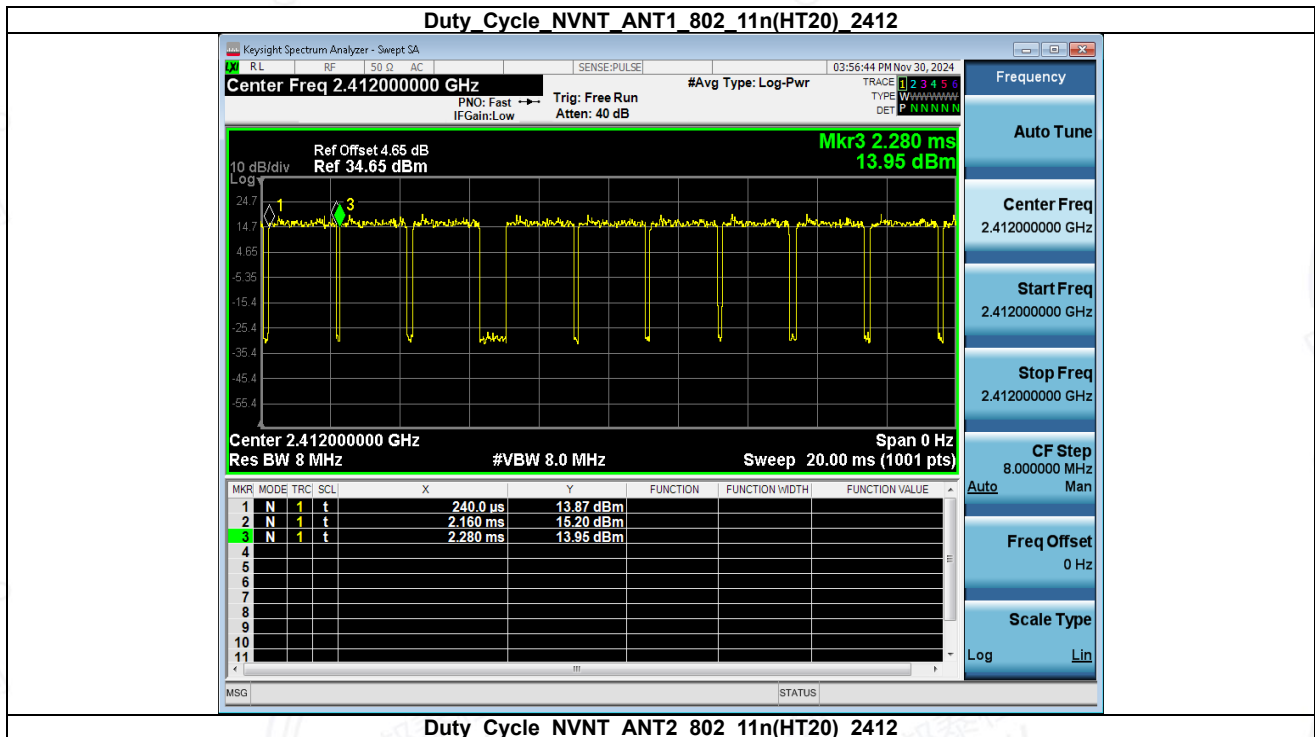
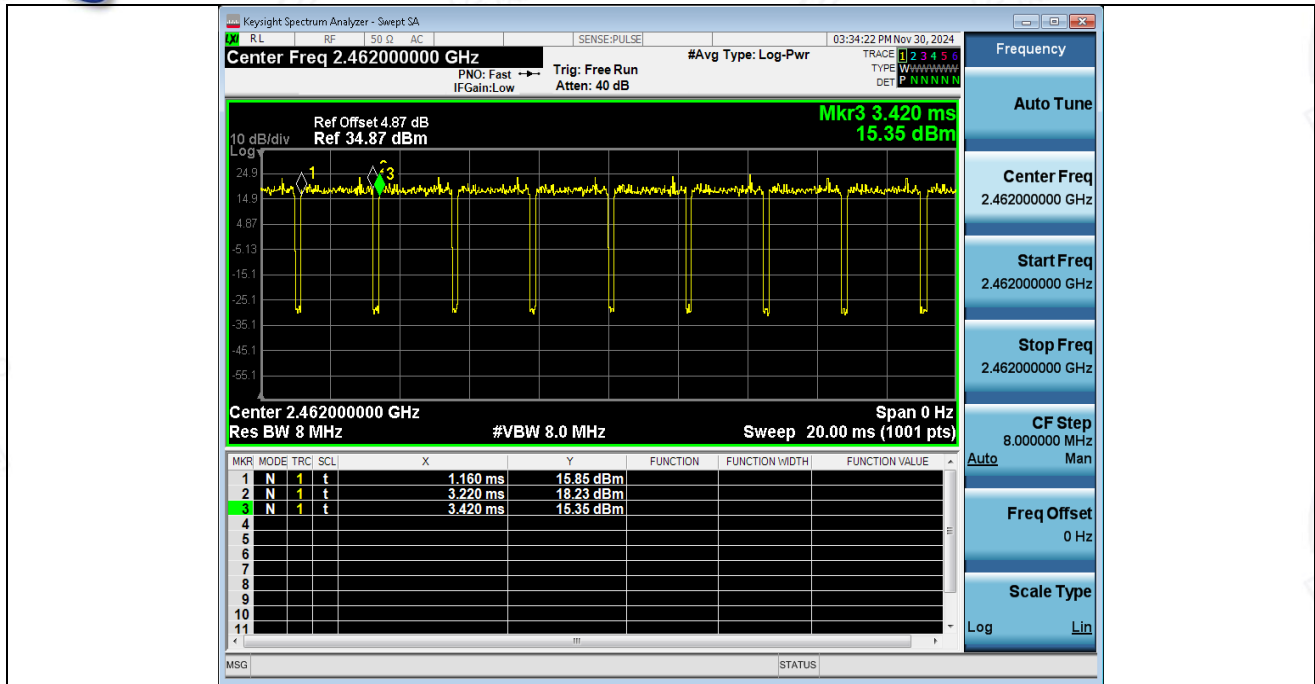


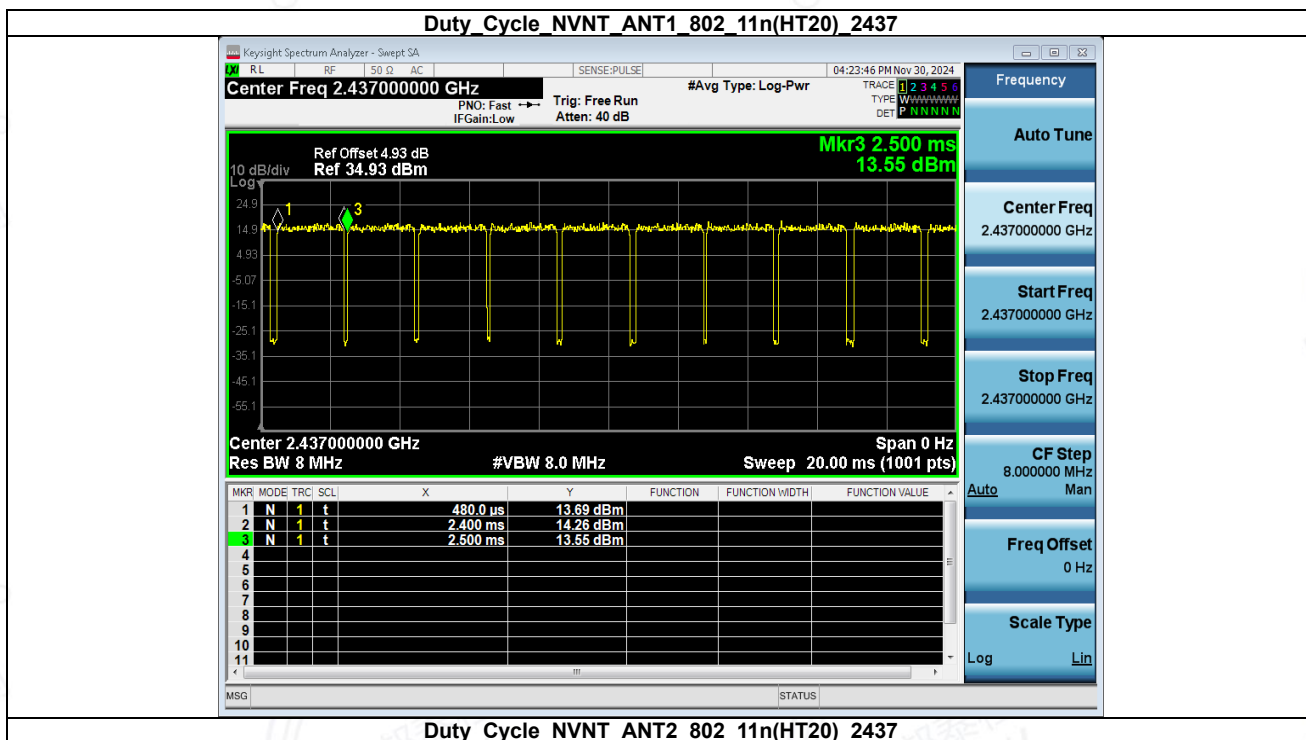
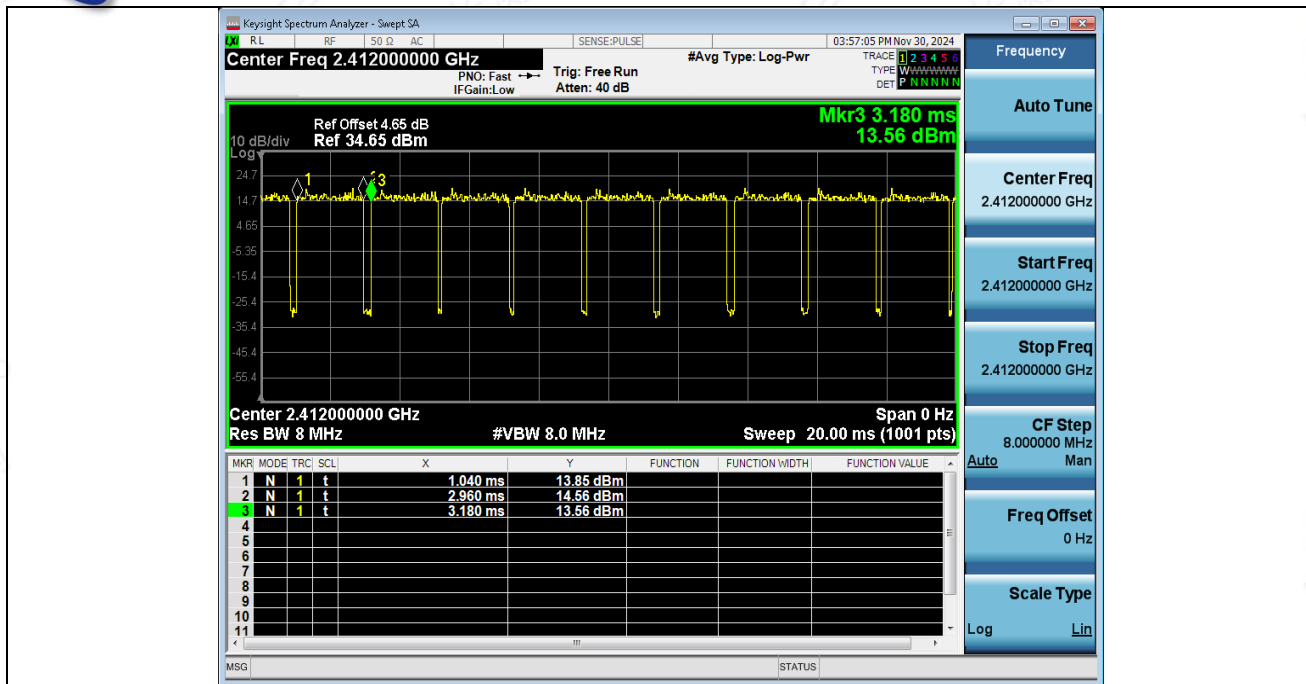


