

Appendix

Test Data

for BTEK241111036A01E03

Start date	2024/12/10	Finish date	2024/12/10
Temperature	22.8℃	Humidity	61%
RF specifications	2.4G WIFI	Test Engineer	Zora



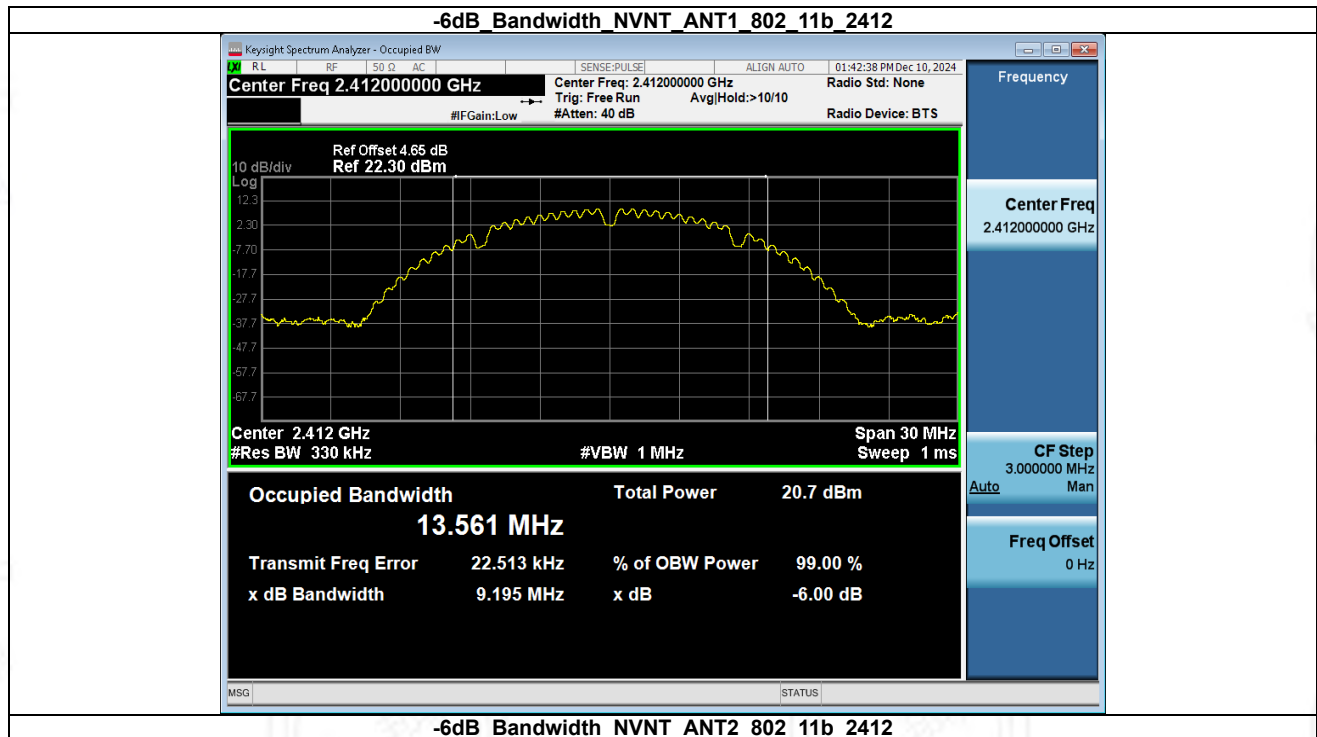
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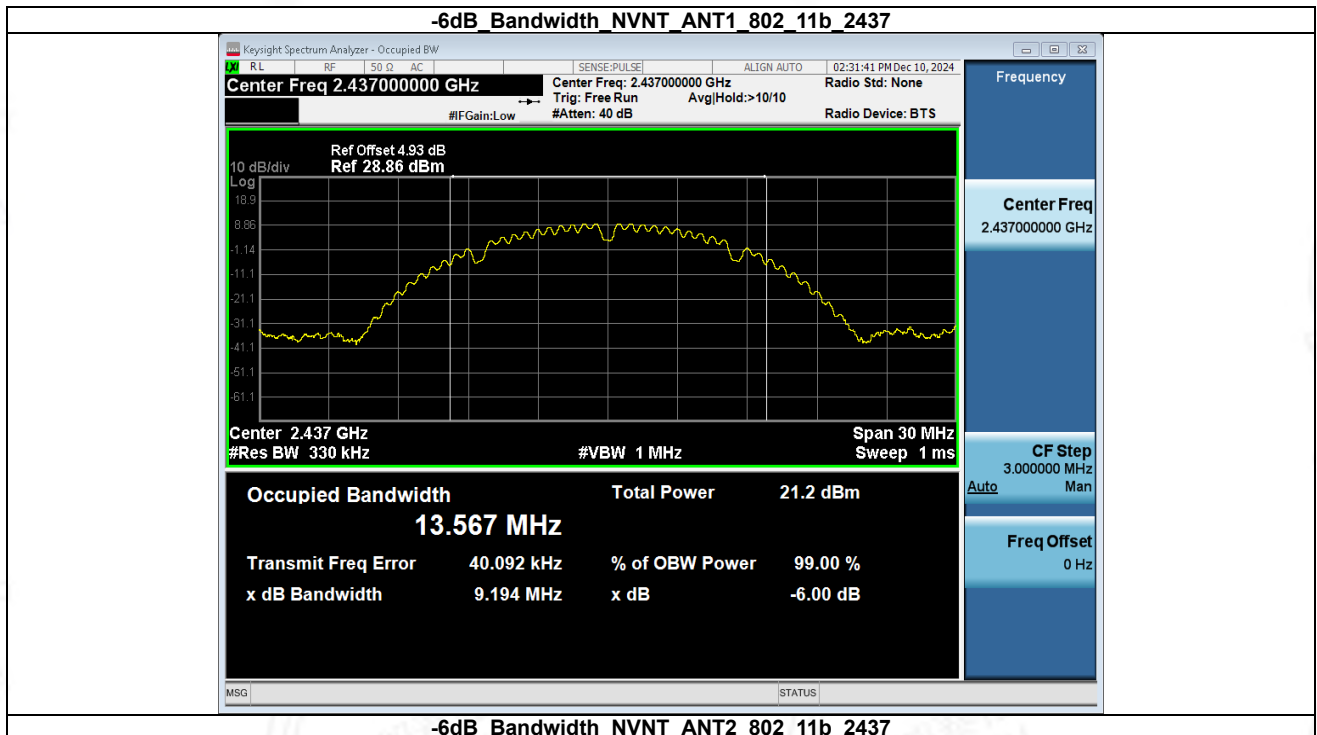
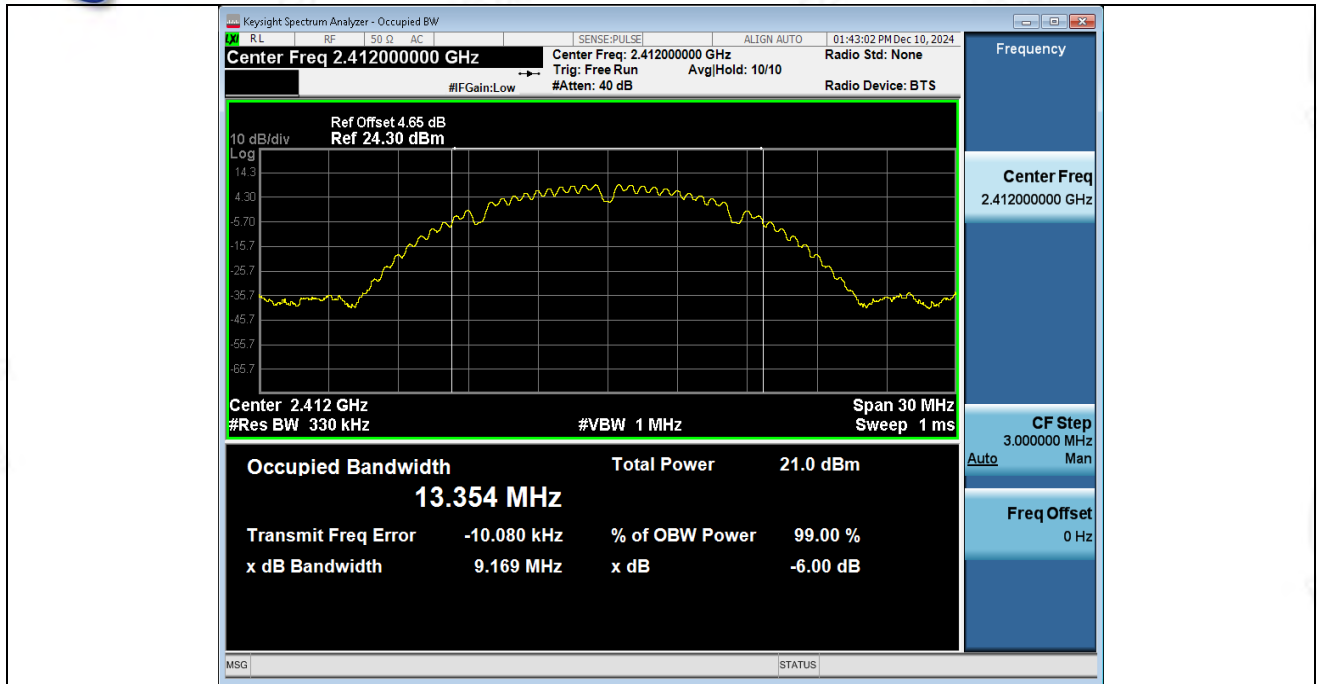
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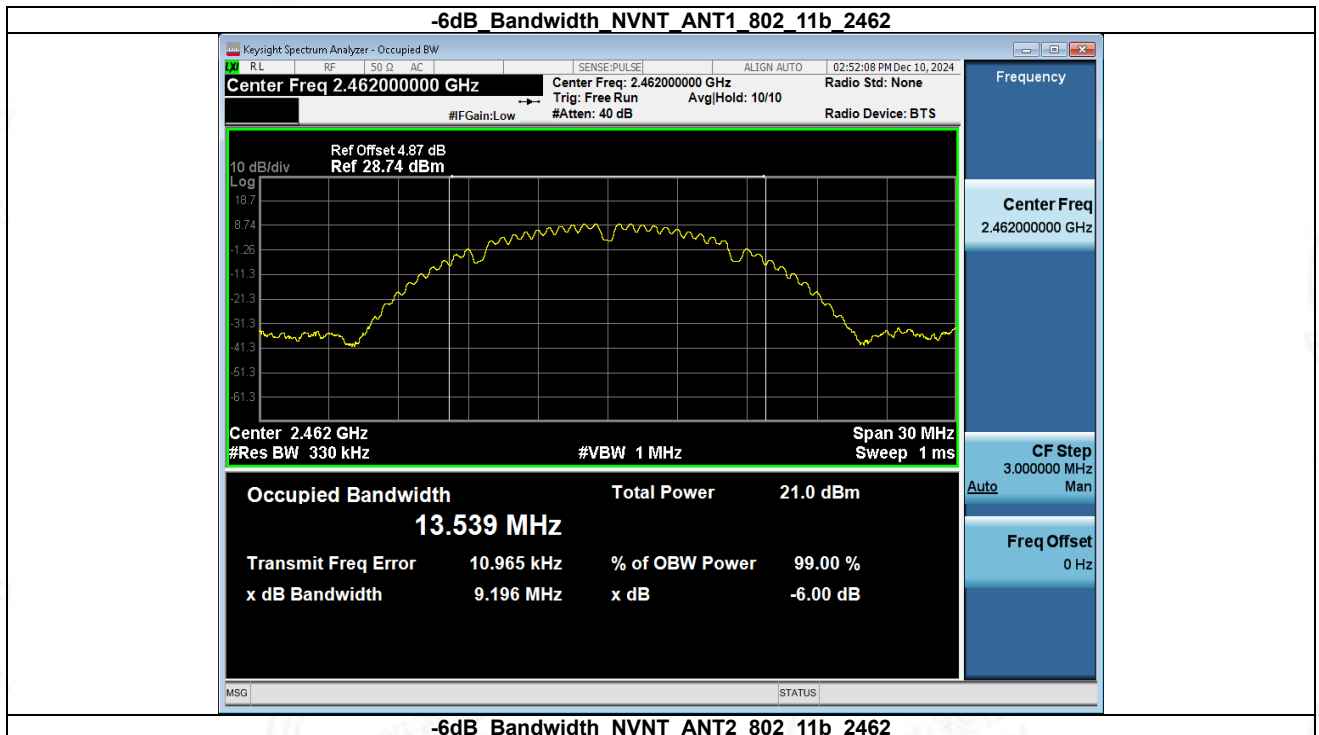
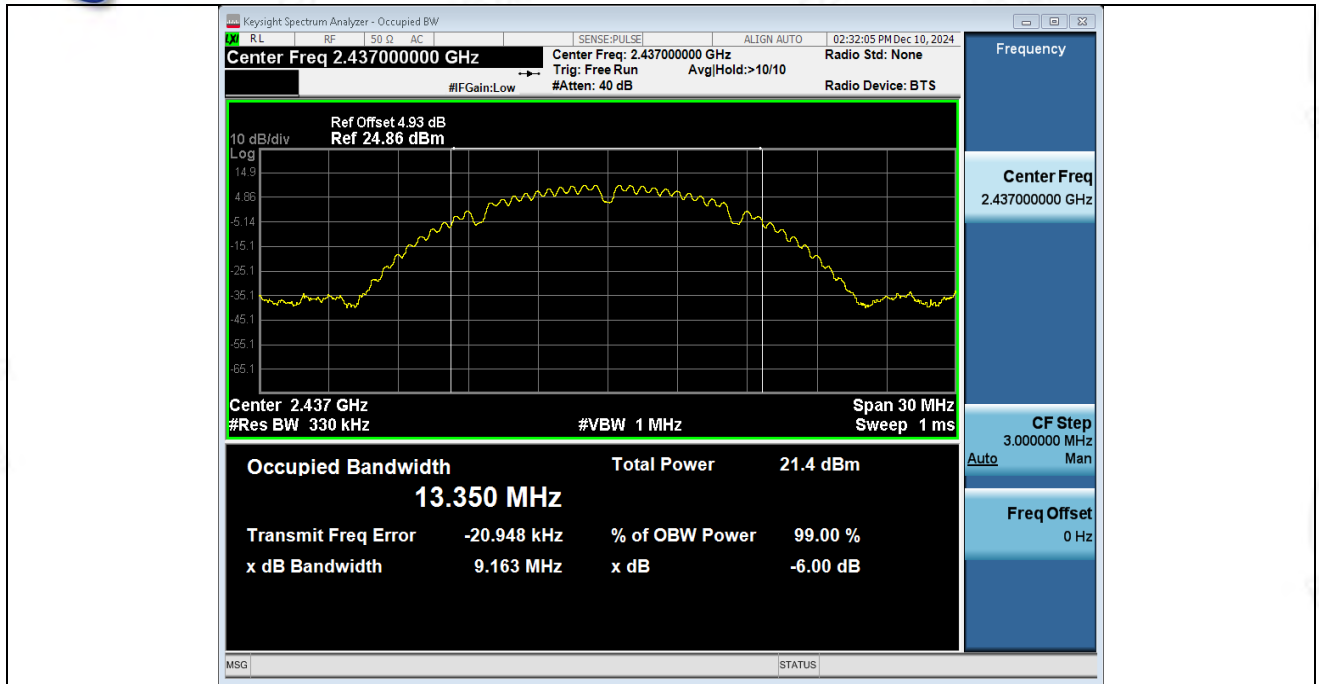