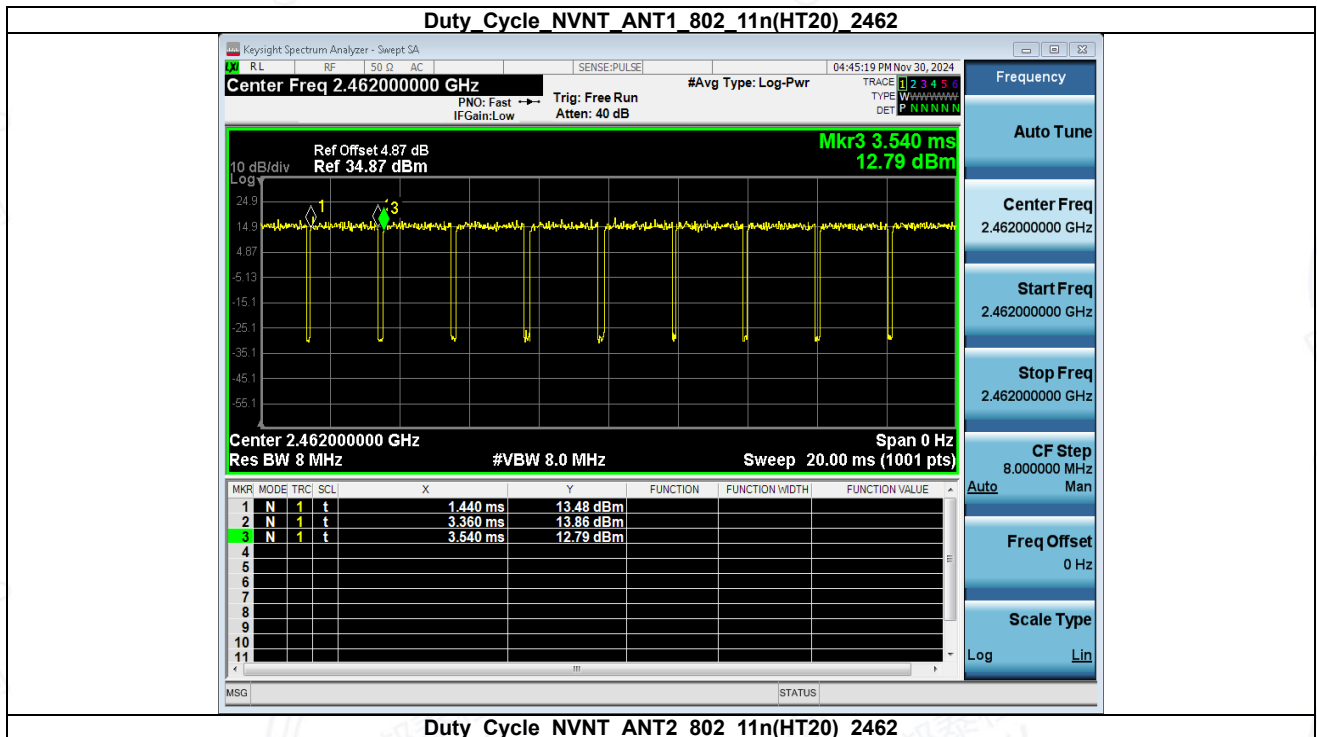
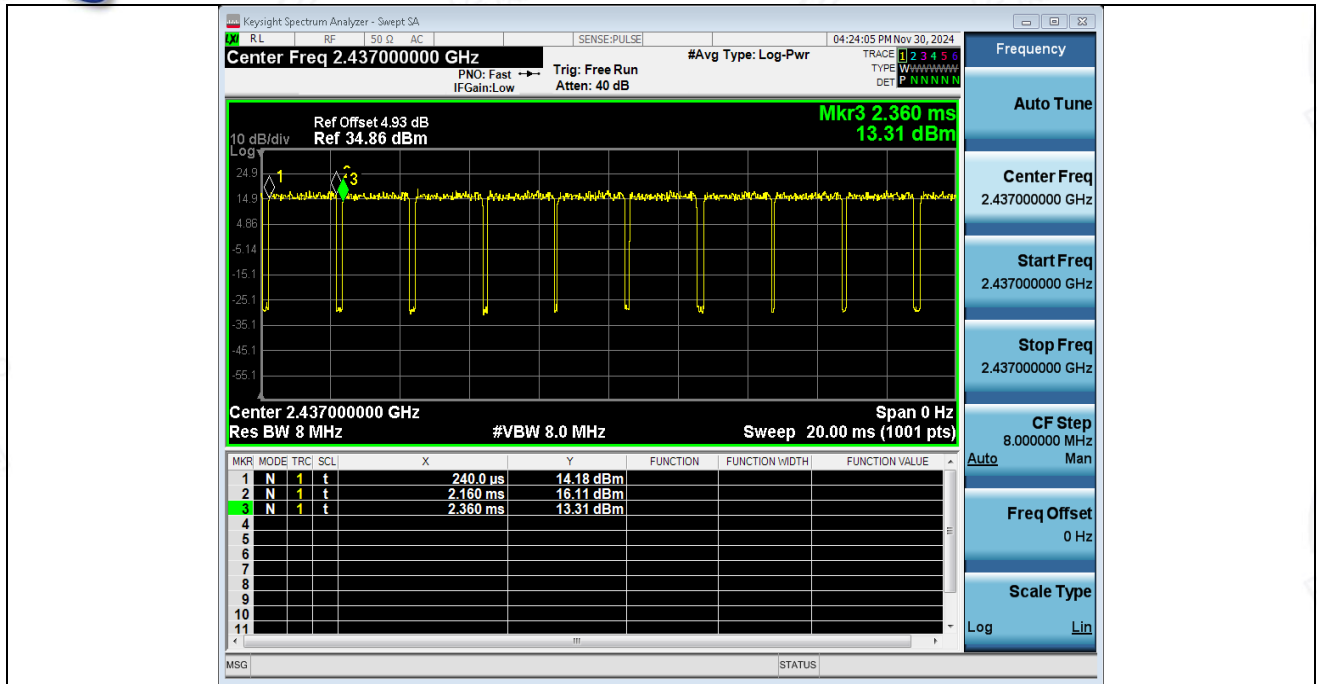


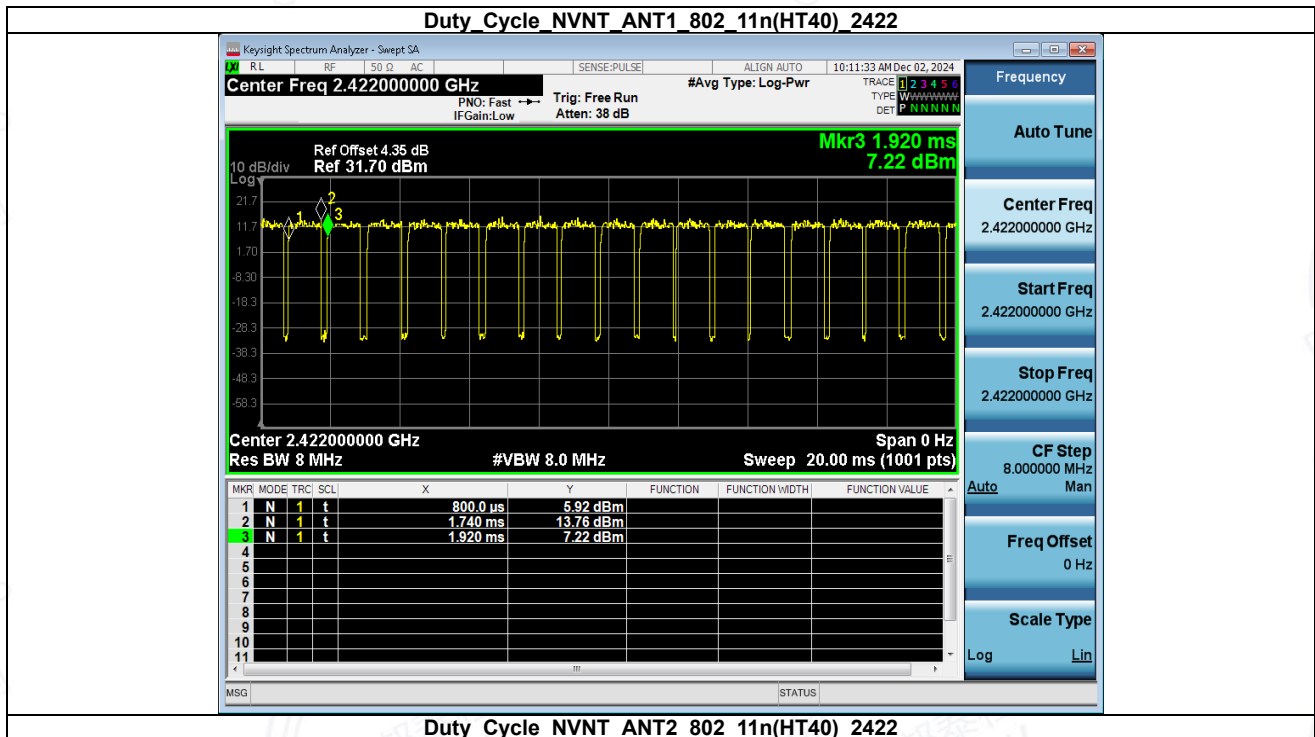
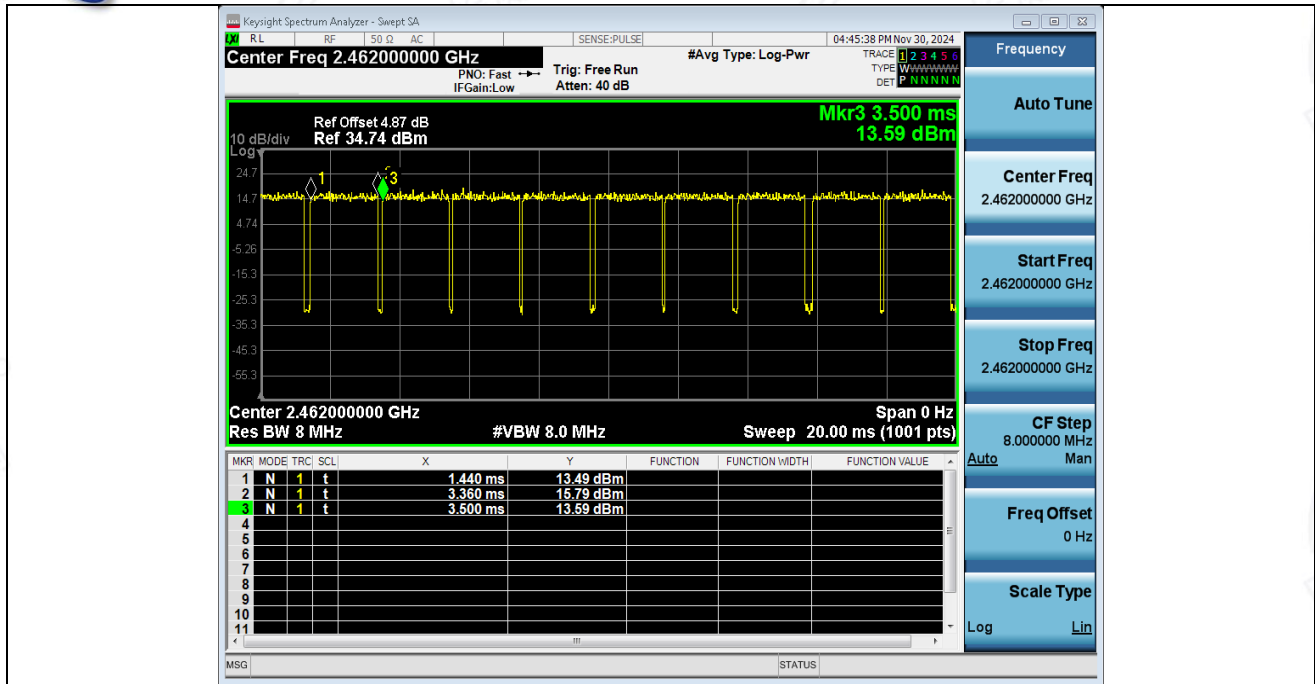


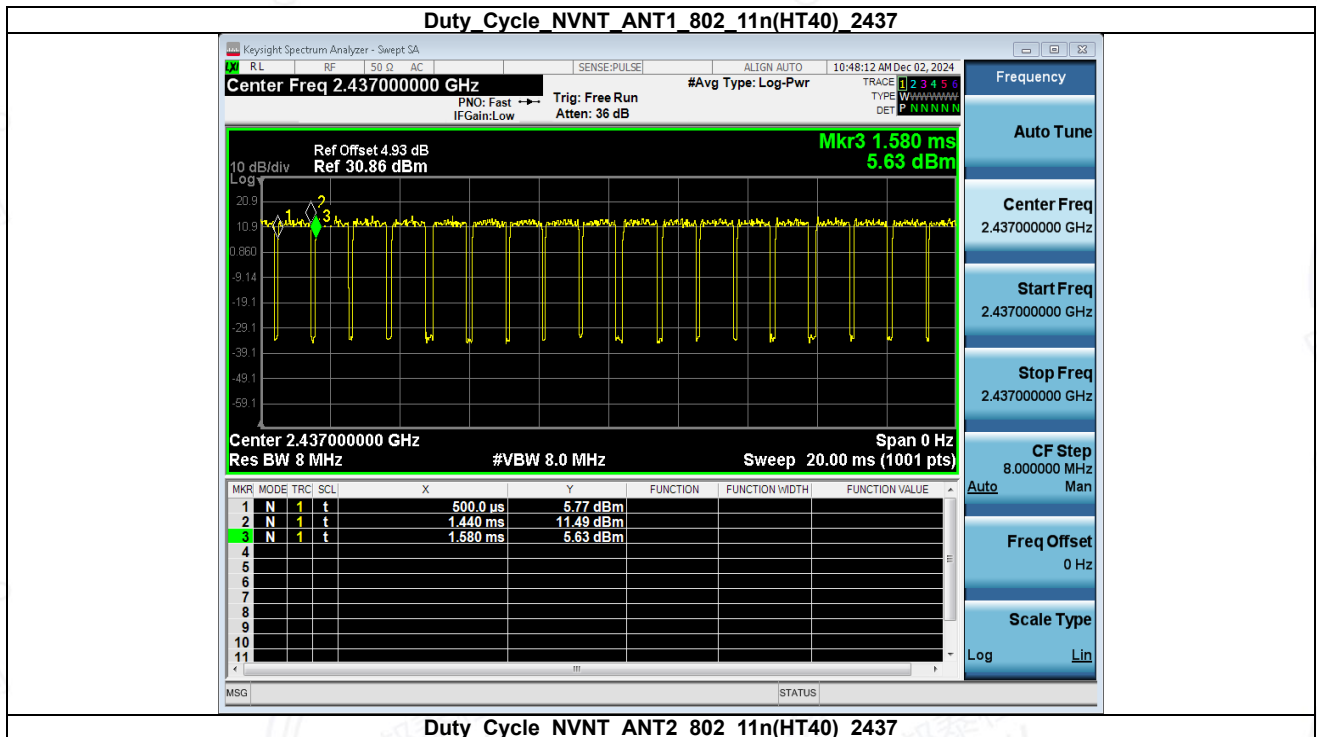
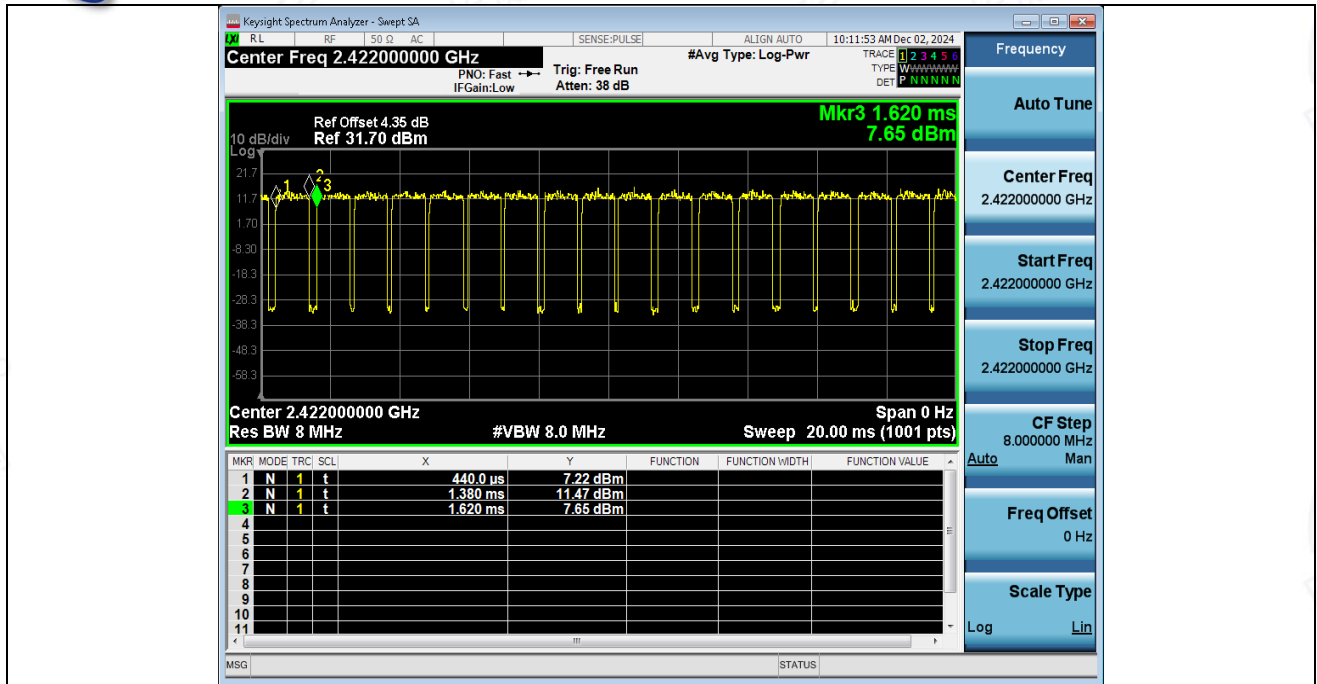