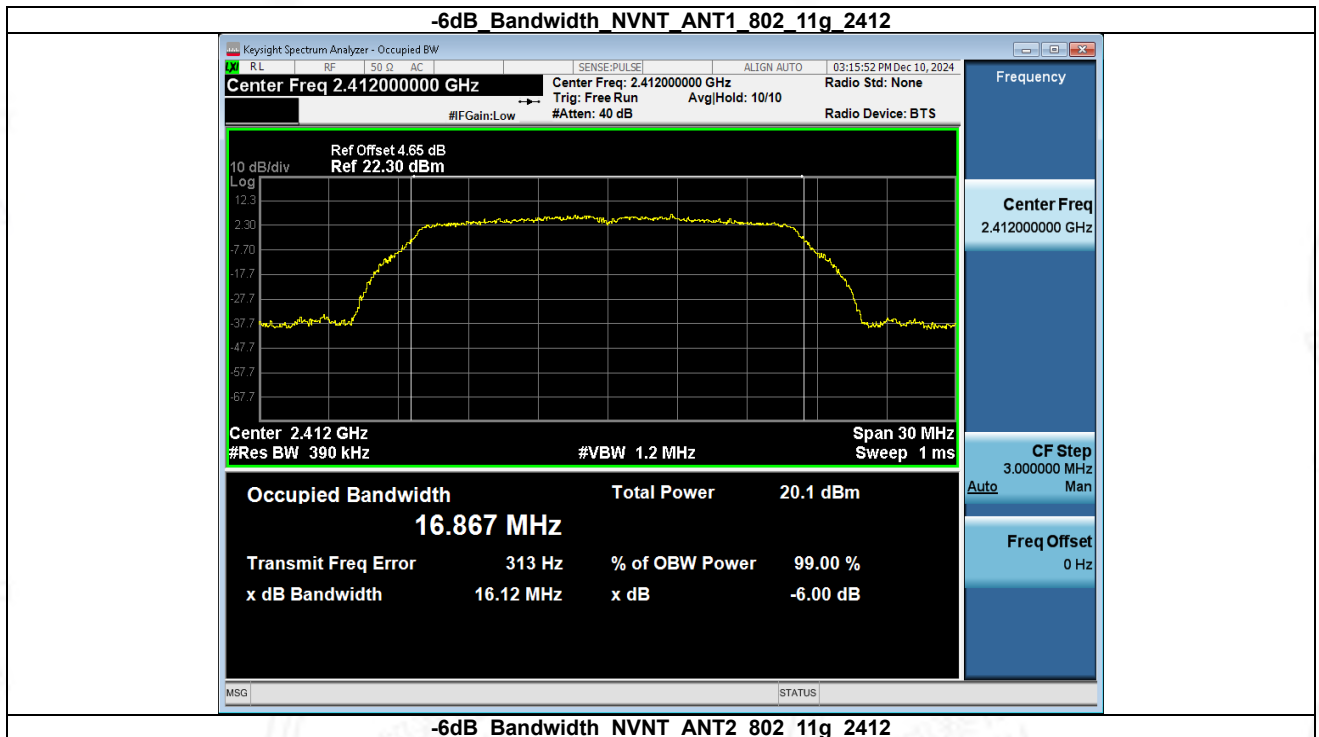
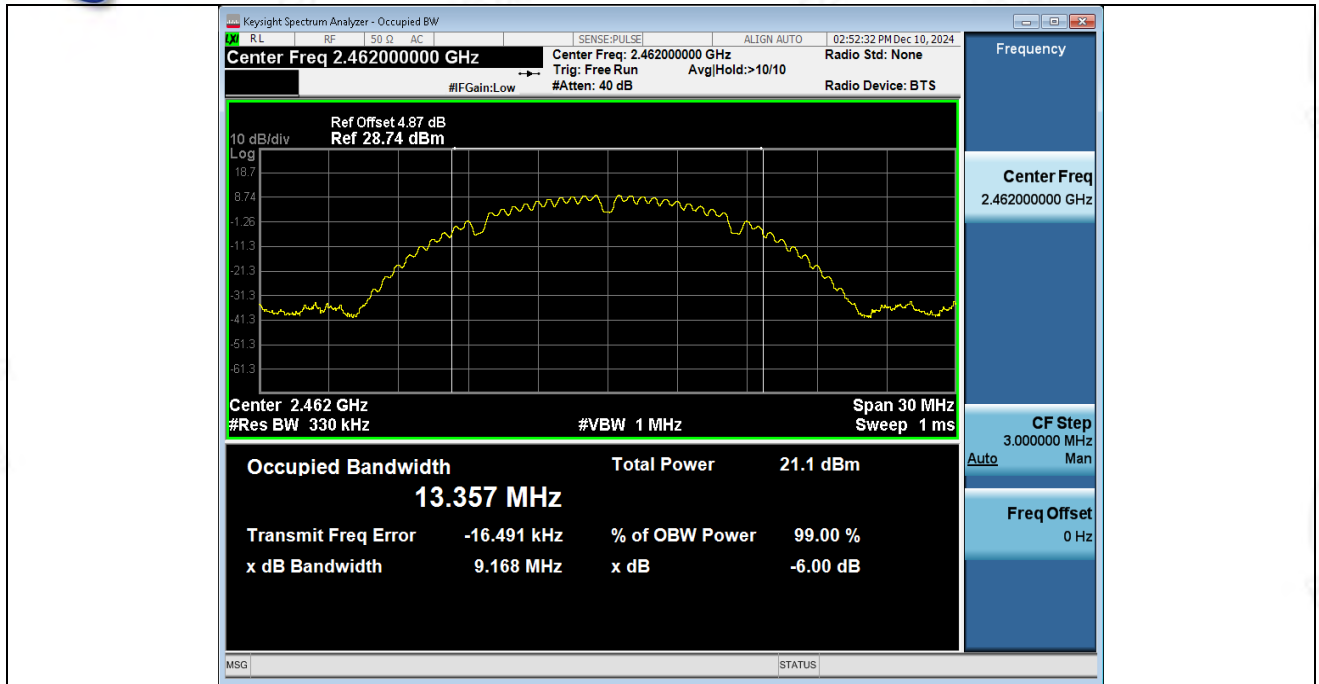
1. -6dB Bandwidth

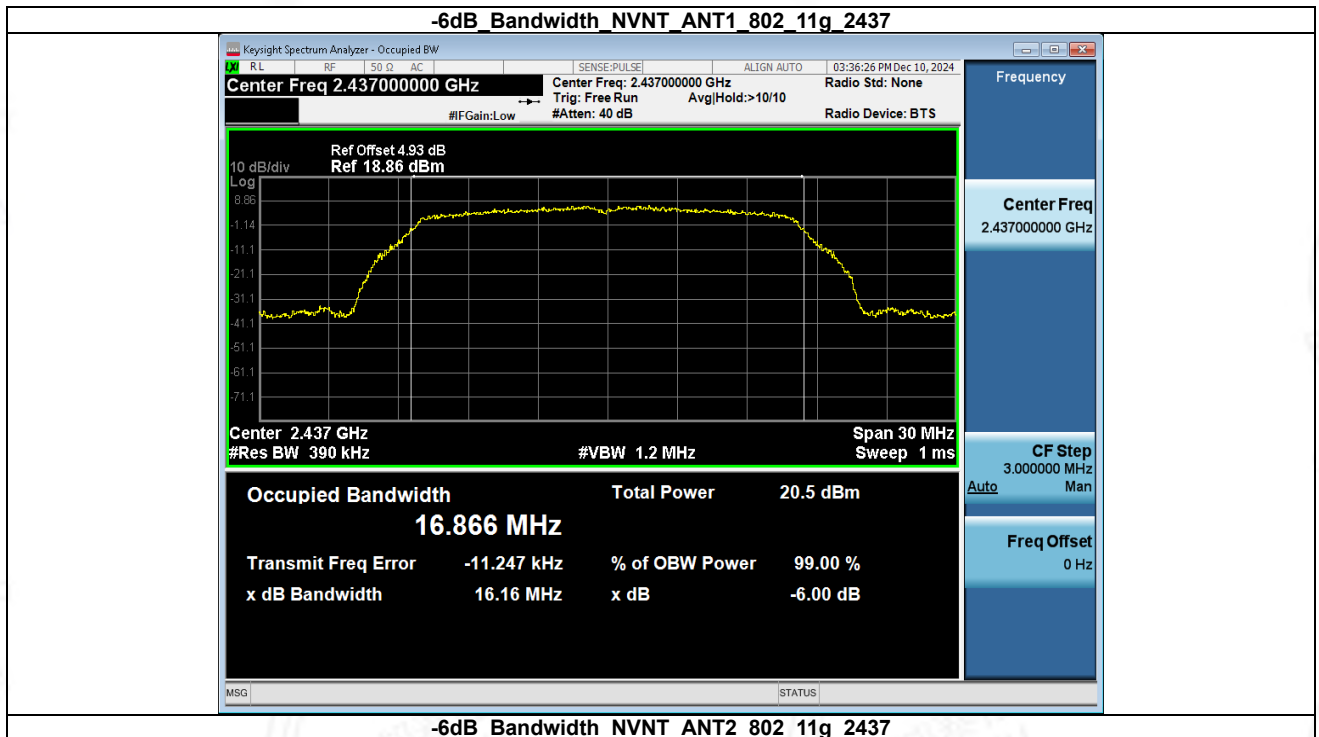
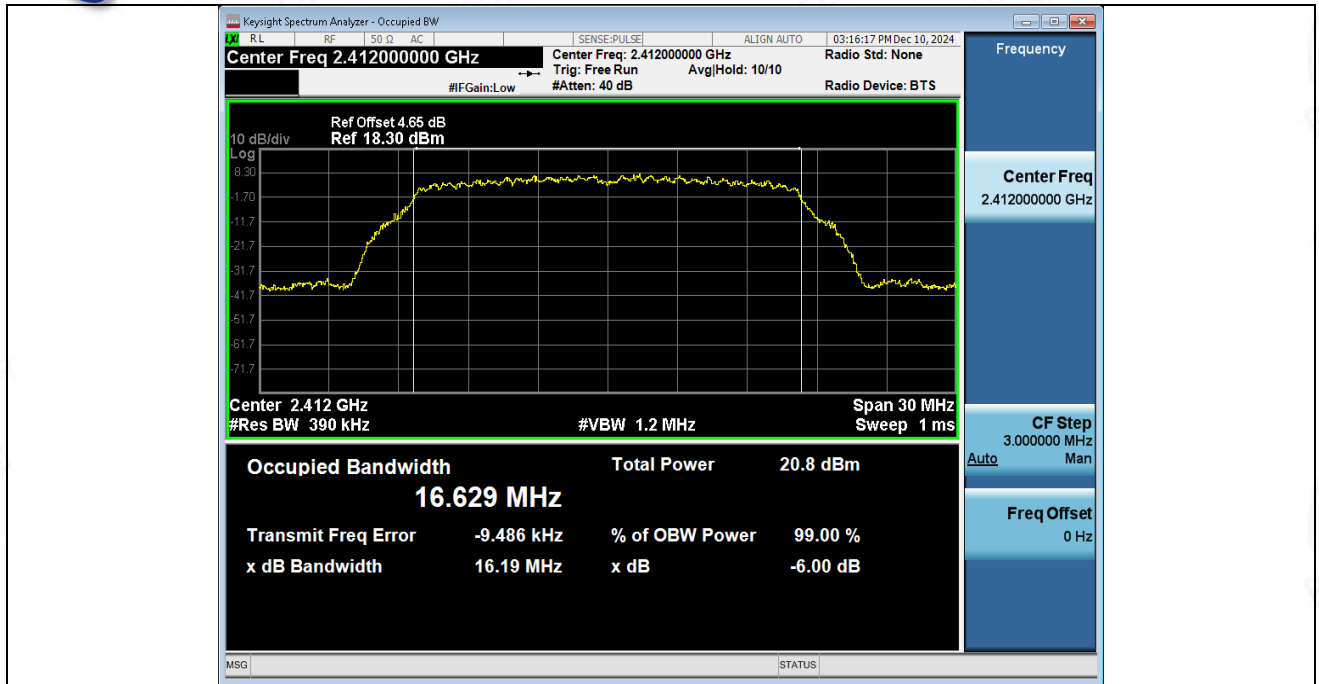
Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	9.19	500	Pass
NVNT	ANT2	802.11b	2412.00	9.17	500	Pass
NVNT	ANT1	802.11b	2437.00	9.19	500	Pass
NVNT	ANT2	802.11b	2437.00	9.16	500	Pass
NVNT	ANT1	802.11b	2462.00	9.20	500	Pass
NVNT	ANT2	802.11b	2462.00	9.17	500	Pass
NVNT	ANT1	802.11g	2412.00	16.12	500	Pass
NVNT	ANT2	802.11g	2412.00	16.19	500	Pass
NVNT	ANT1	802.11g	2437.00	16.16	500	Pass
NVNT	ANT2	802.11g	2437.00	16.09	500	Pass
NVNT	ANT1	802.11g	2462.00	16.20	500	Pass
NVNT	ANT2	802.11g	2462.00	16.18	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	17.42	500	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	17.01	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.47	500	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	16.64	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.45	500	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	16.66	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.56	500	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	35.61	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.35	500	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	34.77	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.46	500	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	35.76	500	Pass