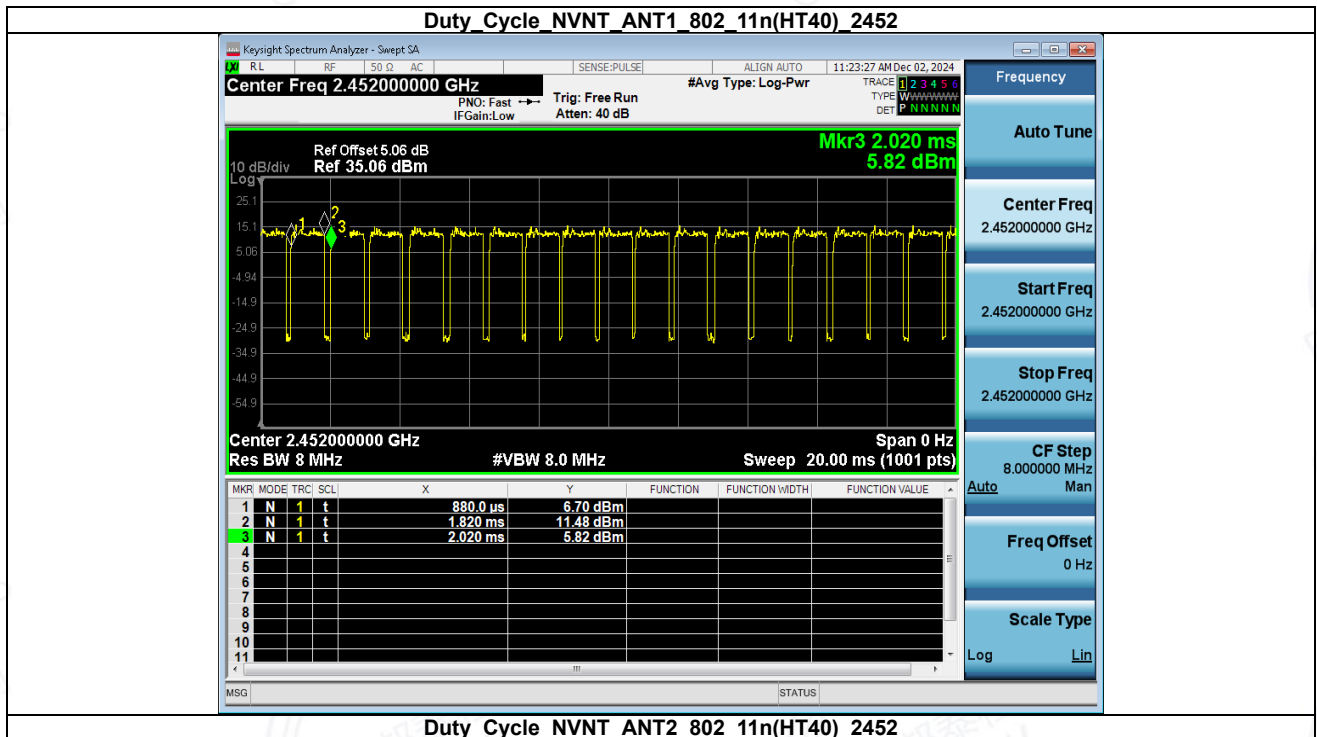
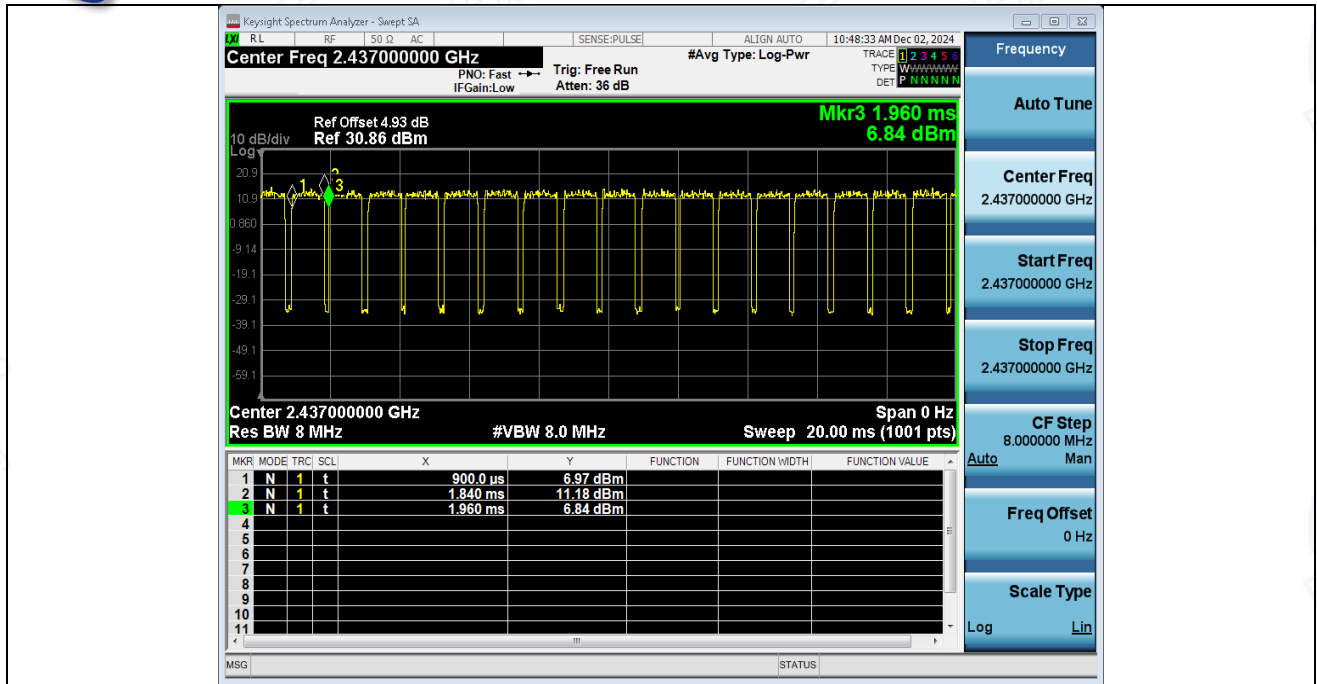


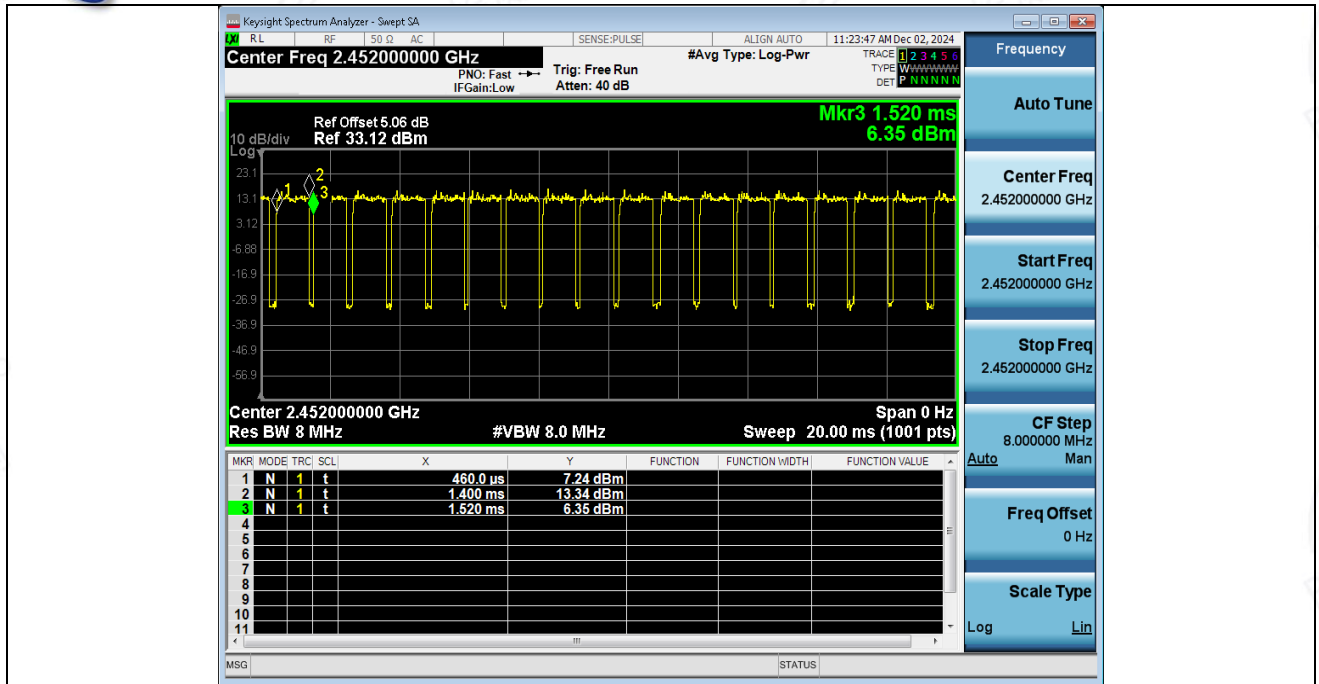








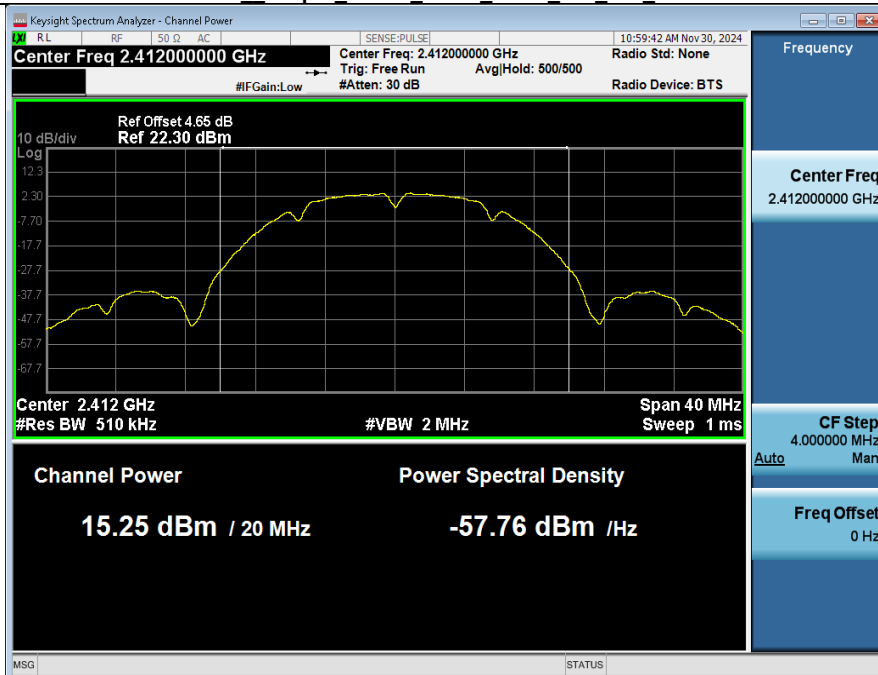




4. MAX. Output Power

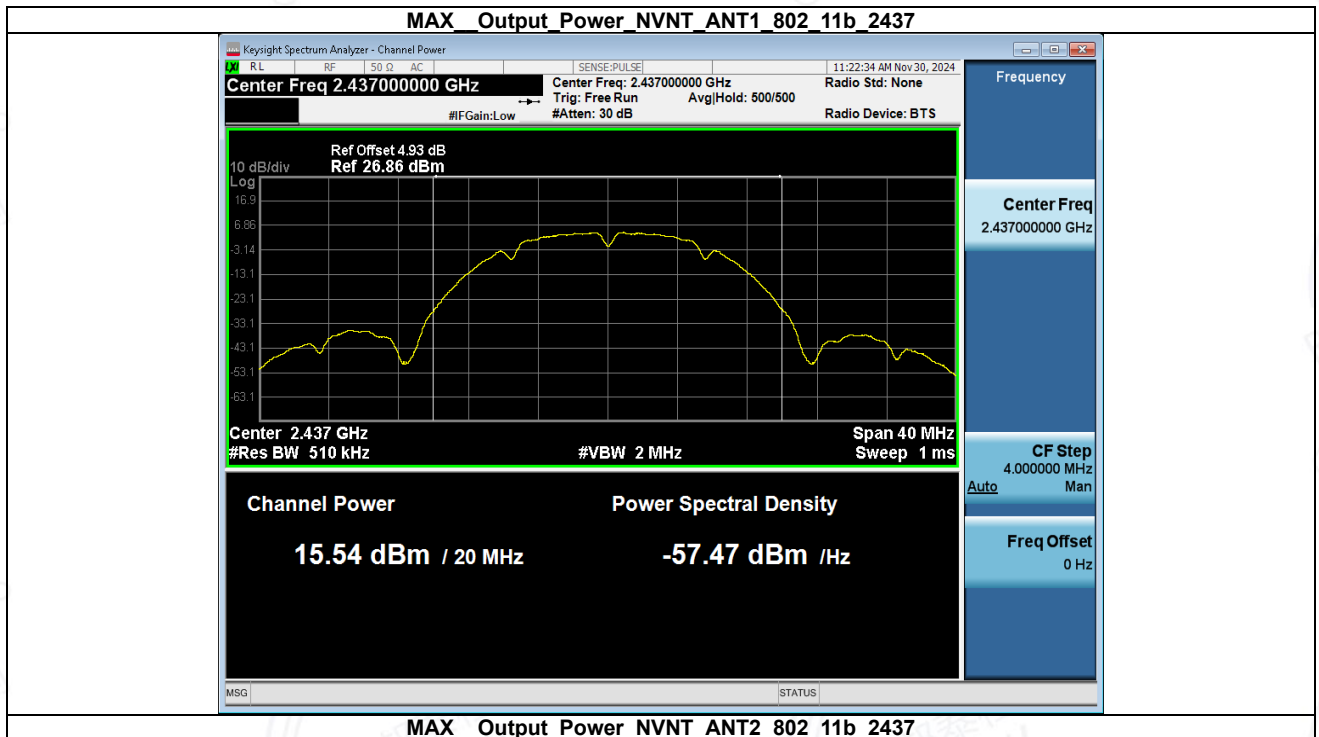
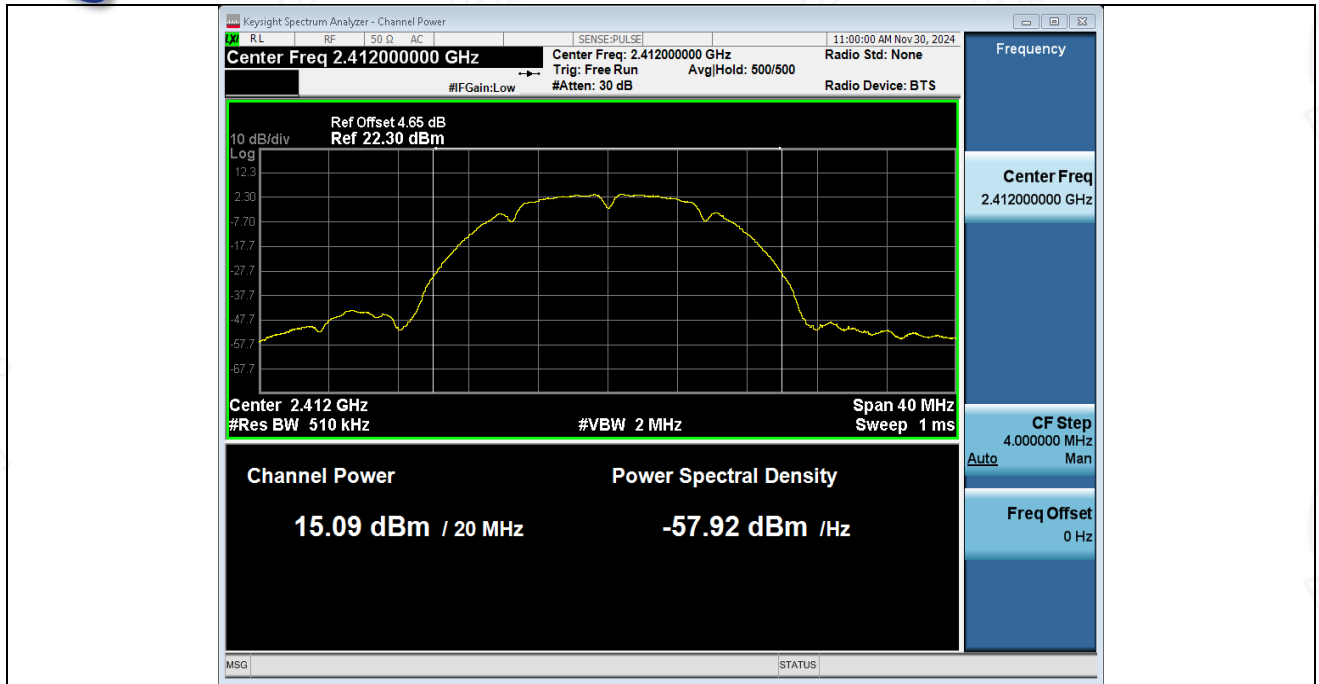
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	15.25	0.10	15.35	30	Pass
NVNT	ANT2	802.11b	2412.00	RMS	15.09	0.10	15.19	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	15.54	0.10	15.64	30	Pass
NVNT	ANT2	802.11b	2437.00	RMS	15.54	0.14	15.68	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	15.72	0.00	15.72	30	Pass
NVNT	ANT2	802.11b	2462.00	RMS	15.24	0.14	15.38	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	13.30	0.28	13.58	30	Pass
NVNT	ANT2	802.11g	2412.00	RMS	13.16	0.24	13.40	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	13.20	0.20	13.40	30	Pass
NVNT	ANT2	802.11g	2437.00	RMS	13.43	0.28	13.71	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	12.87	0.40	13.27	30	Pass
NVNT	ANT2	802.11g	2462.00	RMS	13.27	0.36	13.63	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	10.94	0.22	11.16	30	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	RMS	10.71	0.43	11.14	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	10.87	0.18	11.05	30	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	RMS	10.98	0.39	11.37	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	10.63	0.34	10.97	30	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	RMS	10.91	0.26	11.17	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	RMS	10.71	0.67	11.38	30	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	RMS	10.77	0.90	11.67	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	RMS	10.63	0.51	11.14	30	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	RMS	11.06	0.43	11.49	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	RMS	10.54	0.75	11.29	30	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	RMS	11.12	0.43	11.55	30	Pass

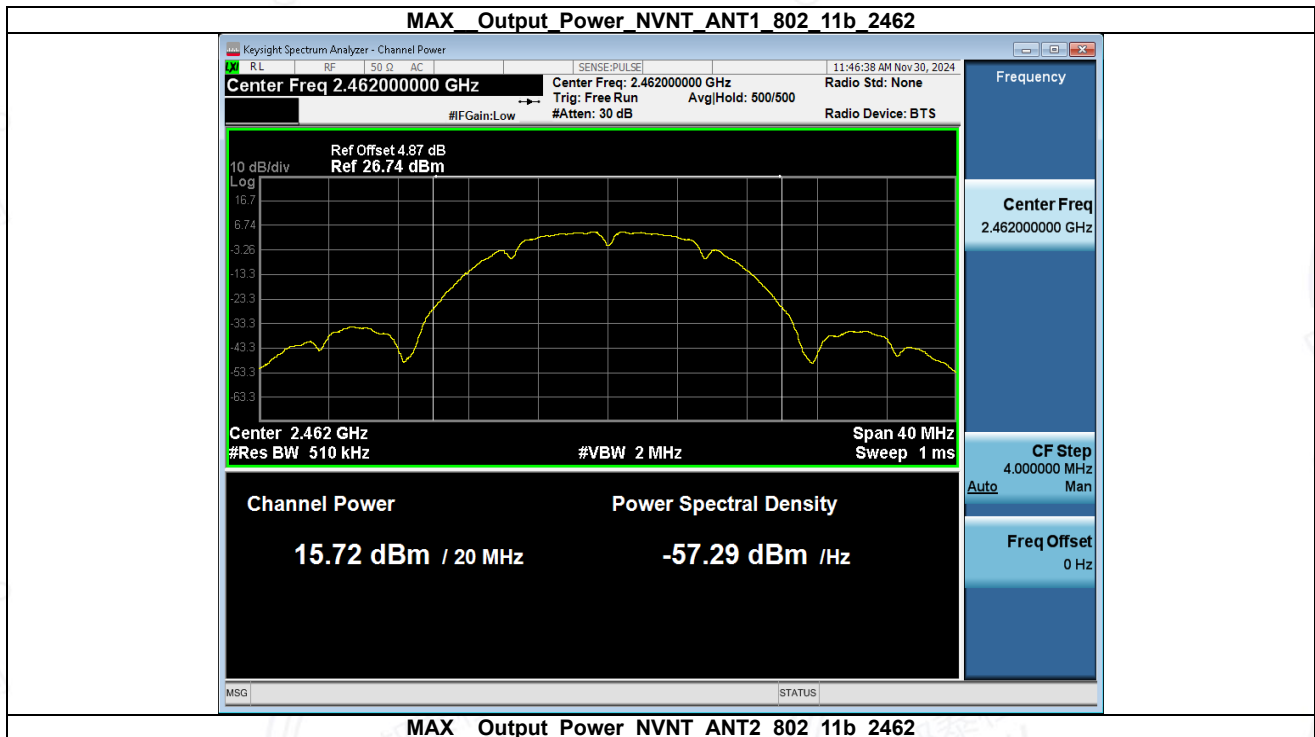
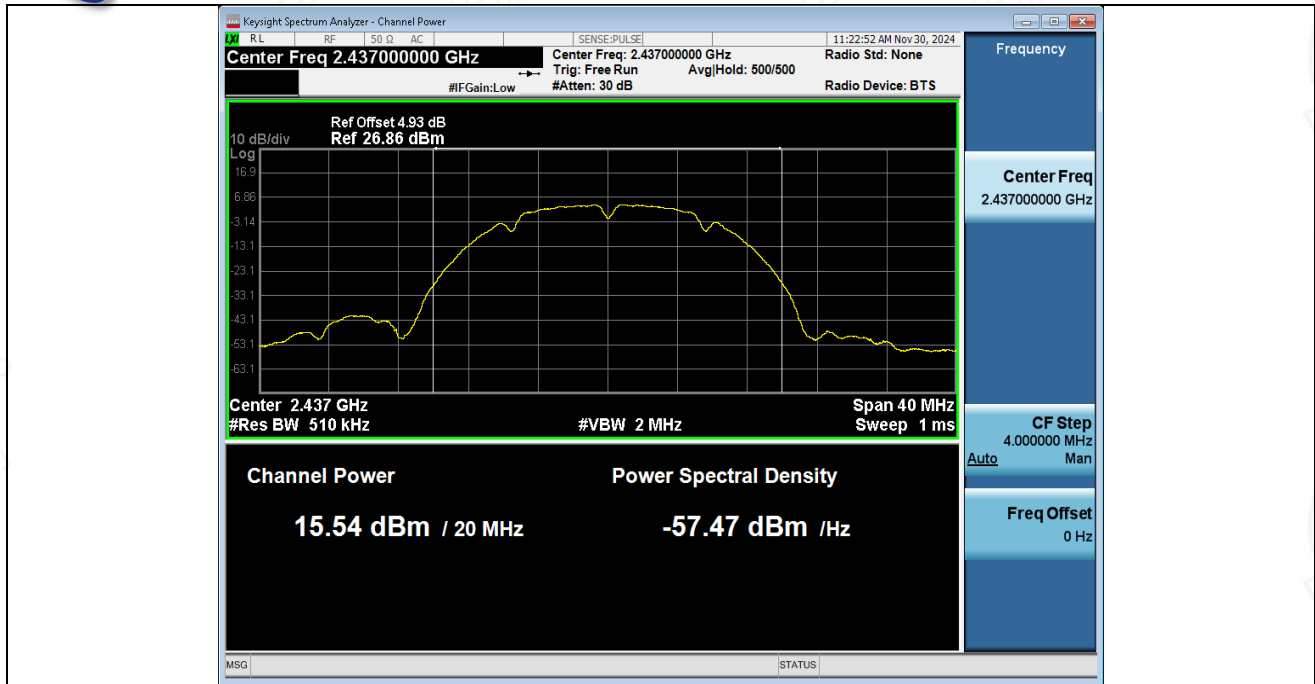
MAX Output Power_NVNT_ANT1_802_11b_2412