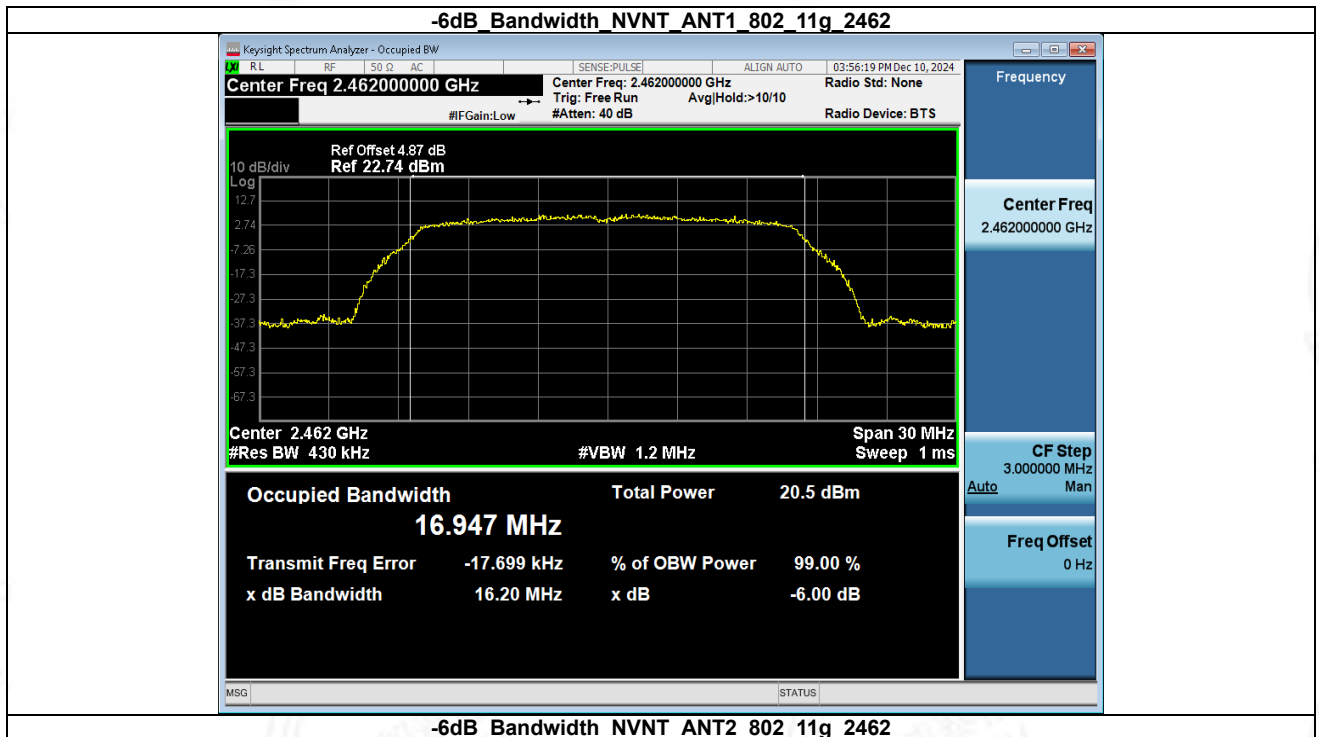
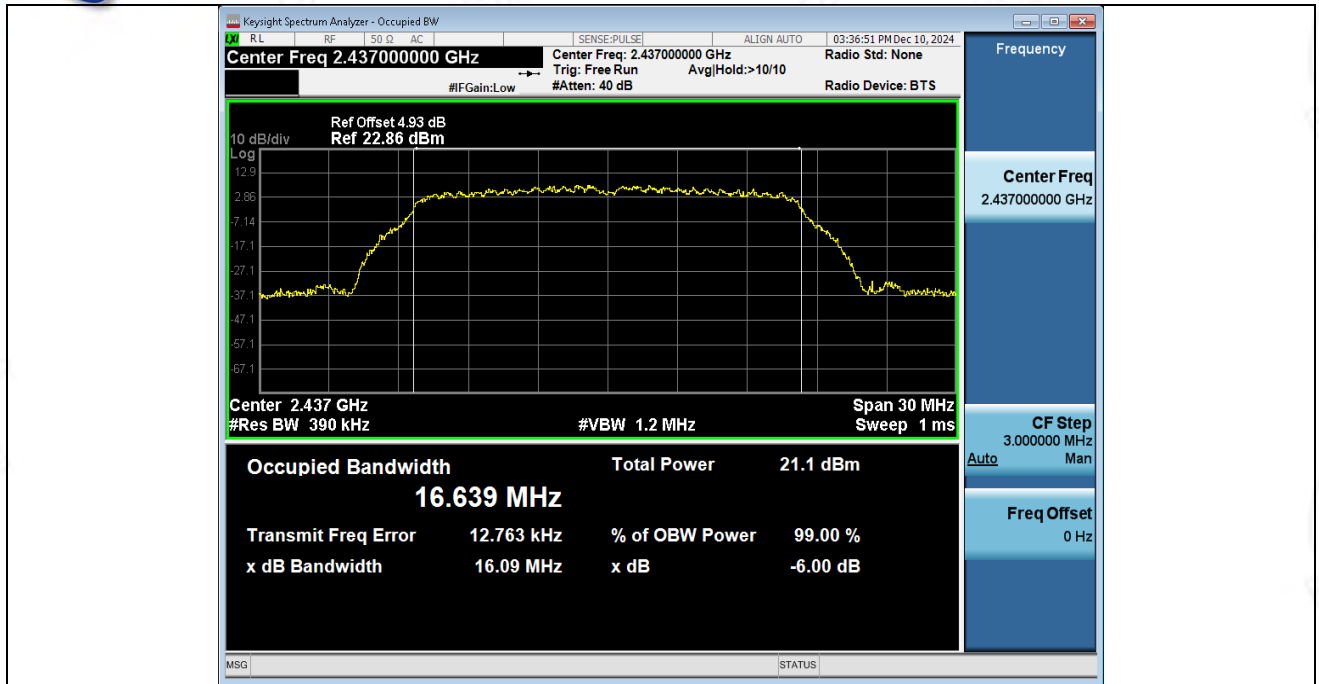


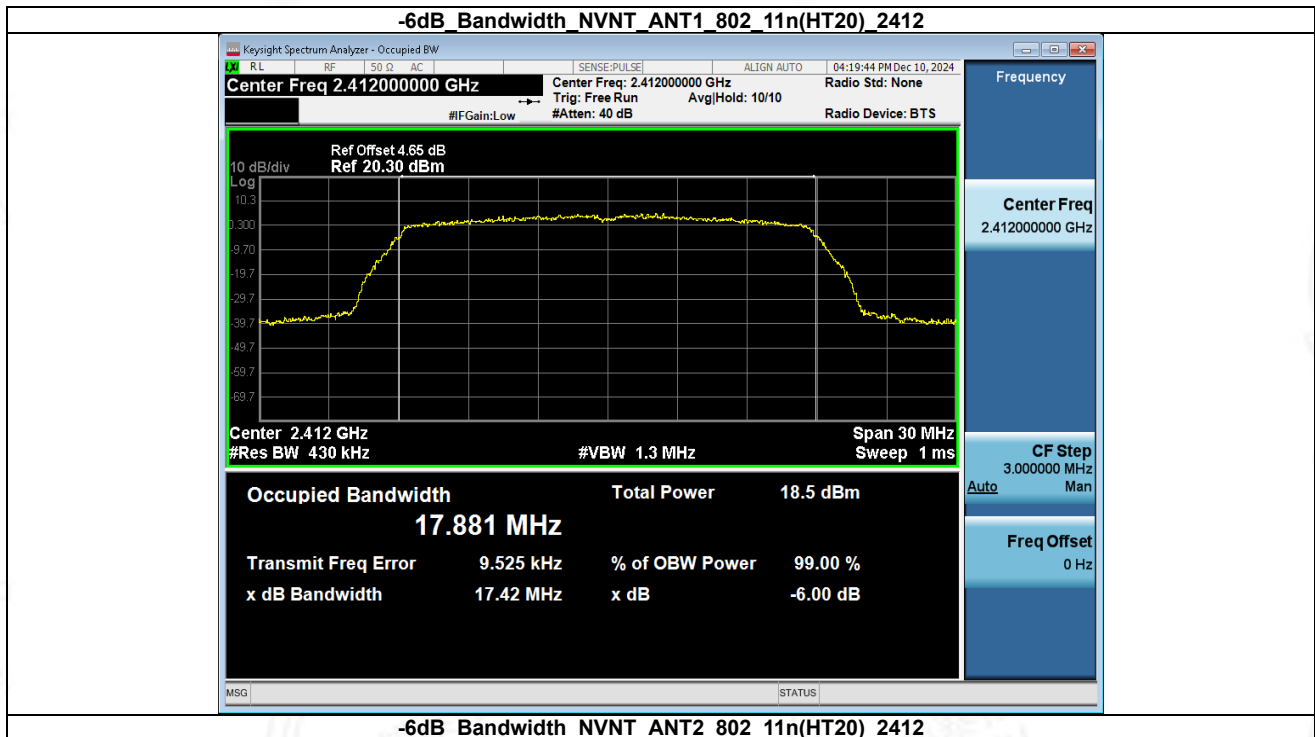
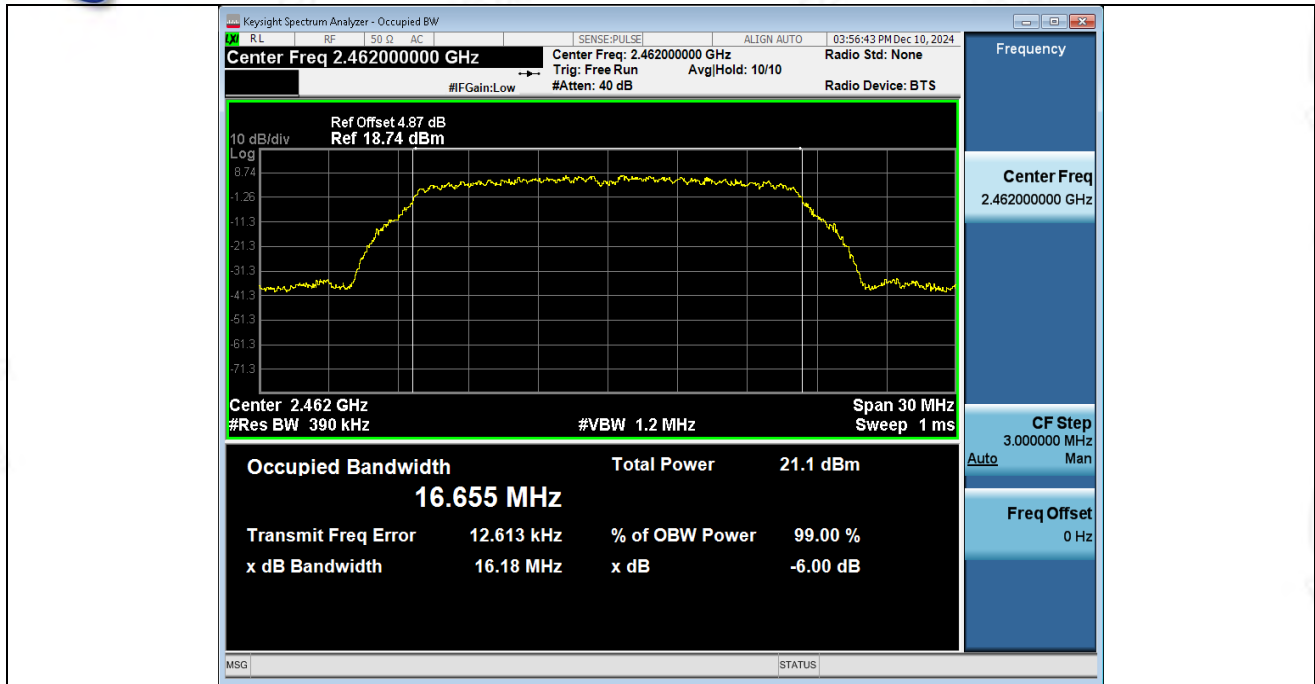


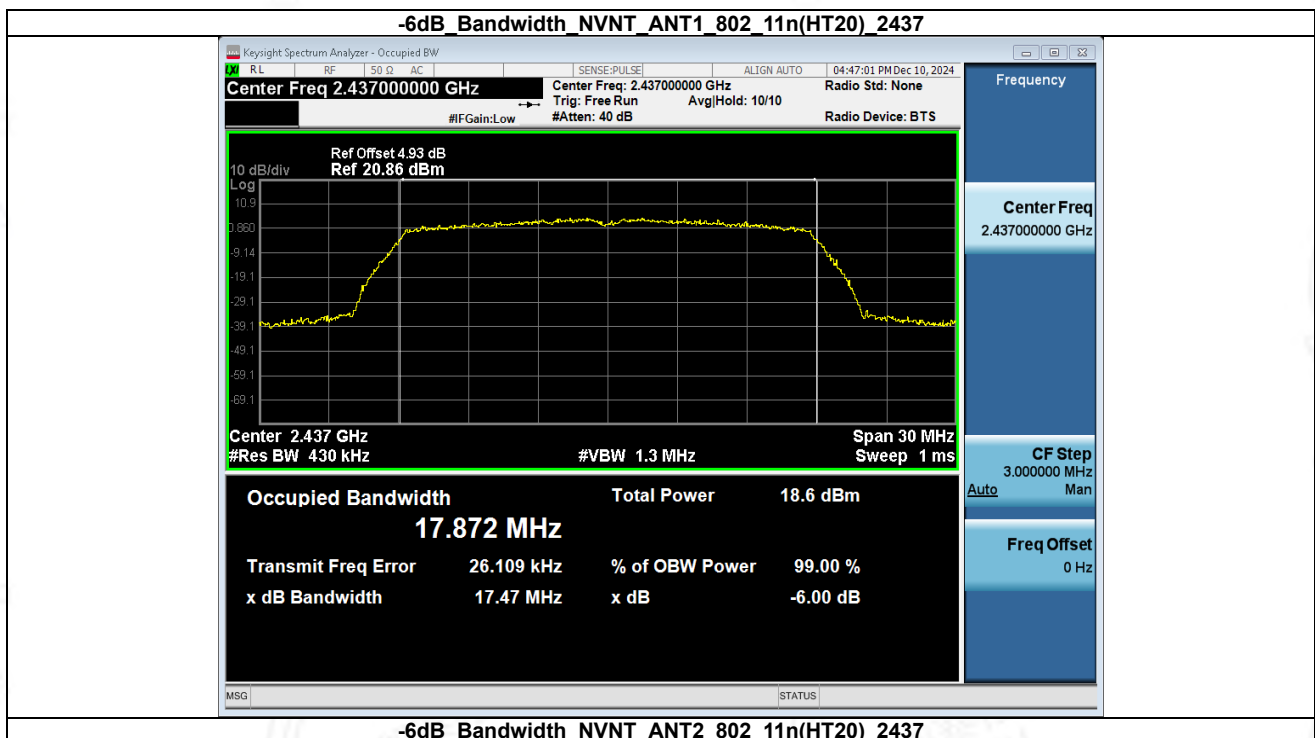
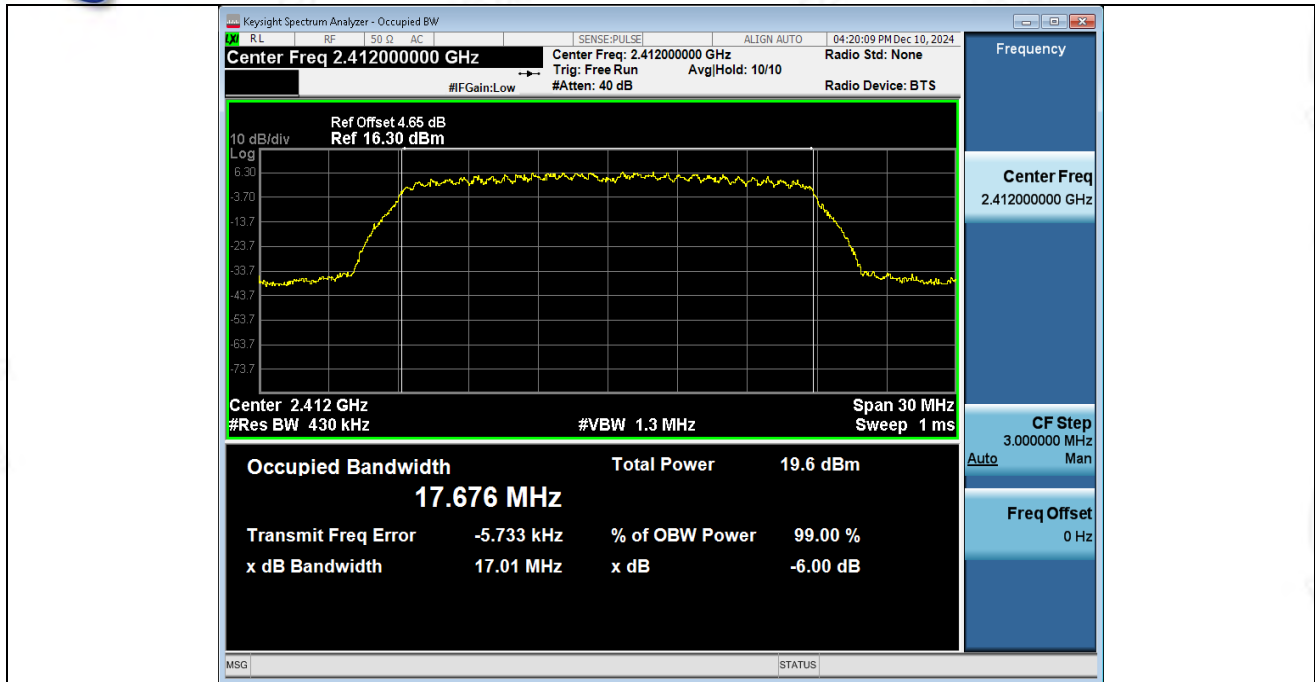