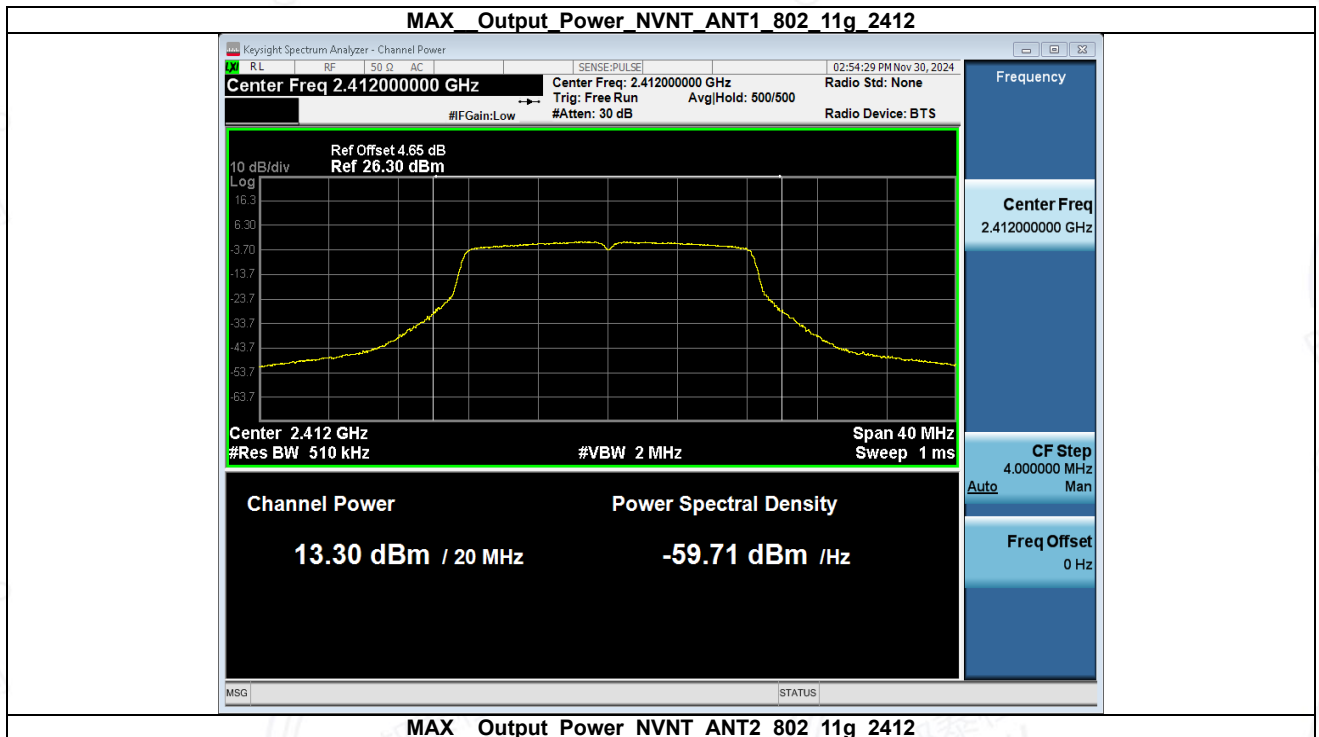
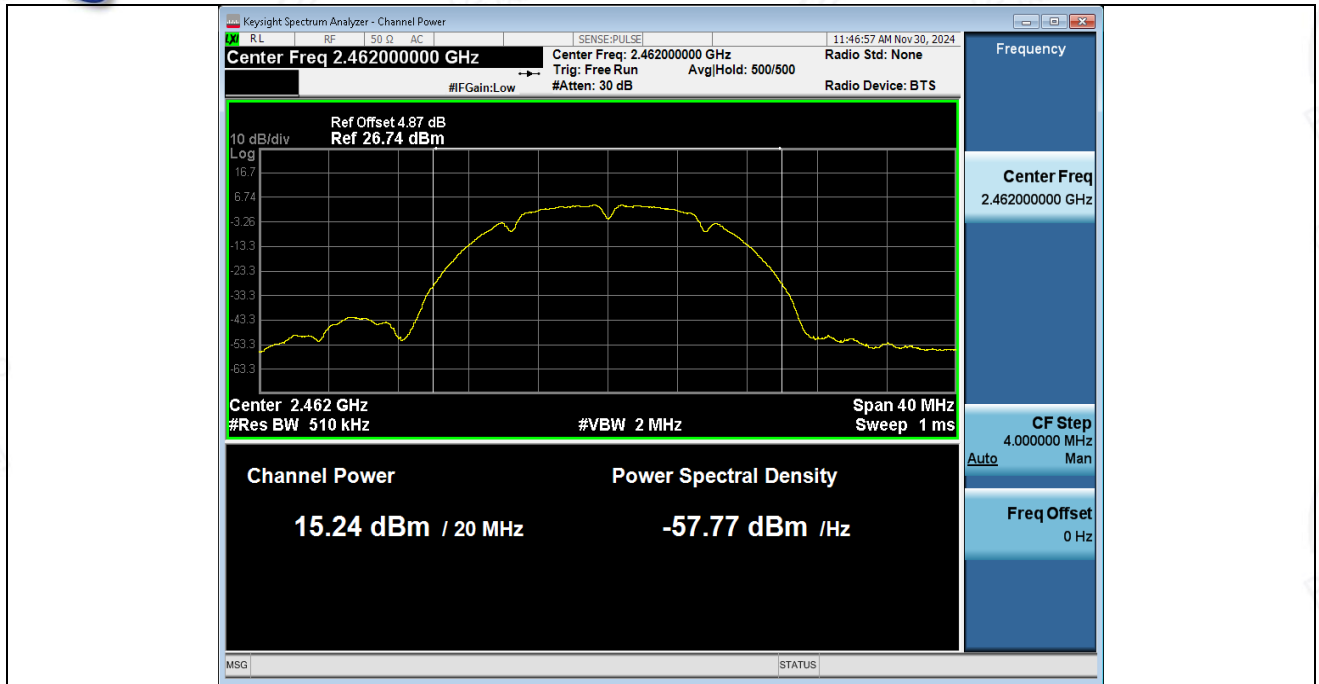


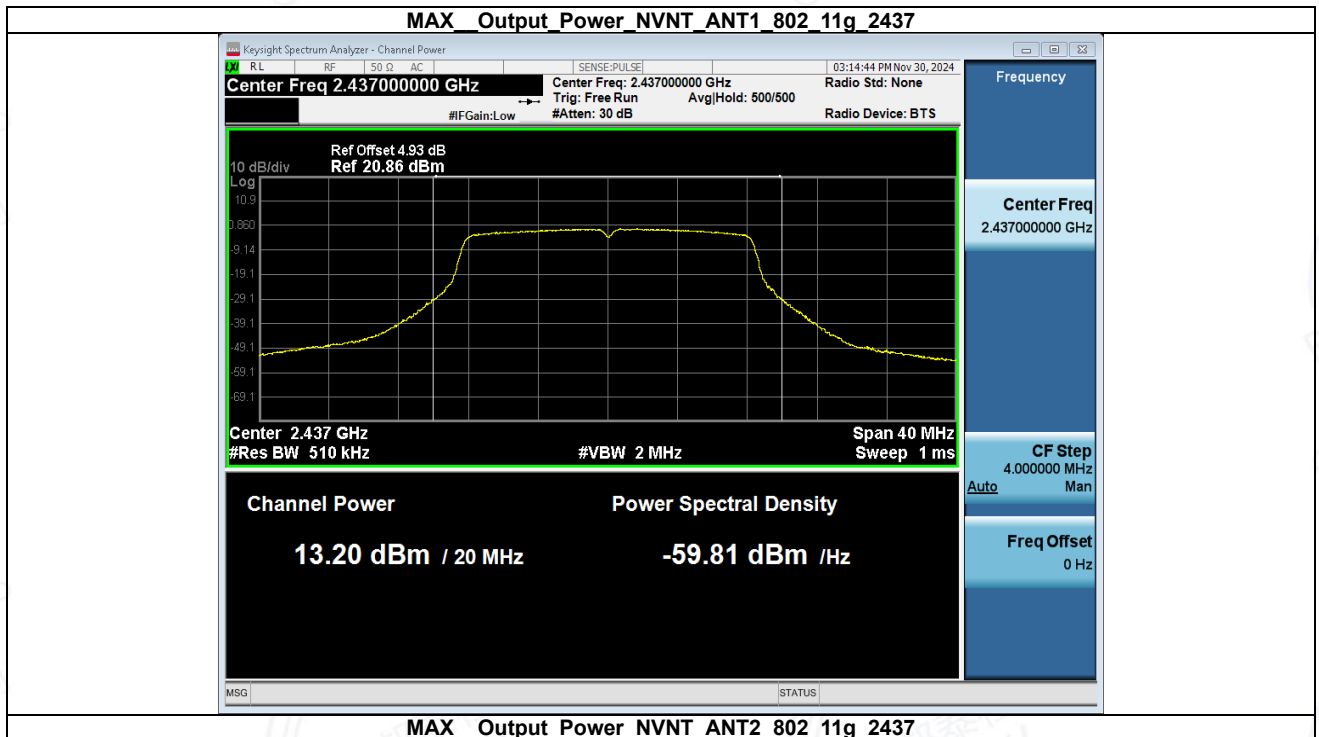
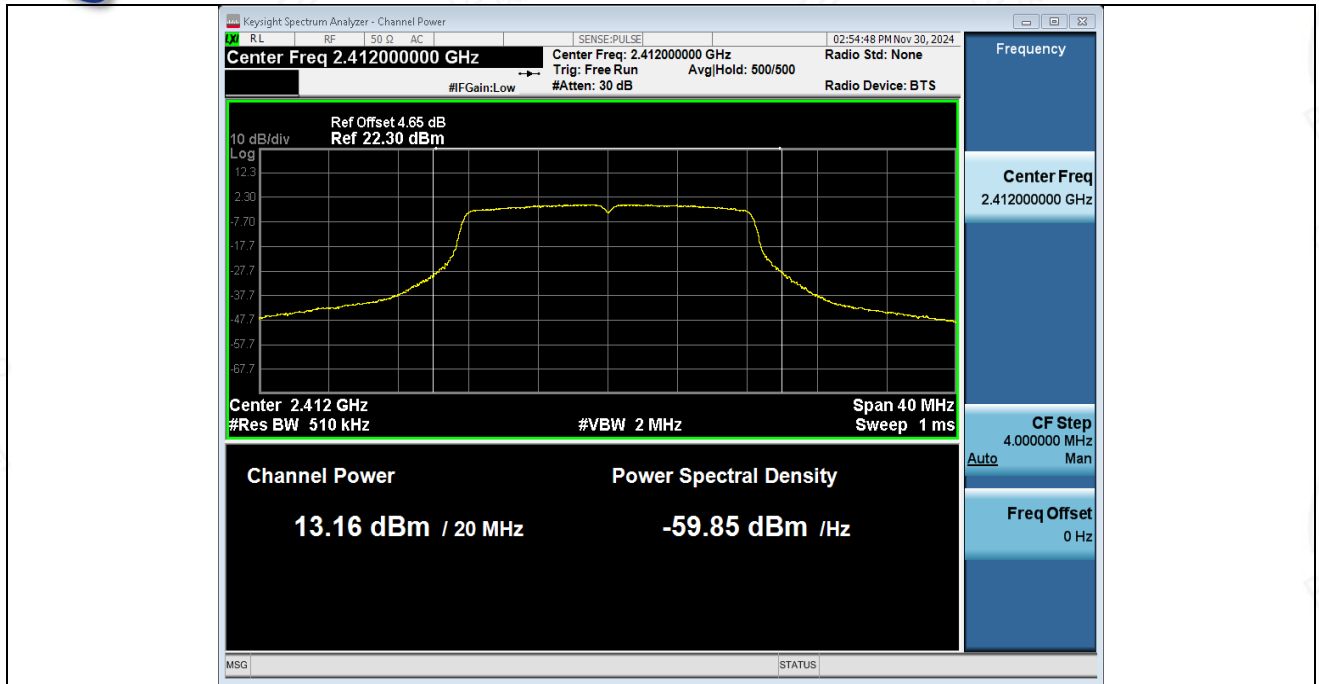
MAX Output Power_NVNT_ANT2_802_11b_2412