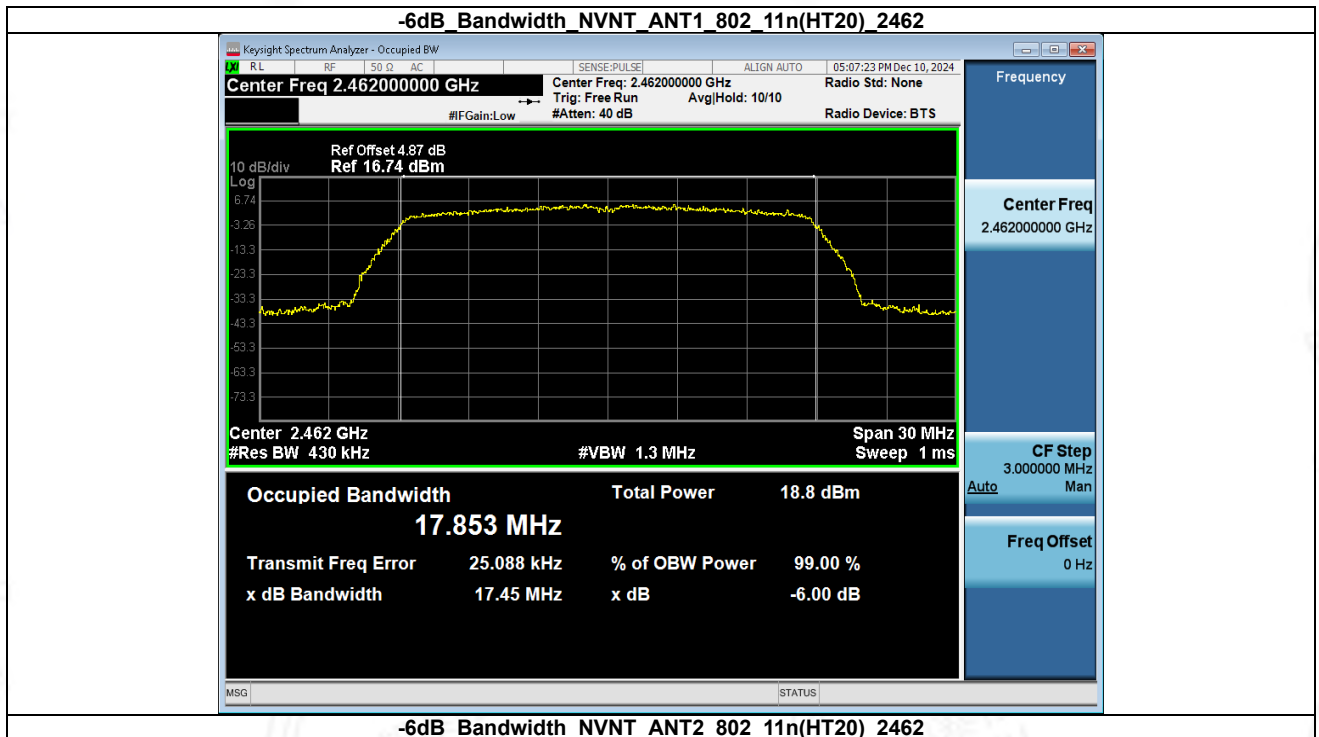
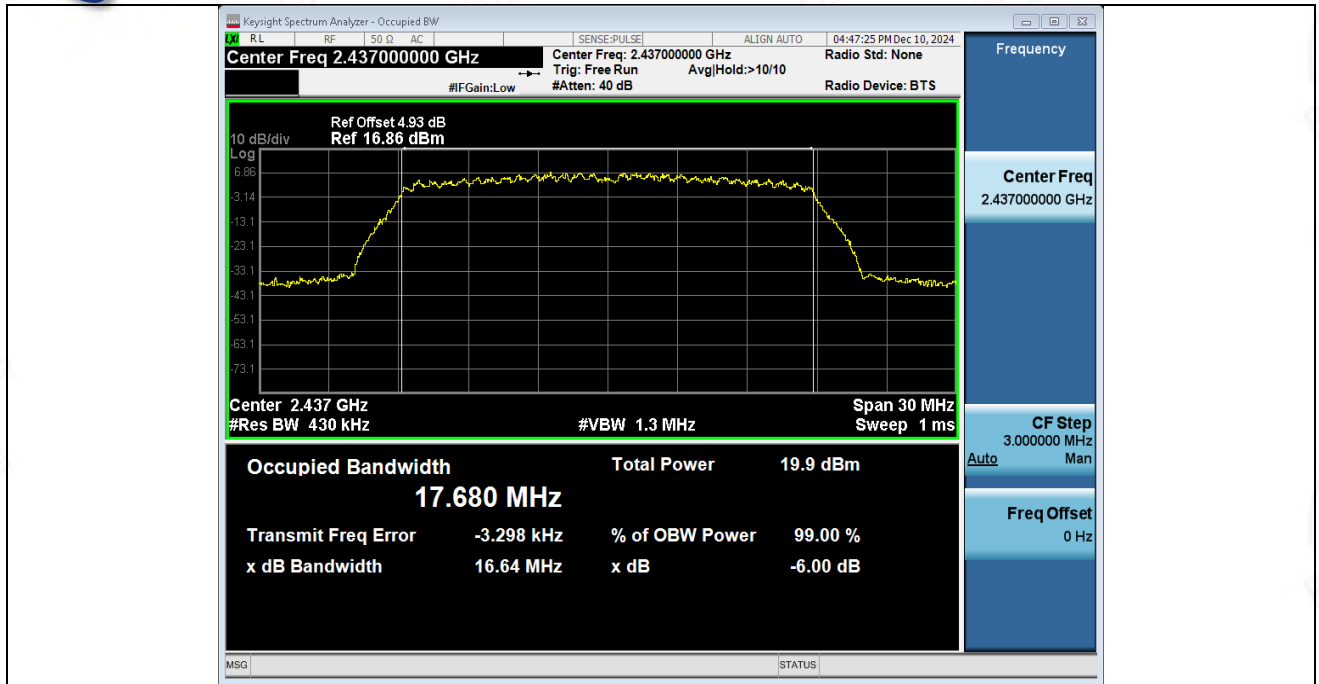


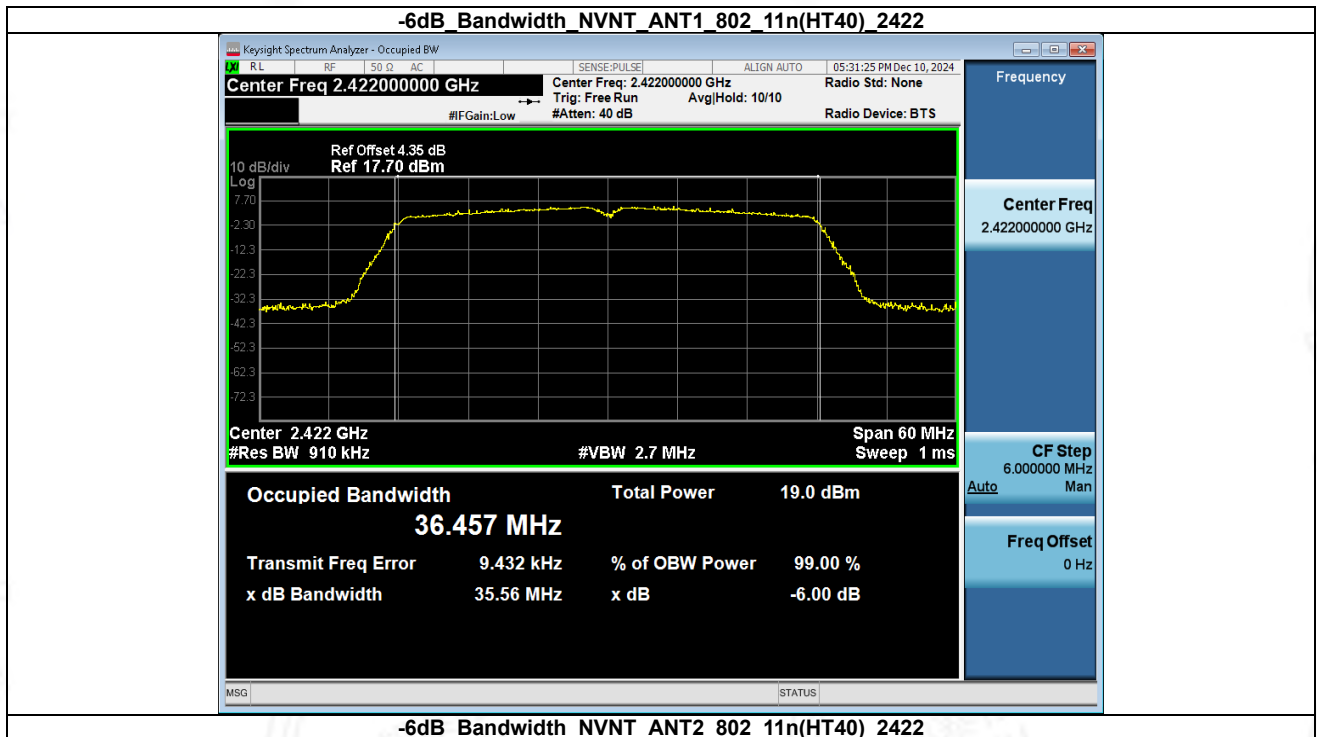
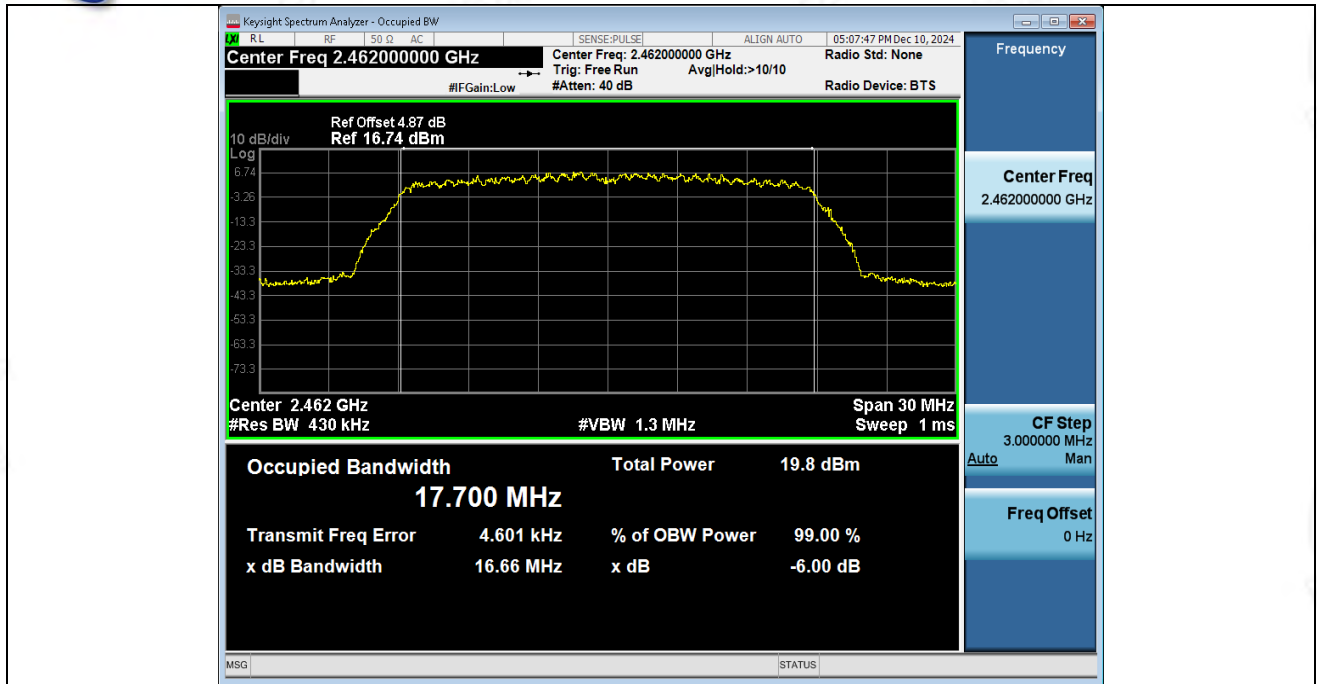