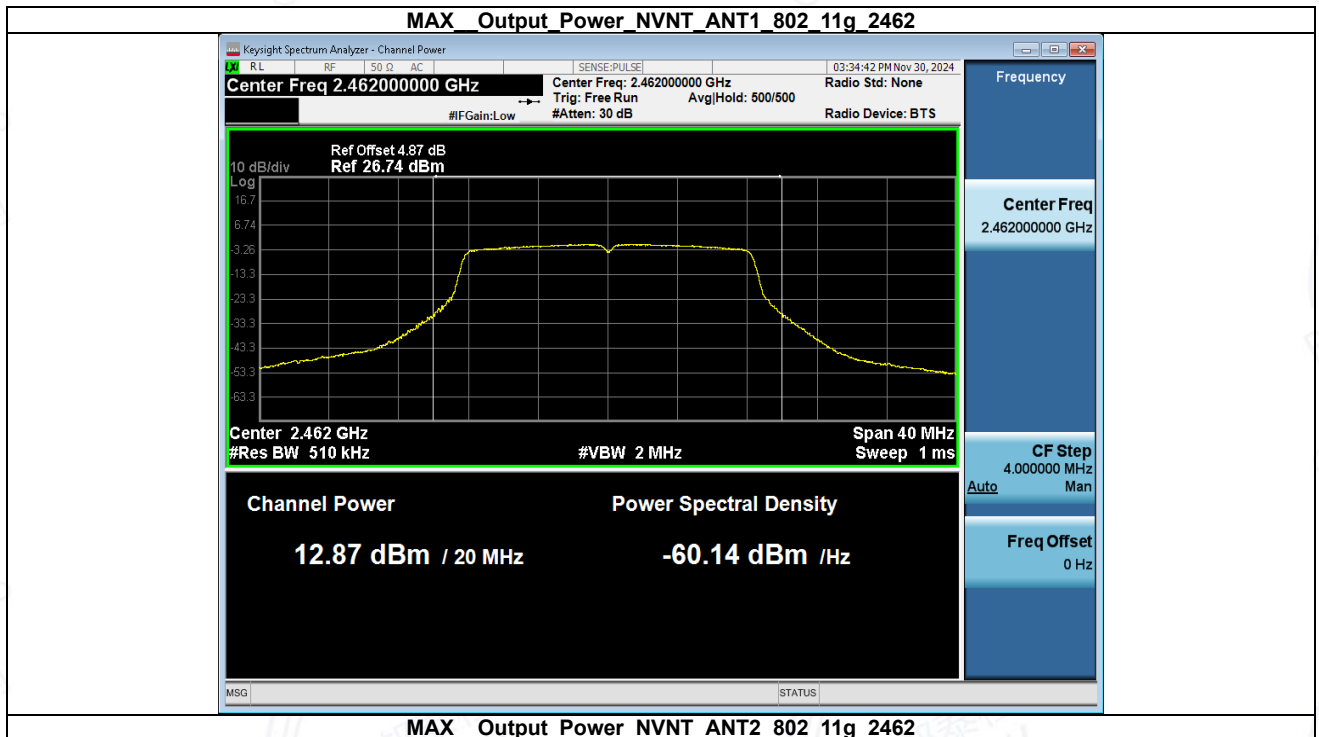
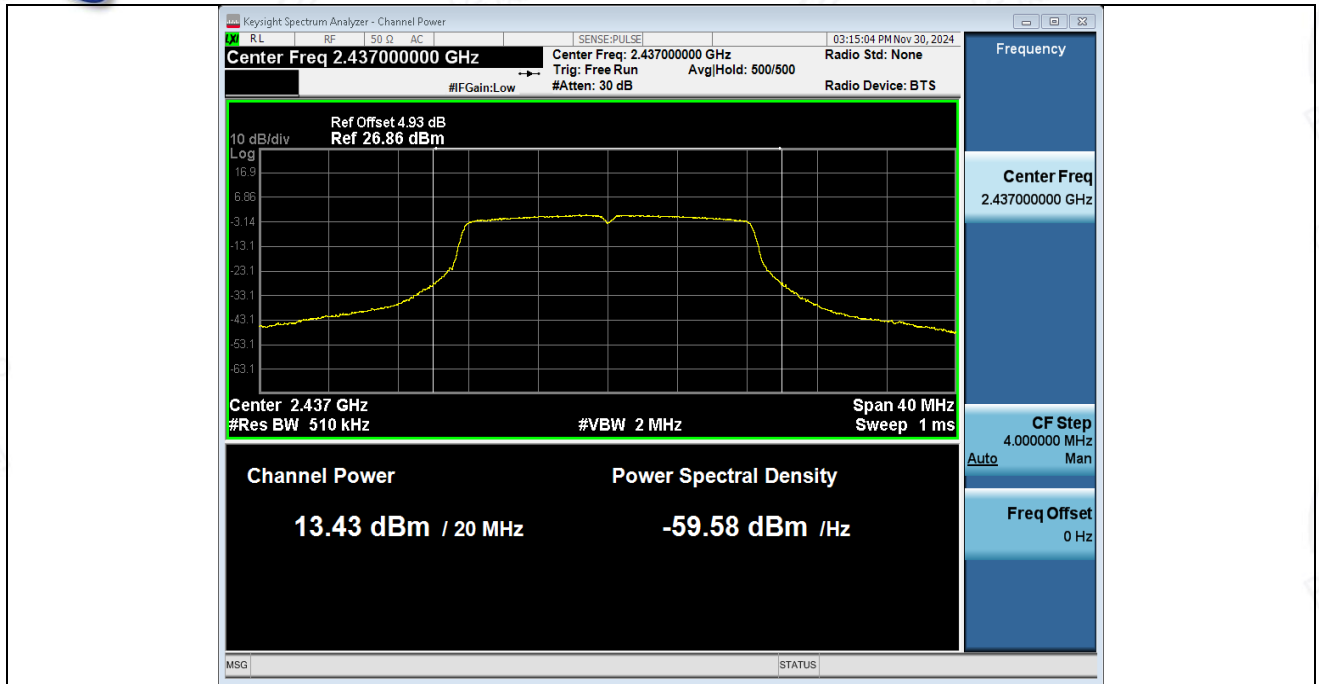


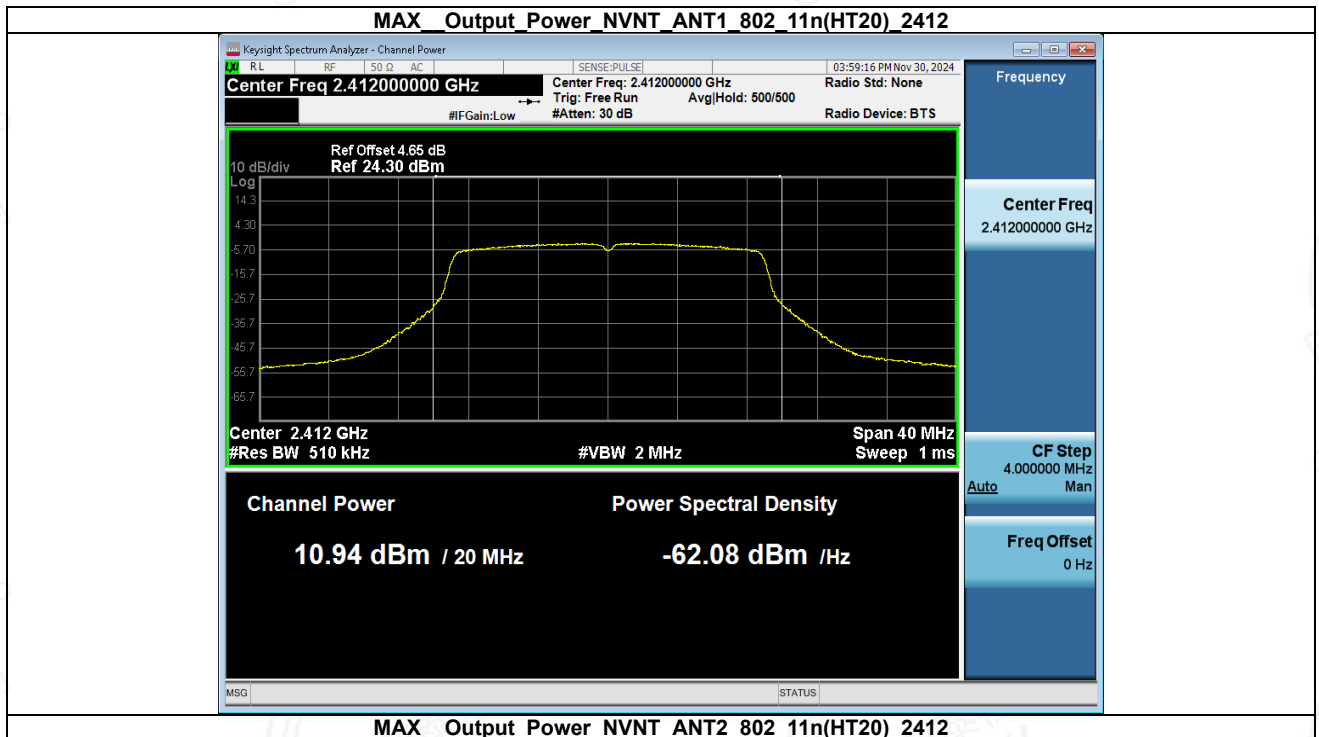
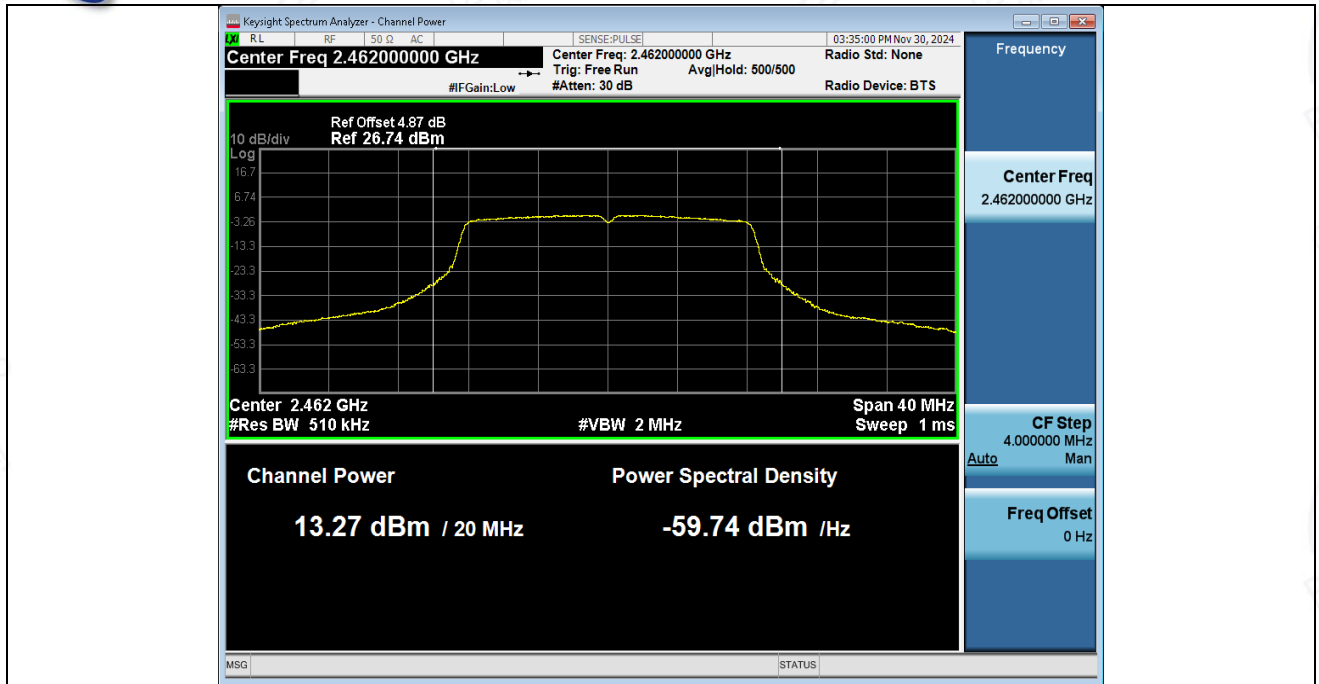