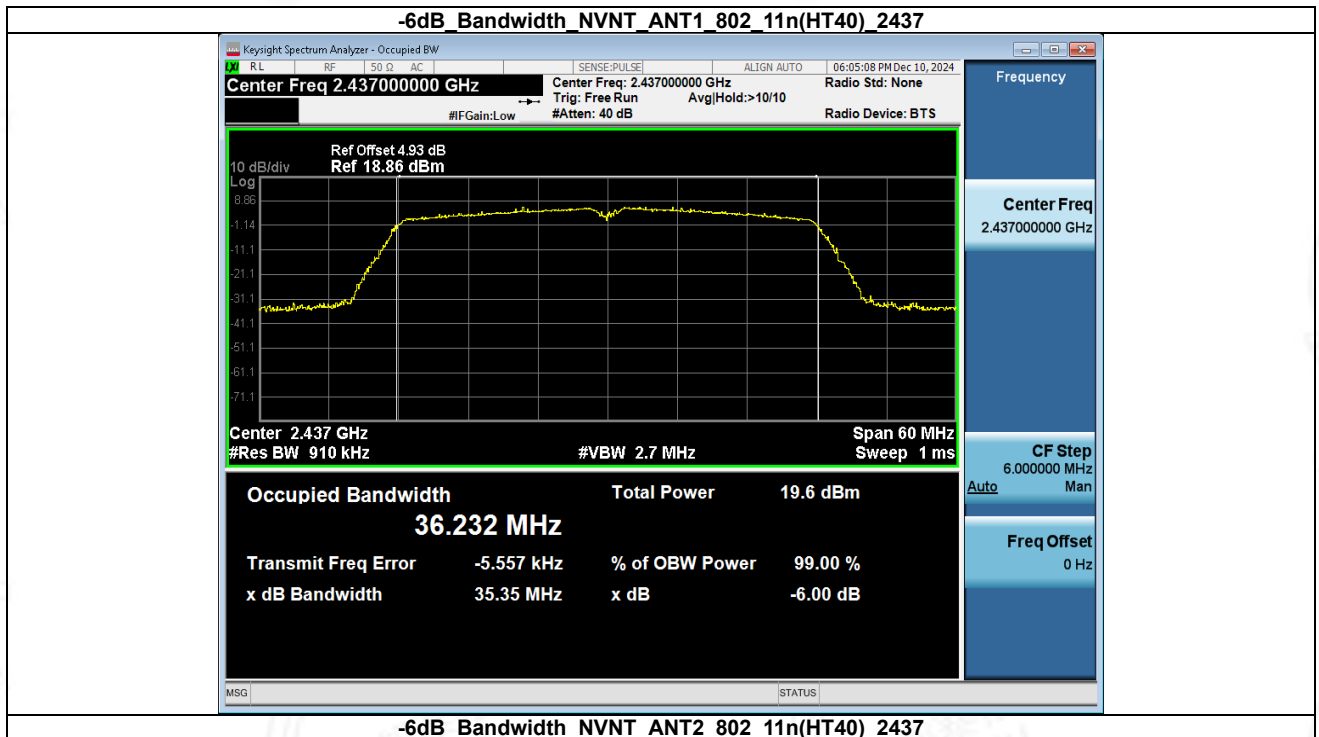
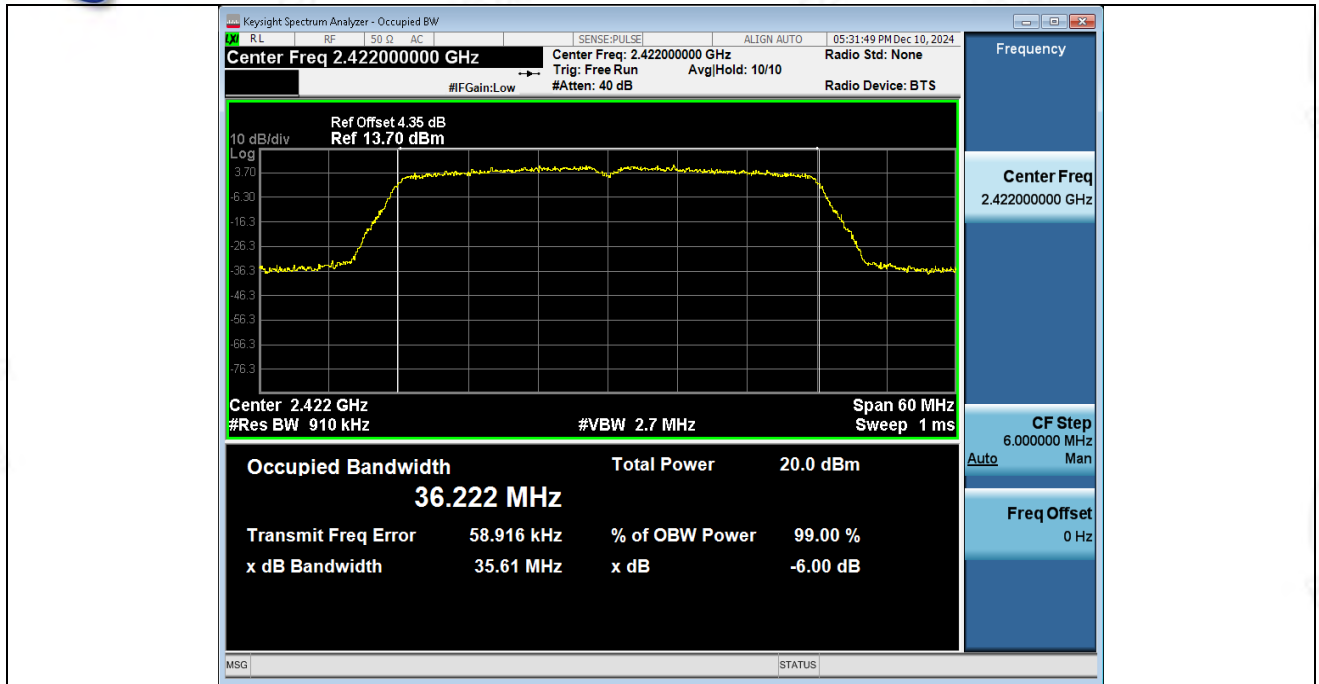


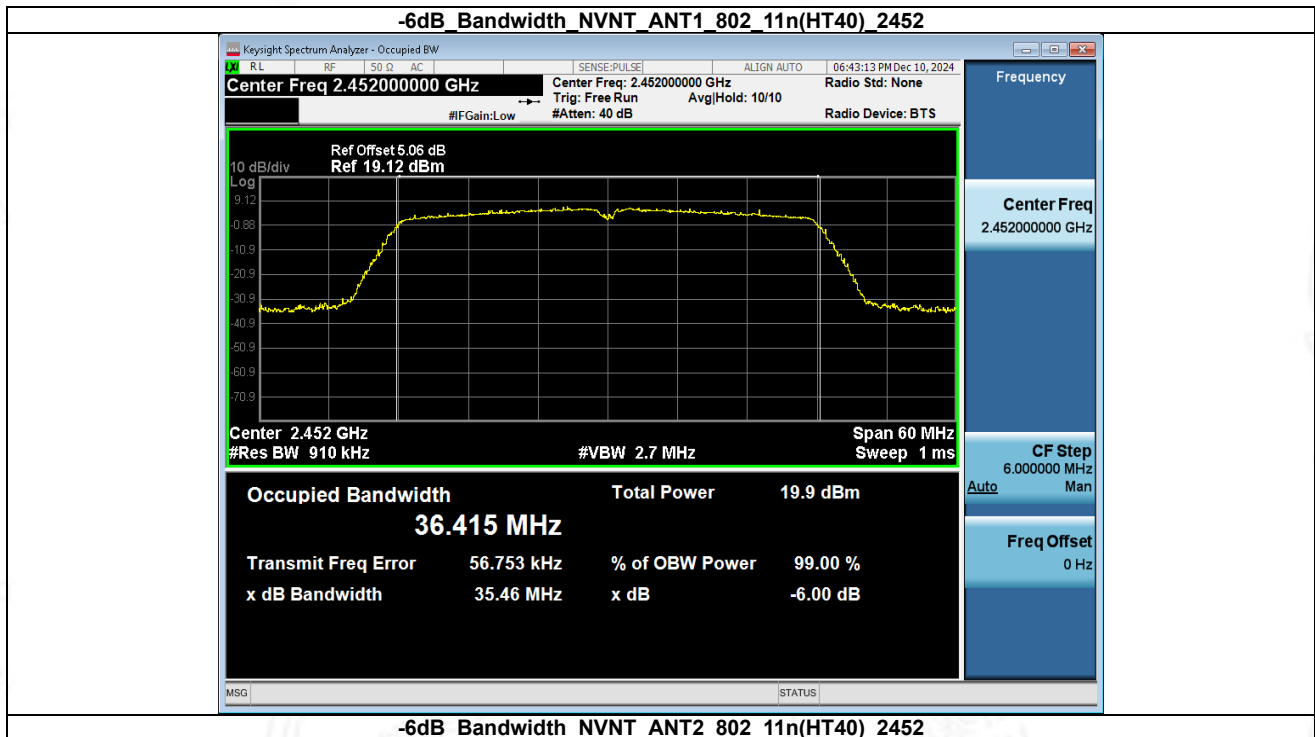
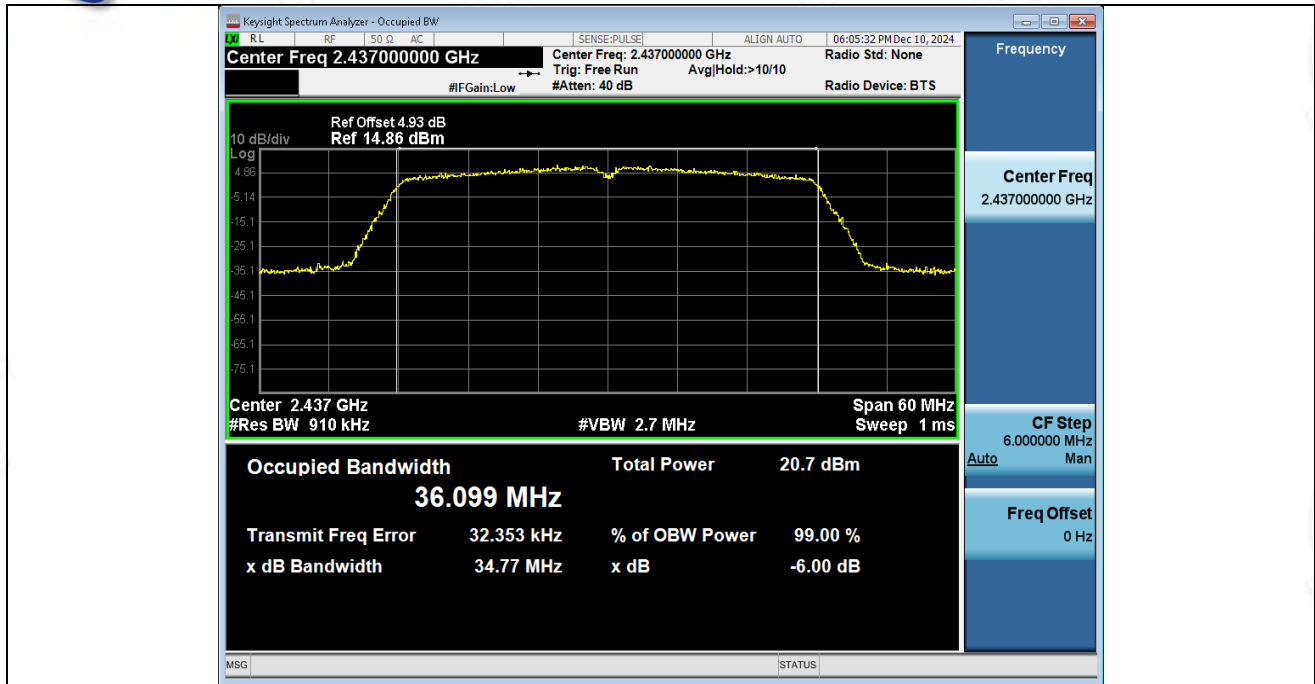