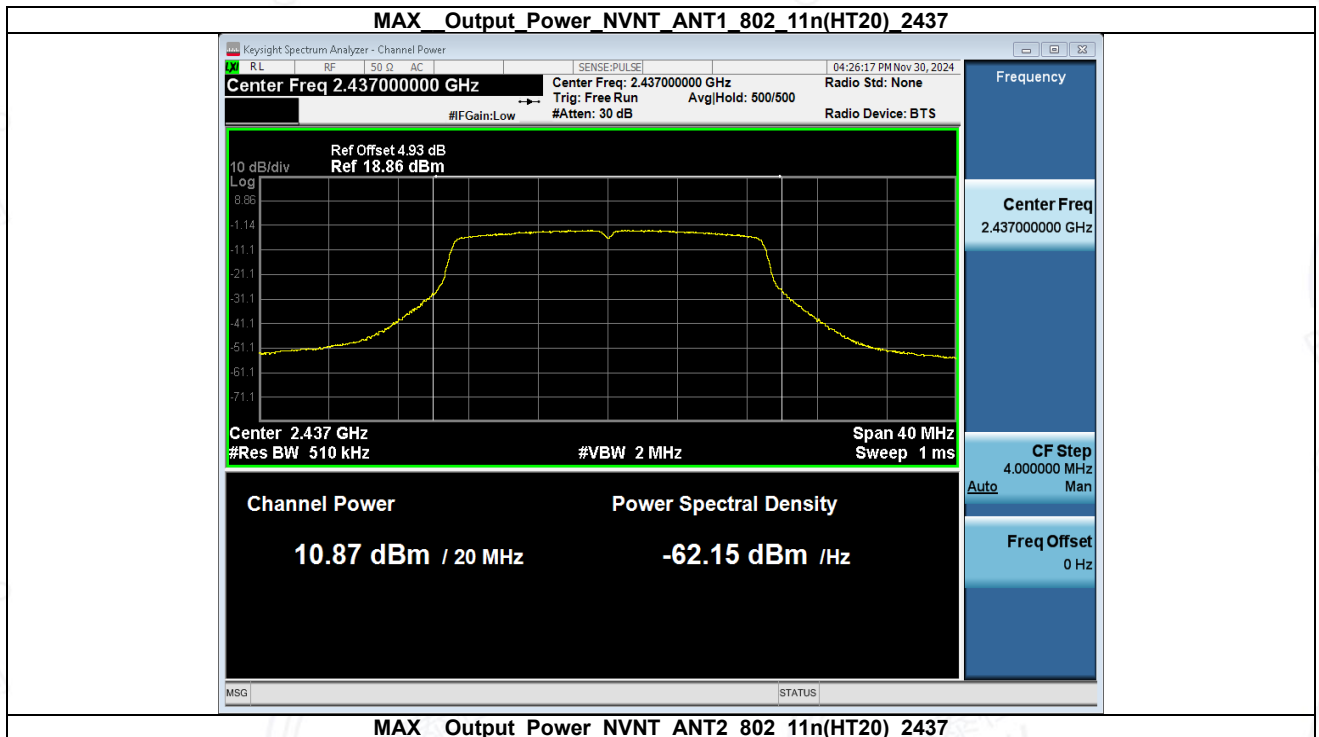
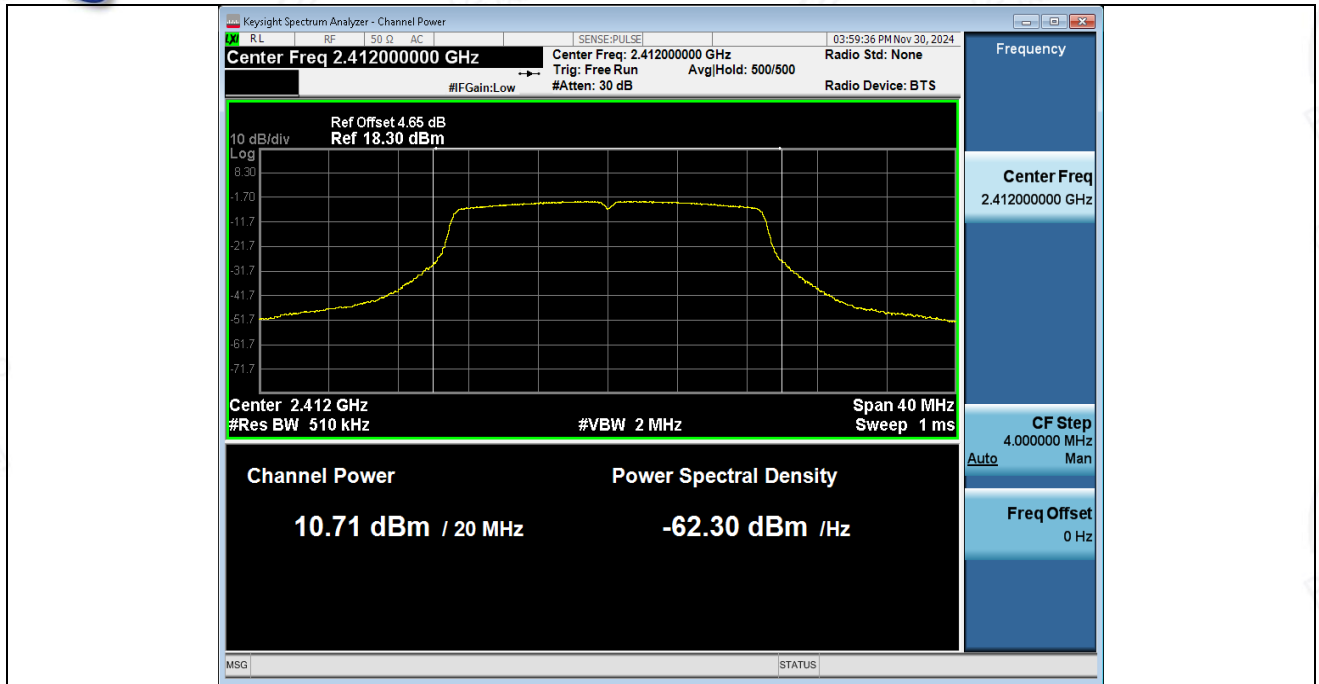


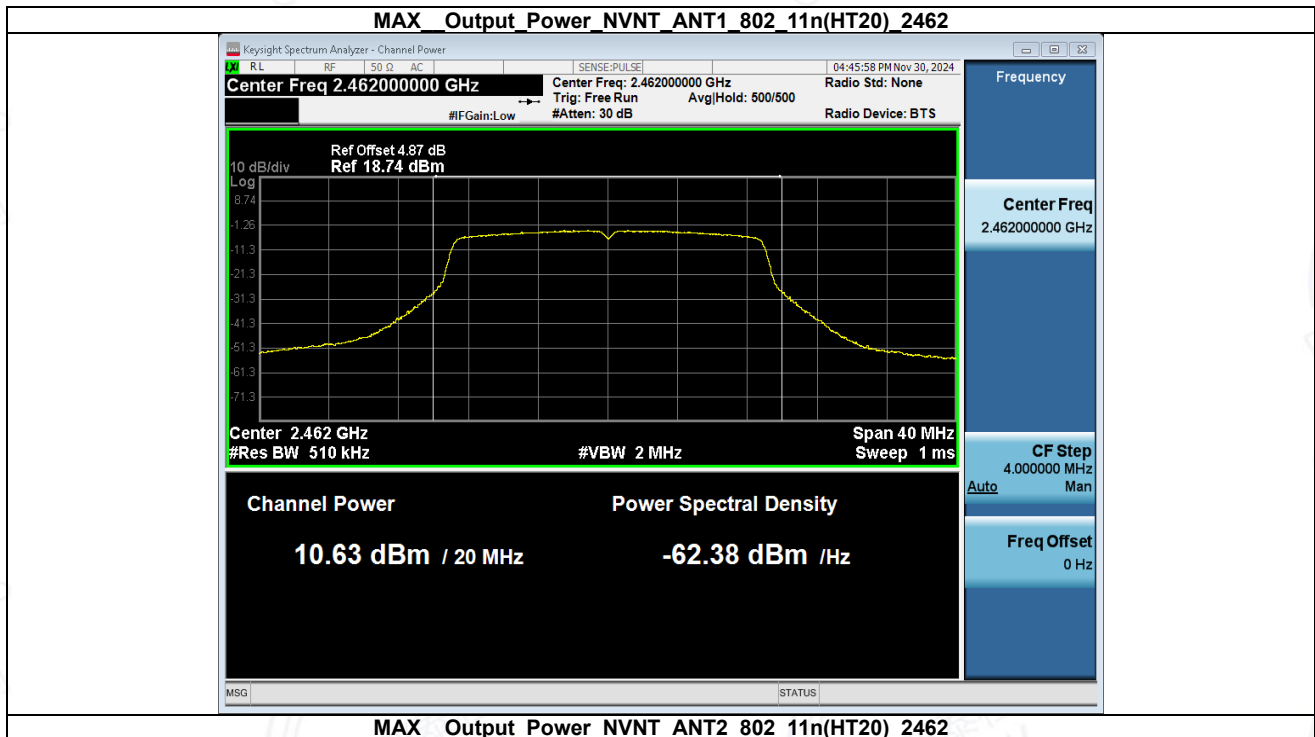
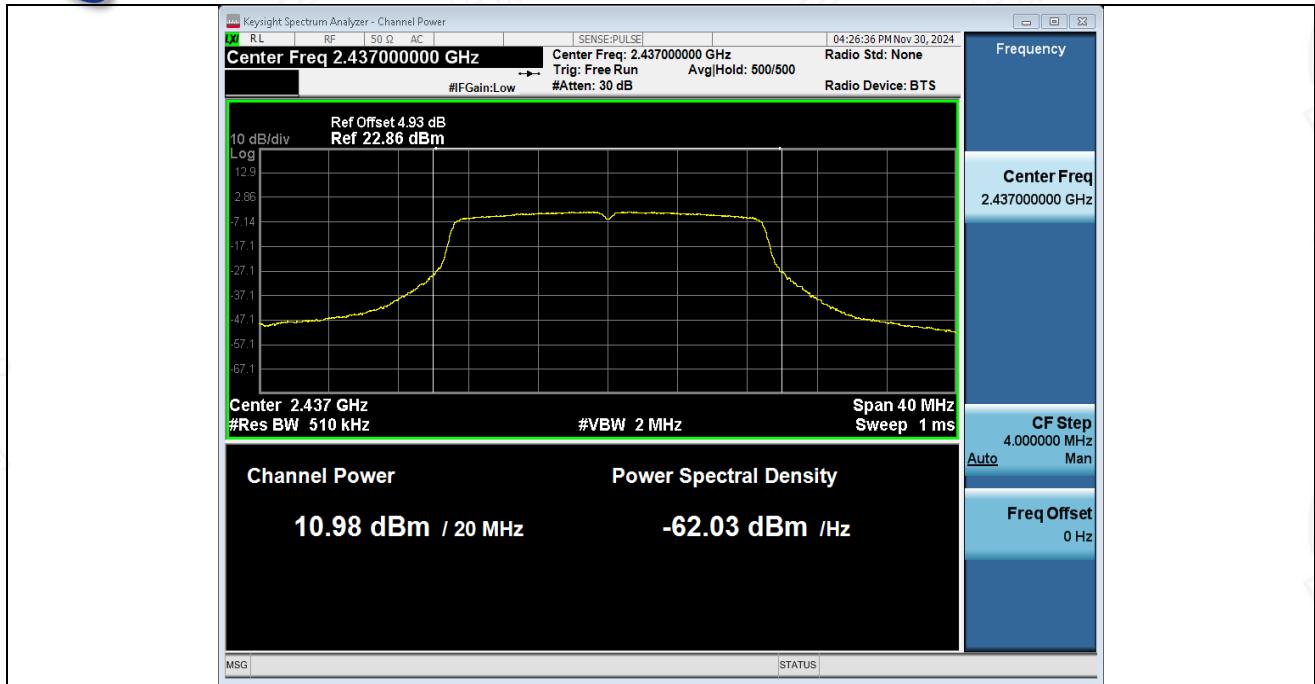


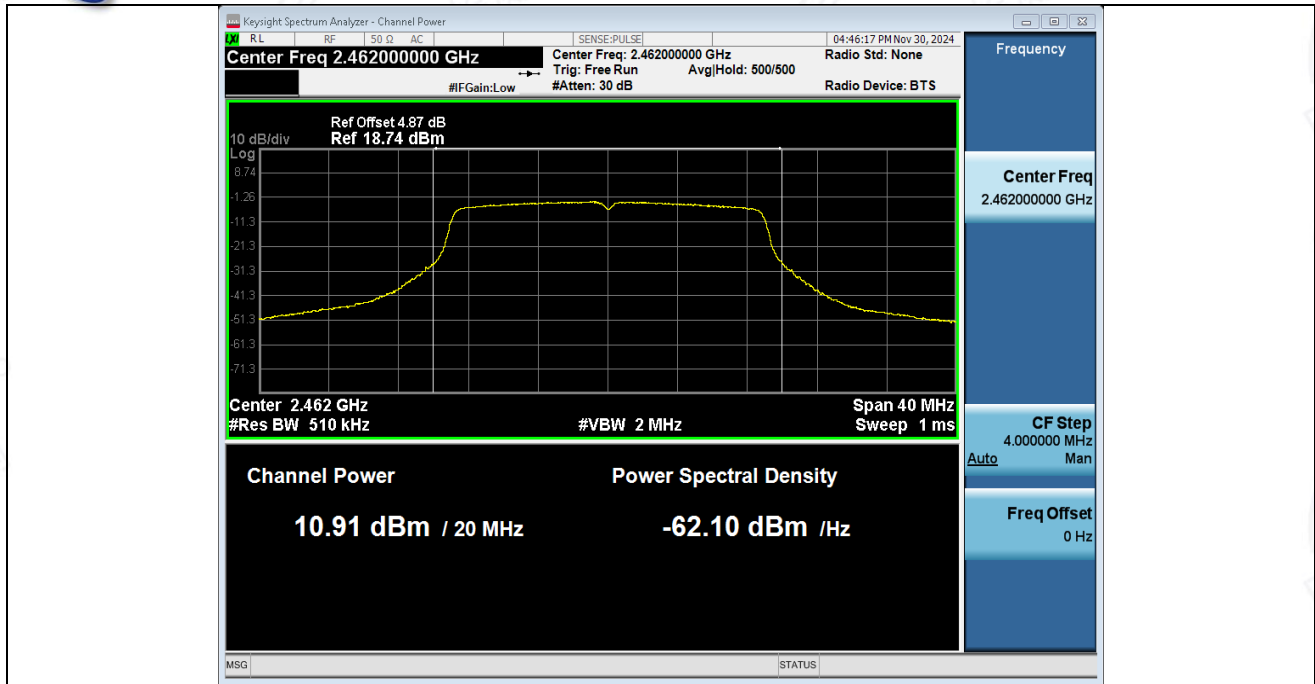


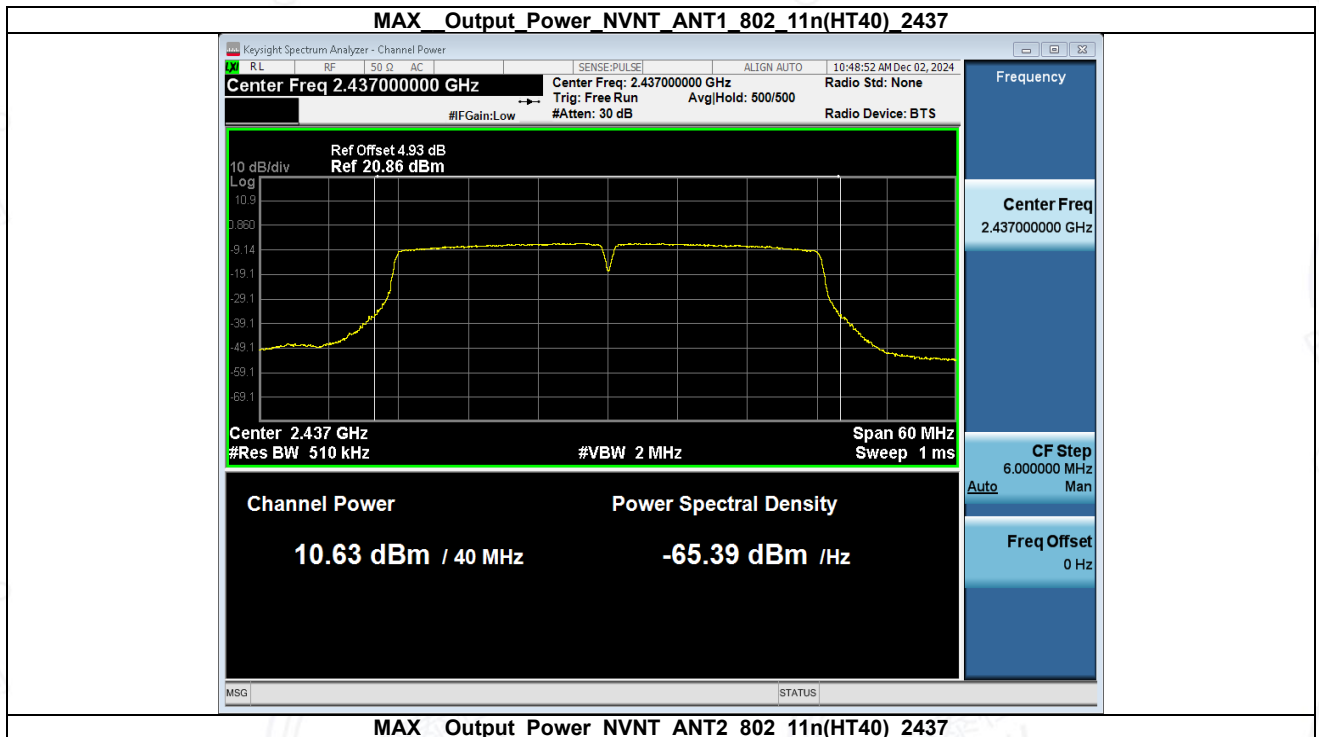
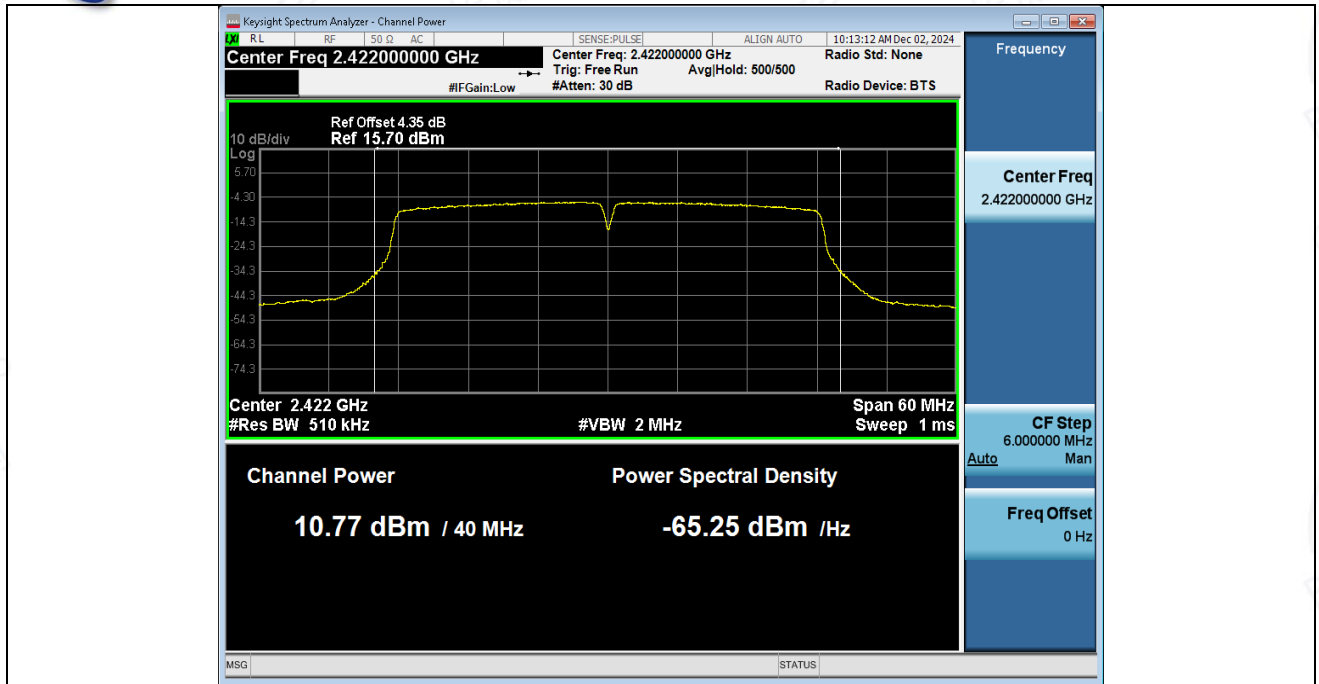


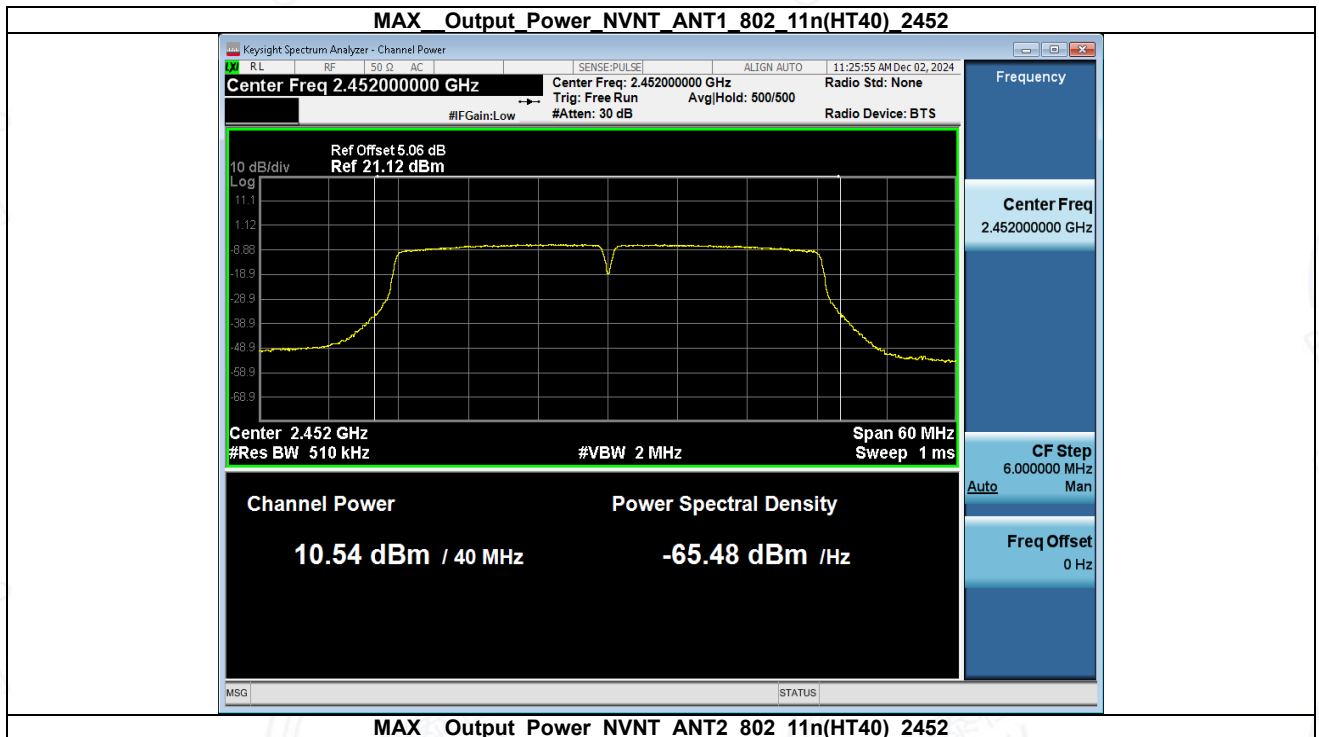
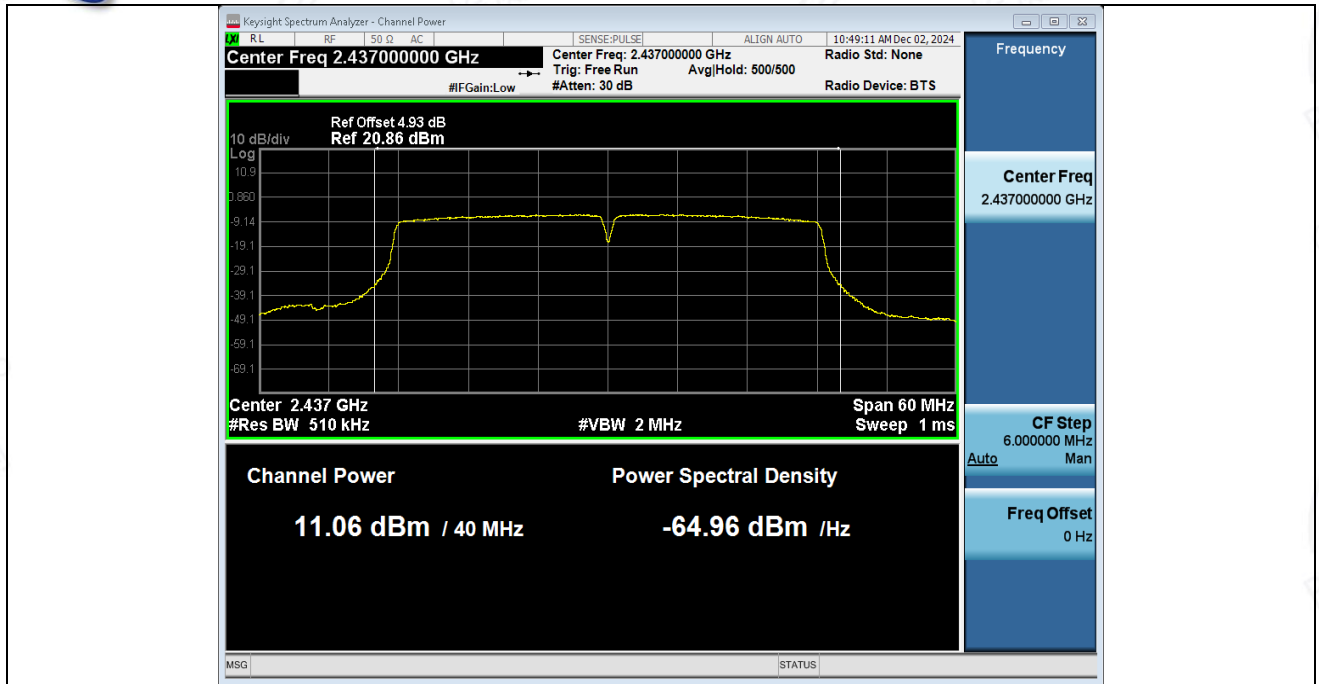


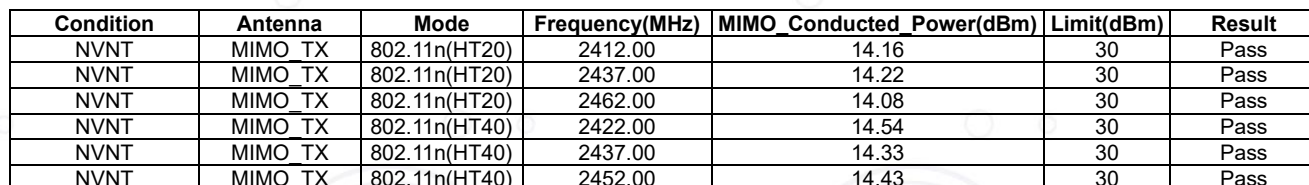












Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted_Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	2412.00	14.16	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2437.00	14.22	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2462.00	14.08	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2422.00	14.54	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2437.00	14.33	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2452.00	14.43	30	Pass

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	-20.61	0.10	0.00	-20.51	8	Pass
NVNT	ANT2	802.11b	2412.00	-20.02	0.10	0.00	-19.92	8	Pass
NVNT	ANT1	802.11b	2437.00	-19.76	0.10	0.00	-19.66	8	Pass
NVNT	ANT2	802.11b	2437.00	-19.92	0.14	0.00	-19.78	8	Pass
NVNT	ANT1	802.11b	2462.00	-19.92	0.00	0.00	-19.92	8	Pass
NVNT	ANT2	802.11b	2462.00	-19.90	0.14	0.00	-19.76	8	Pass
NVNT	ANT1	802.11g	2412.00	-21.88	0.28	0.00	-21.60	8	Pass
NVNT	ANT2	802.11g	2412.00	-22.20	0.24	0.00	-21.96	8	Pass
NVNT	ANT1	802.11g	2437.00	-20.51	0.20	0.00	-20.31	8	Pass
NVNT	ANT2	802.11g	2437.00	-20.04	0.28	0.00	-19.76	8	Pass
NVNT	ANT1	802.11g	2462.00	-21.43	0.40	0.00	-21.03	8	Pass
NVNT	ANT2	802.11g	2462.00	-20.56	0.36	0.00	-20.20	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-23.58	0.22	0.00	-23.36	8	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	-24.23	0.43	0.00	-23.80	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-23.23	0.18	0.00	-23.05	8	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	-23.19	0.39	0.00	-22.80	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-24.08	0.34	0.00	-23.74	8	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	-23.71	0.26	0.00	-23.45	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-26.54	0.67	0.00	-25.87	8	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	-25.53	0.90	0.00	-24.63	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-26.29	0.51	0.00	-25.78	8	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	-26.15	0.43	0.00	-25.72	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-29.31	0.75	0.00	-28.56	8	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	-28.08	0.43	0.00	-27.65	8	Pass