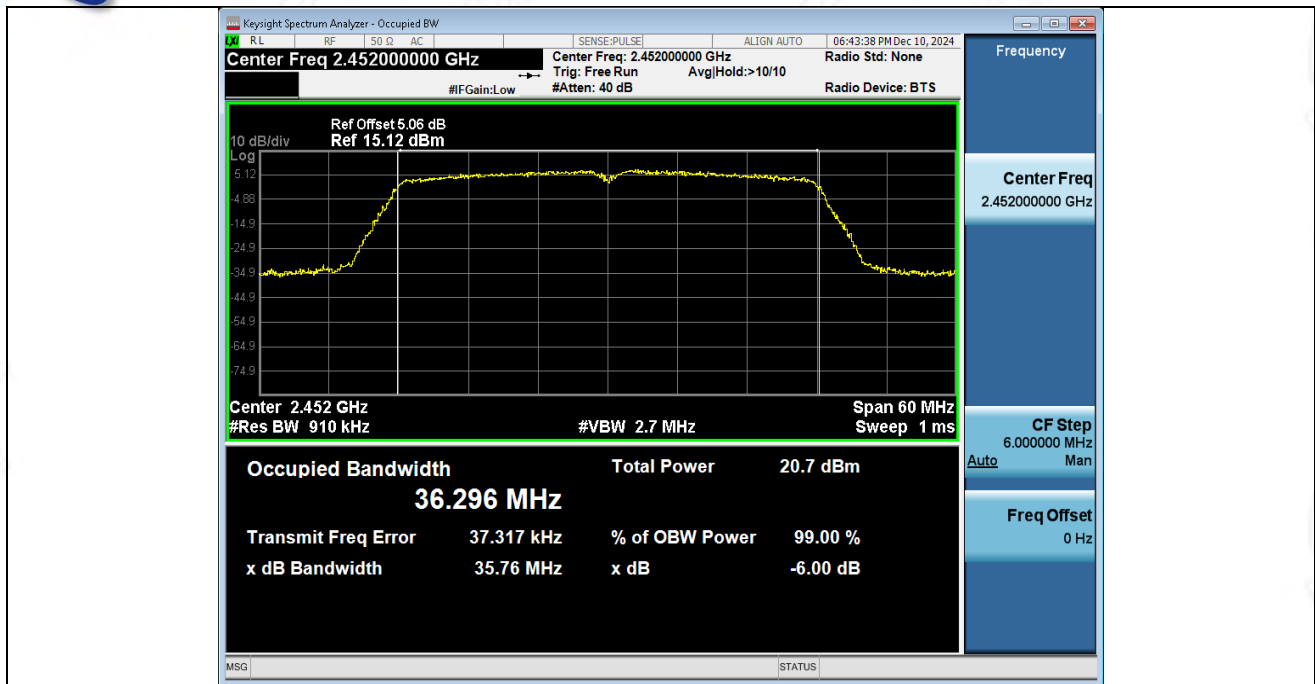








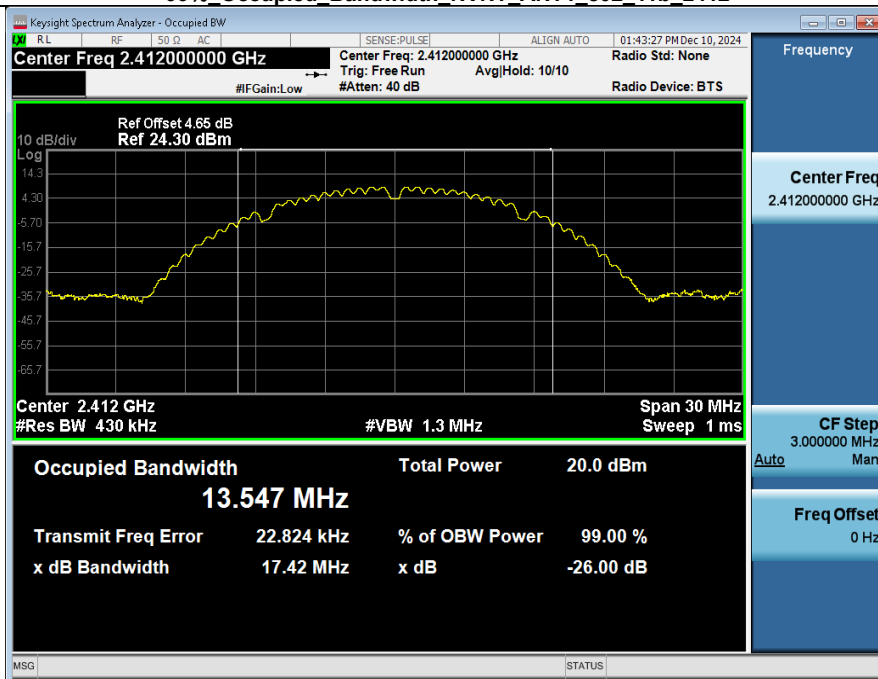




2. 99% Occupied Bandwidth

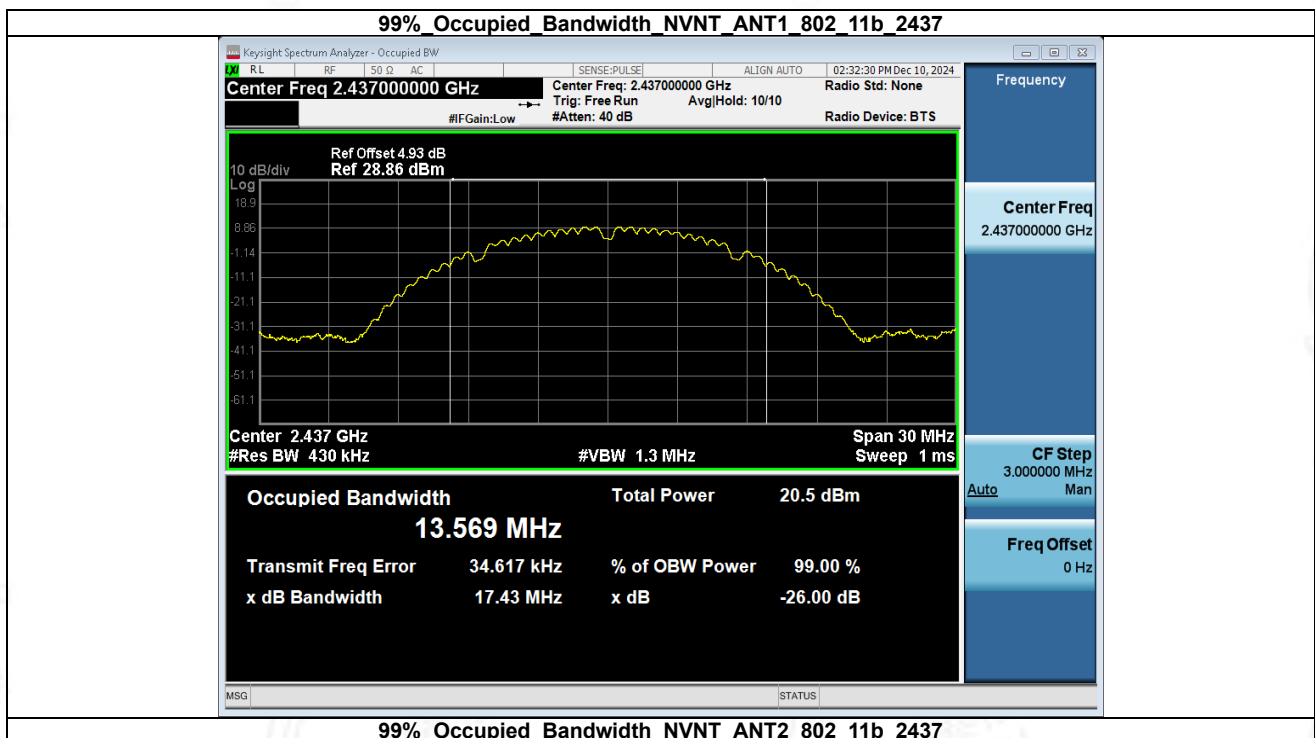
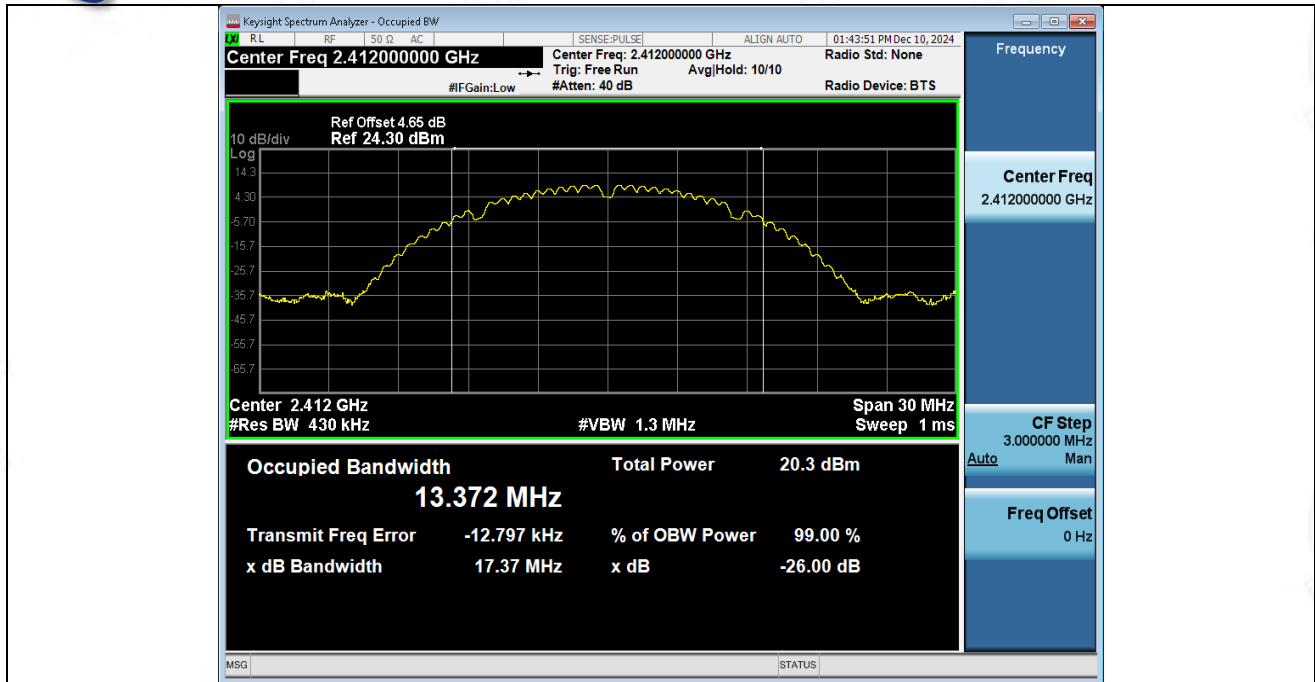
Condition	Antenna	Modulation	Frequency (MHz)	99% BW (MHz)
NVNT	ANT1	802.11b	2412.00	13.547
NVNT	ANT2	802.11b	2412.00	13.372
NVNT	ANT1	802.11b	2437.00	13.569
NVNT	ANT2	802.11b	2437.00	13.377
NVNT	ANT1	802.11b	2462.00	13.543
NVNT	ANT2	802.11b	2462.00	13.373
NVNT	ANT1	802.11g	2412.00	17.060
NVNT	ANT2	802.11g	2412.00	16.768
NVNT	ANT1	802.11g	2437.00	17.025
NVNT	ANT2	802.11g	2437.00	16.781
NVNT	ANT1	802.11g	2462.00	17.045
NVNT	ANT2	802.11g	2462.00	16.726
NVNT	ANT1	802.11n(HT20)	2412.00	17.966
NVNT	ANT2	802.11n(HT20)	2412.00	17.749
NVNT	ANT1	802.11n(HT20)	2437.00	18.037
NVNT	ANT2	802.11n(HT20)	2437.00	17.745
NVNT	ANT1	802.11n(HT20)	2462.00	18.008
NVNT	ANT2	802.11n(HT20)	2462.00	17.760
NVNT	ANT1	802.11n(HT40)	2422.00	36.452
NVNT	ANT2	802.11n(HT40)	2422.00	36.298
NVNT	ANT1	802.11n(HT40)	2437.00	36.273
NVNT	ANT2	802.11n(HT40)	2437.00	36.195
NVNT	ANT1	802.11n(HT40)	2452.00	36.373
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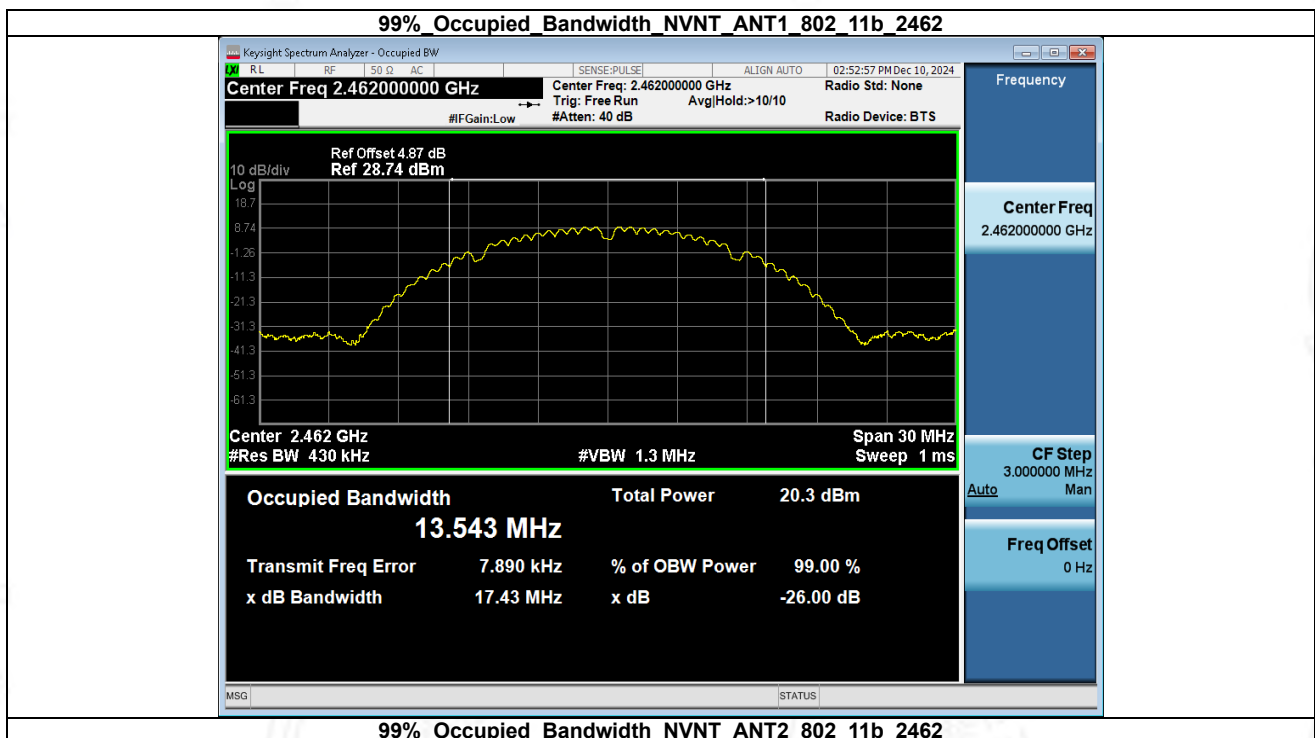
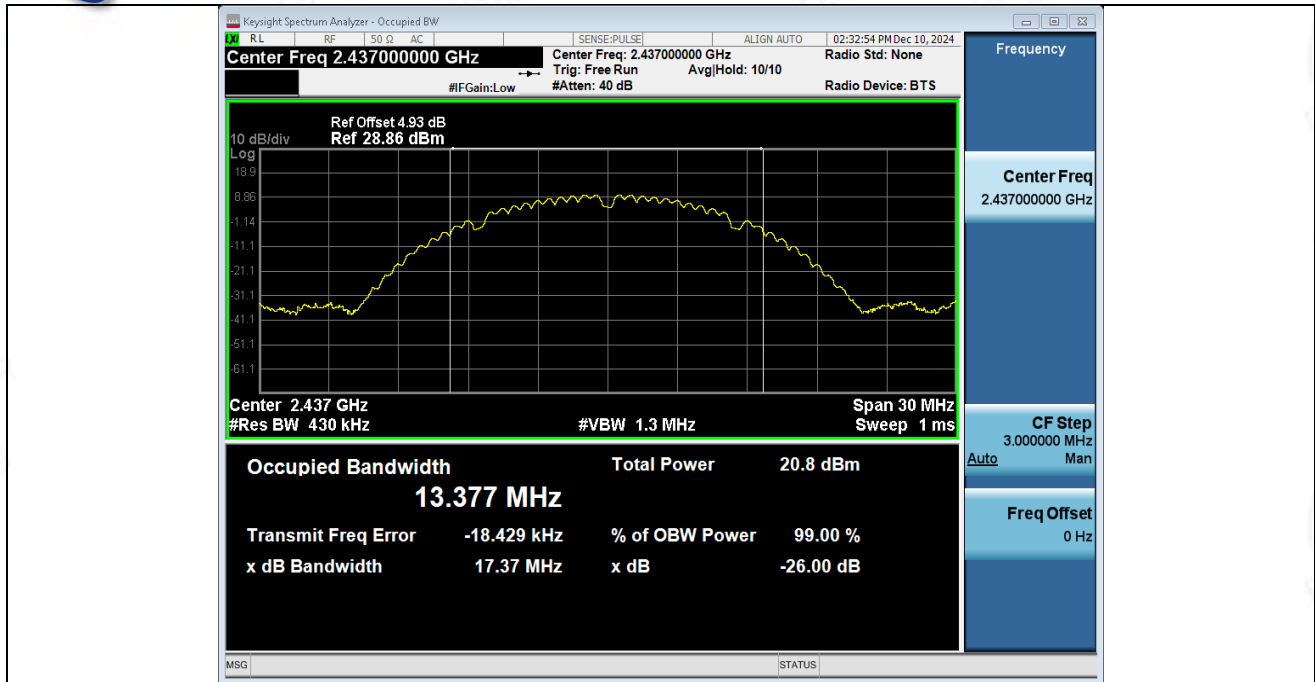
99% Occupied Bandwidth NVNT ANT1 802_11b 2412

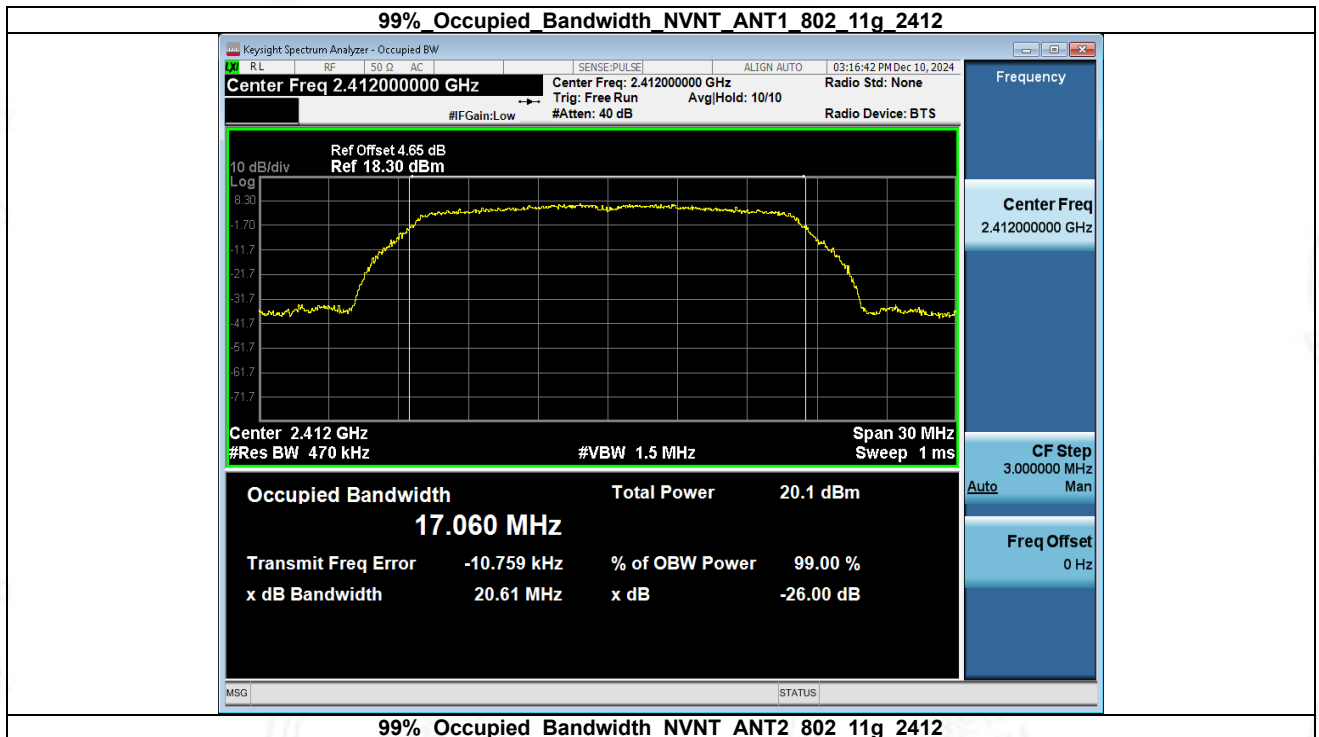
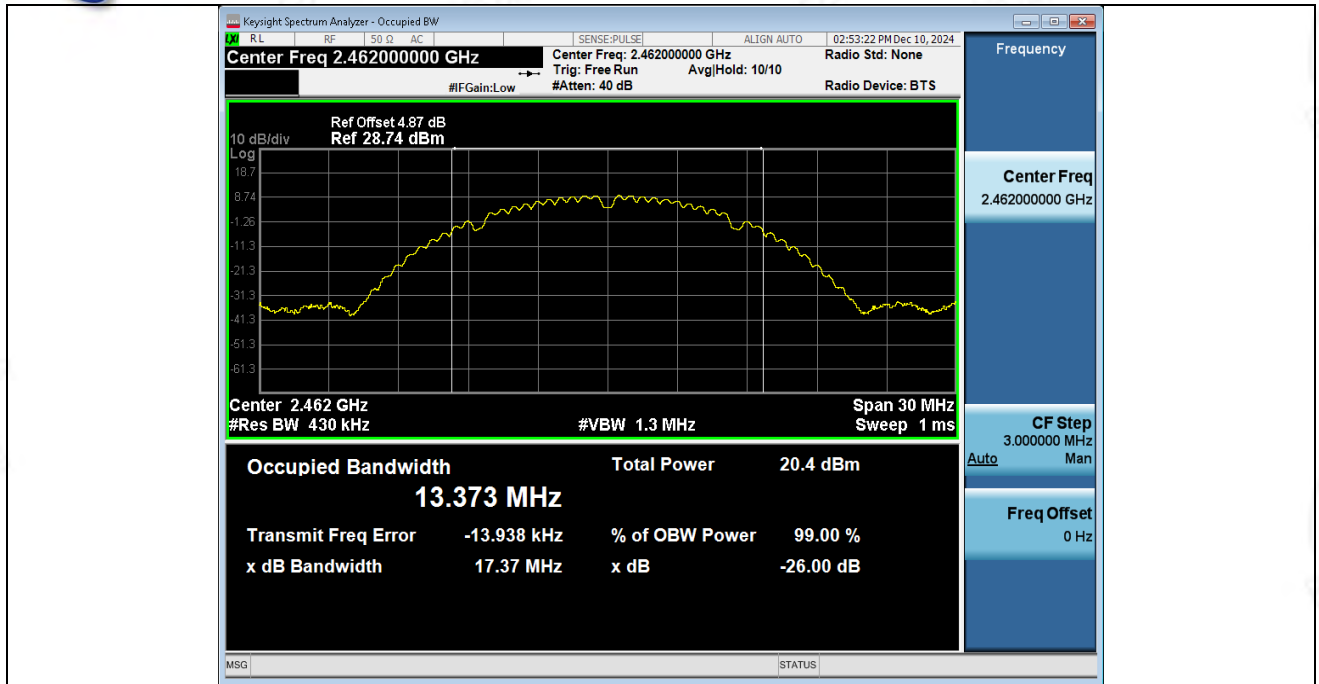


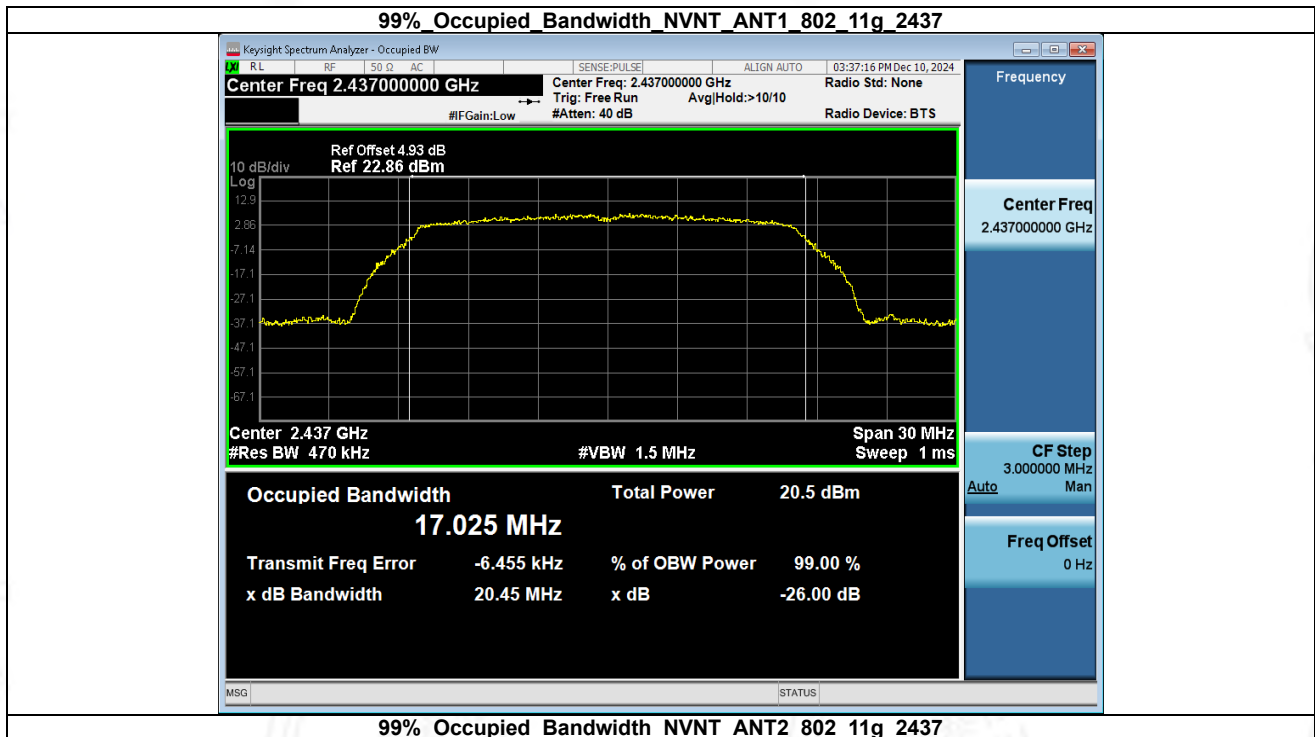
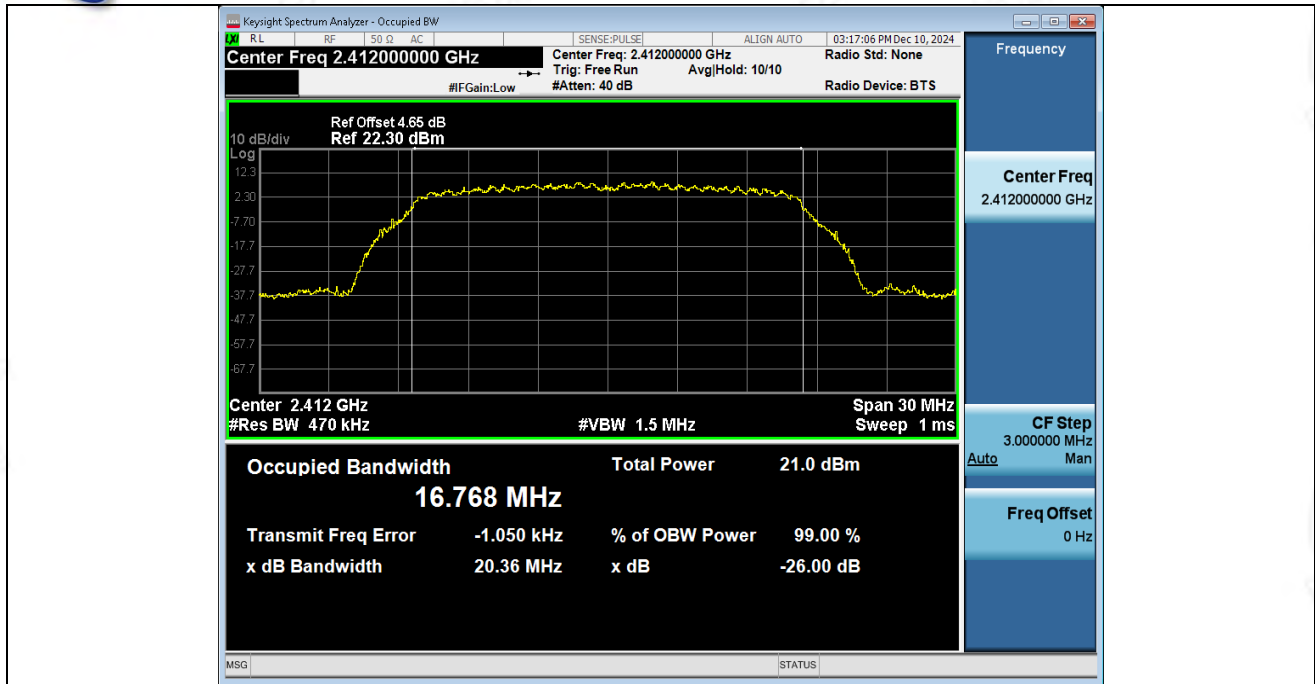
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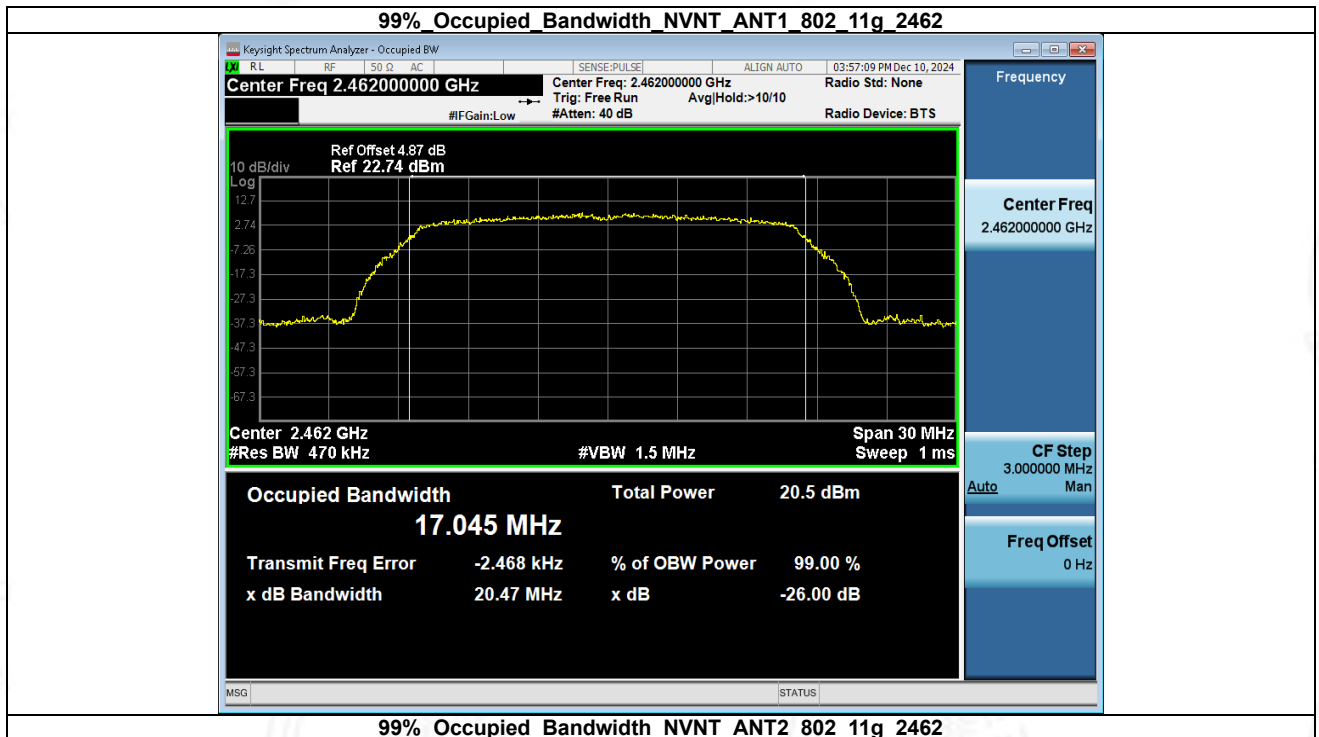
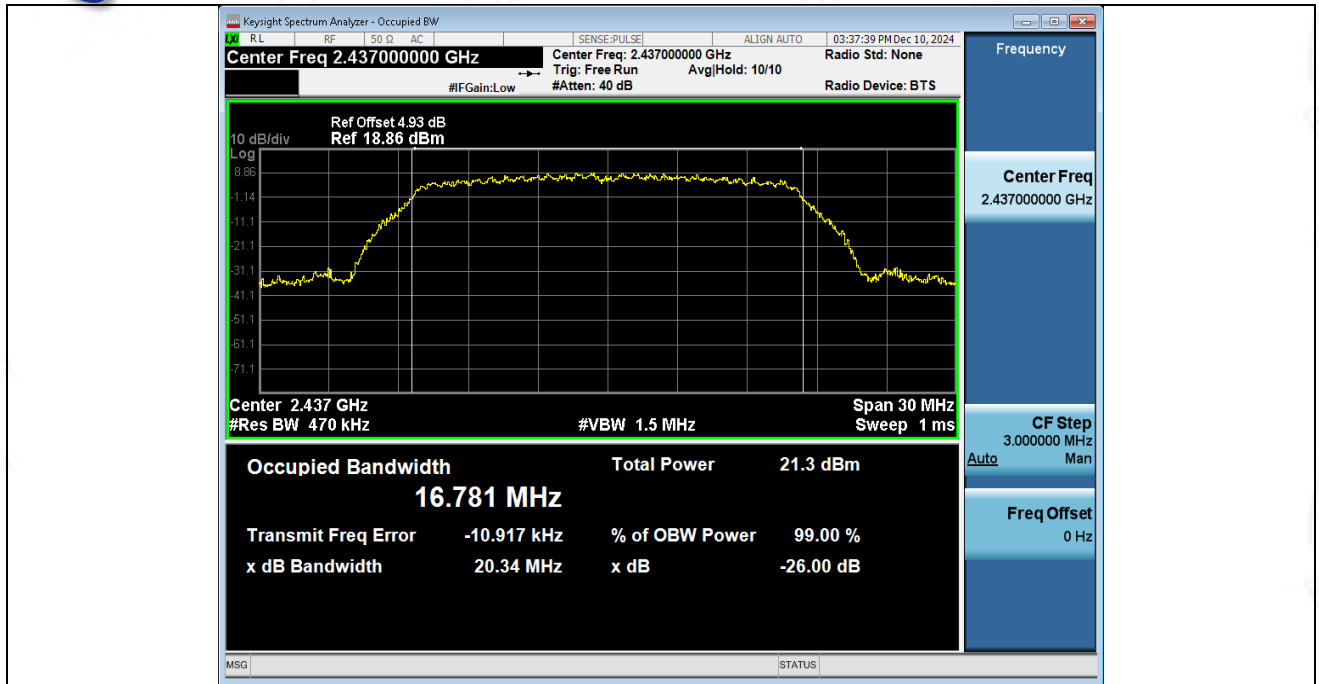


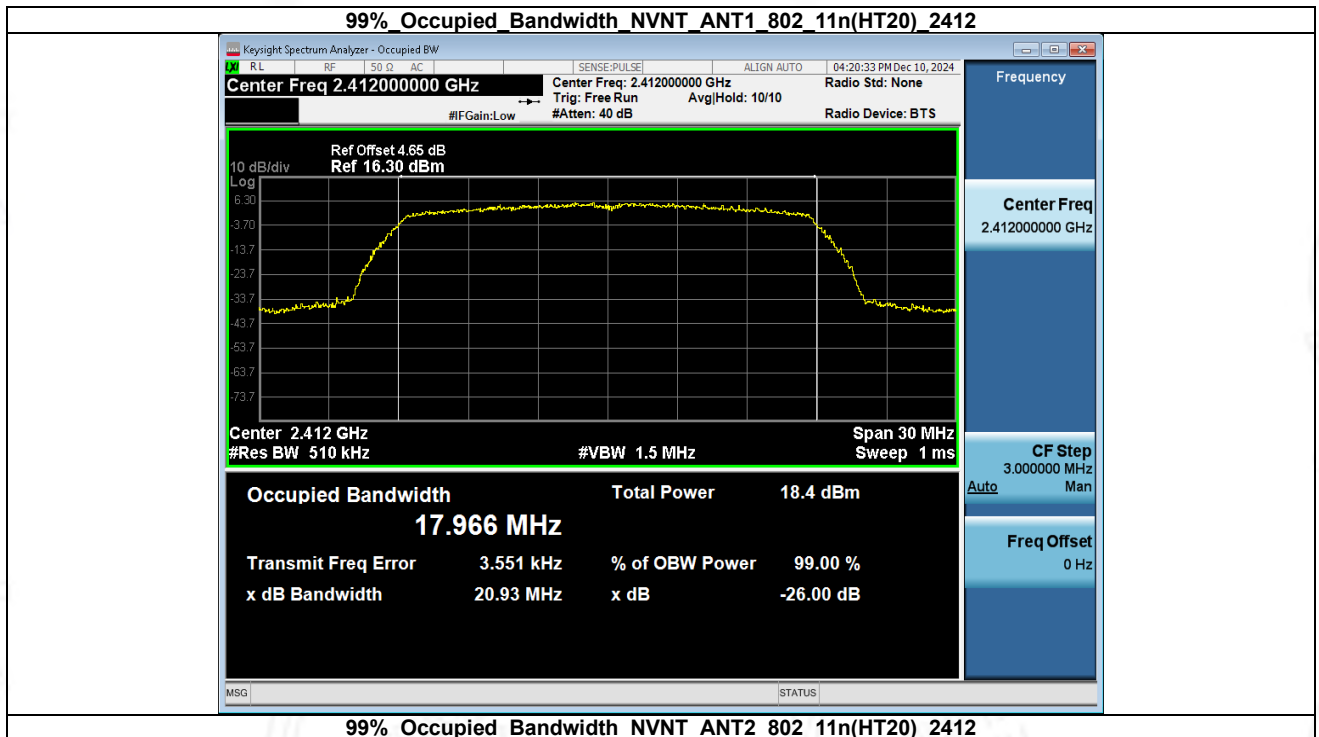
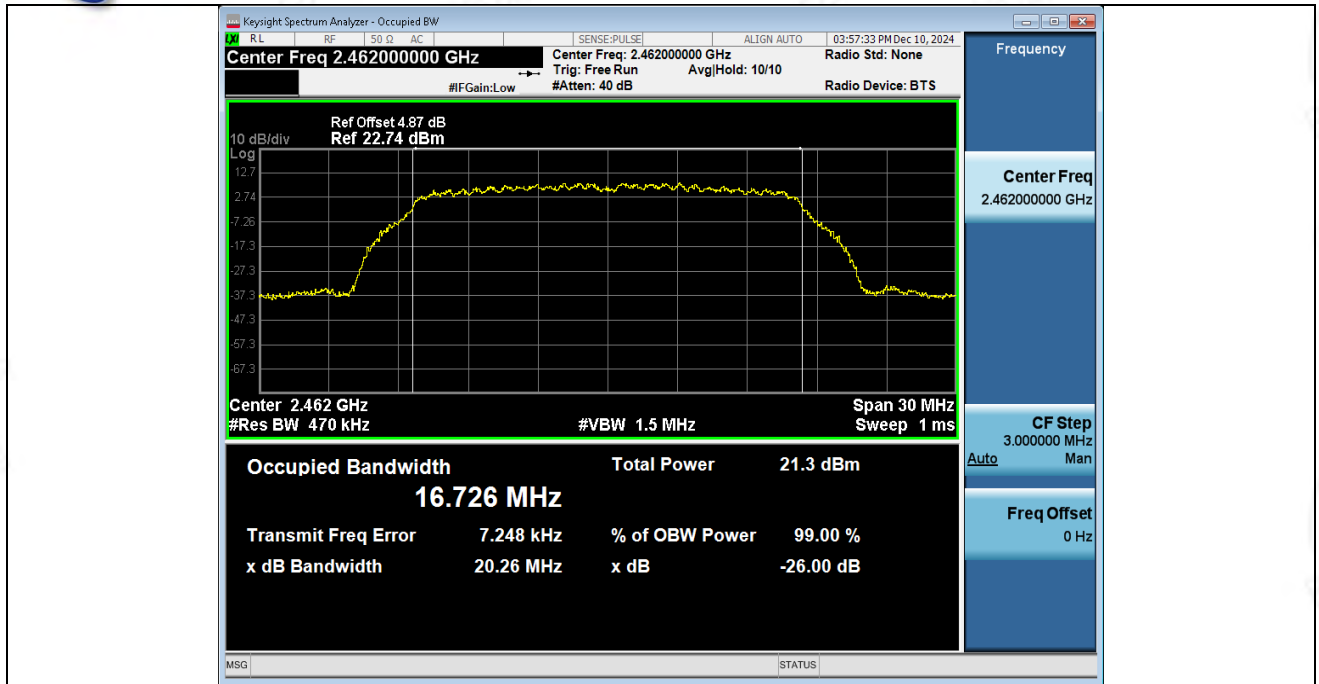


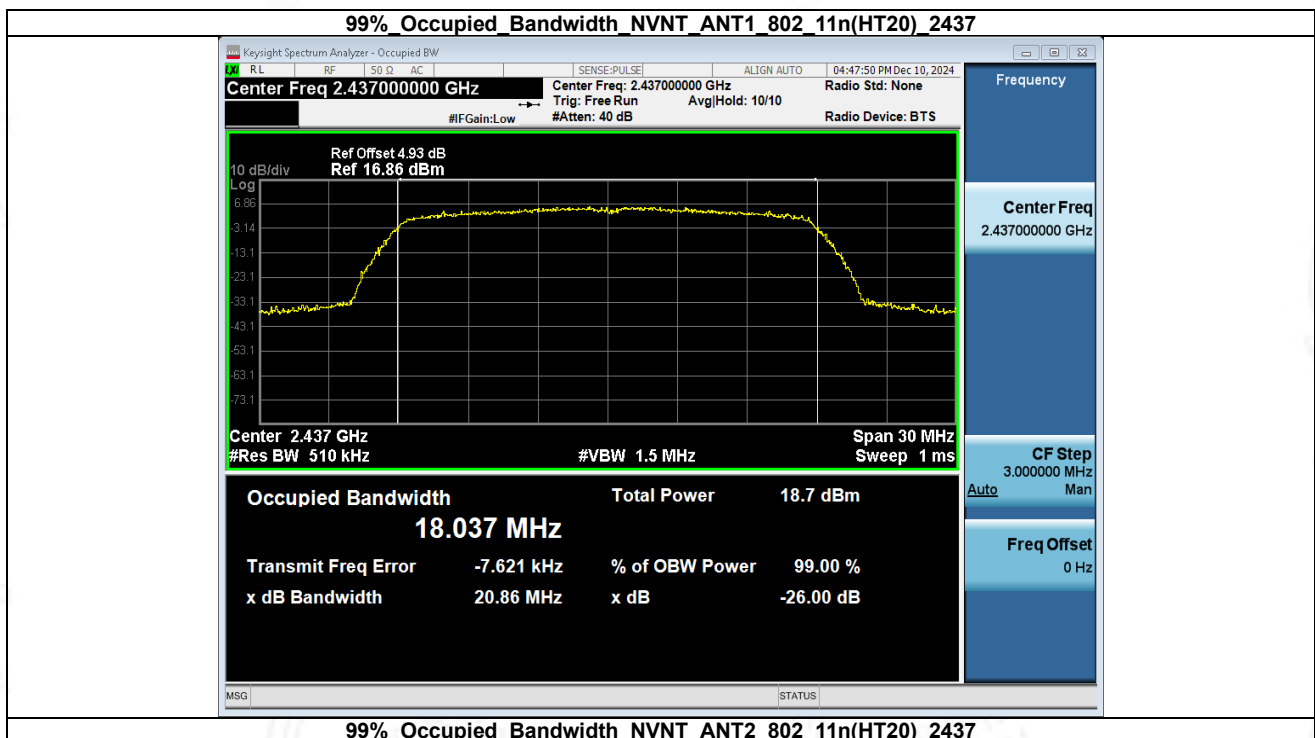
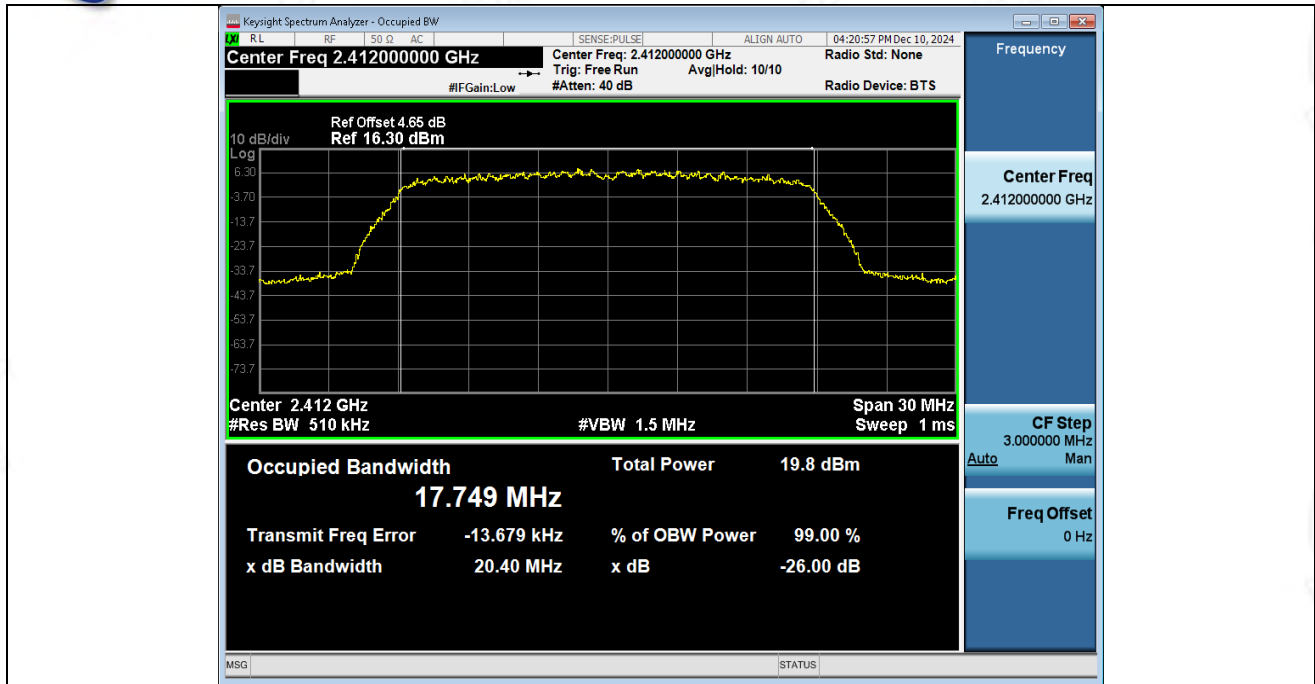


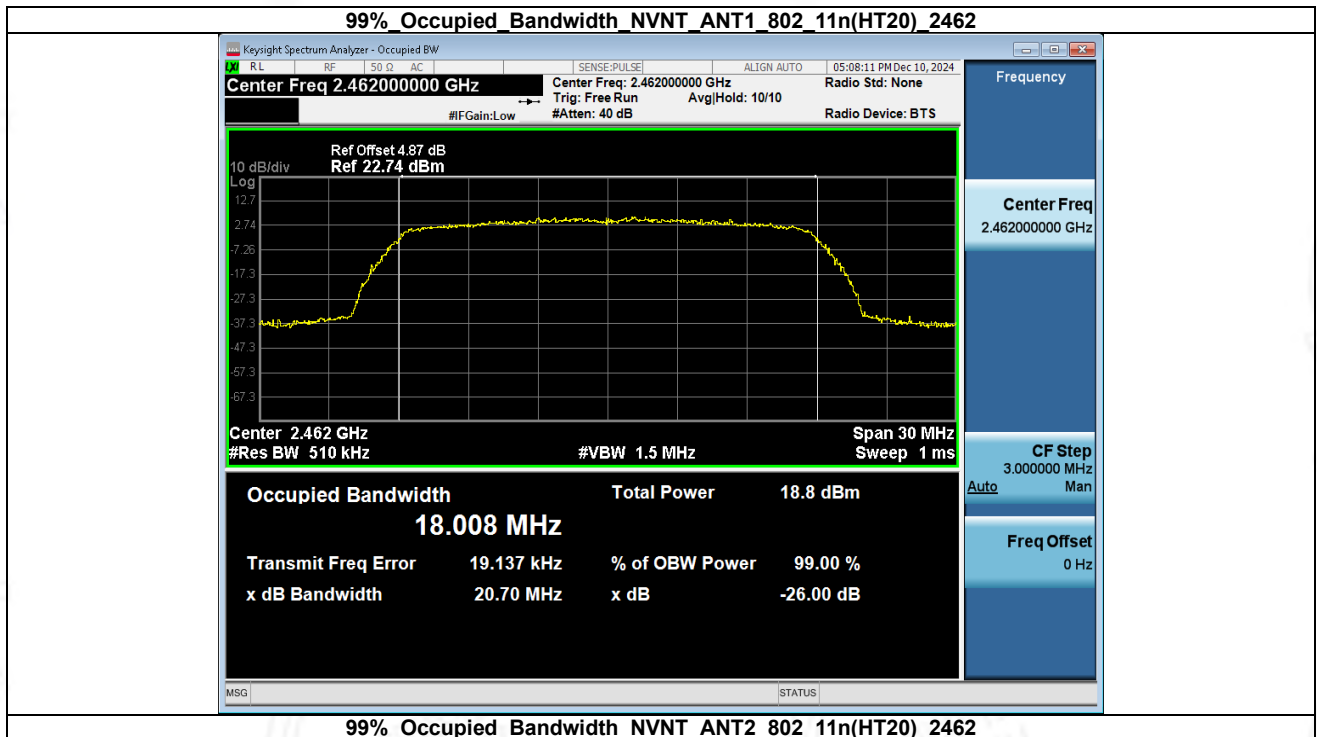
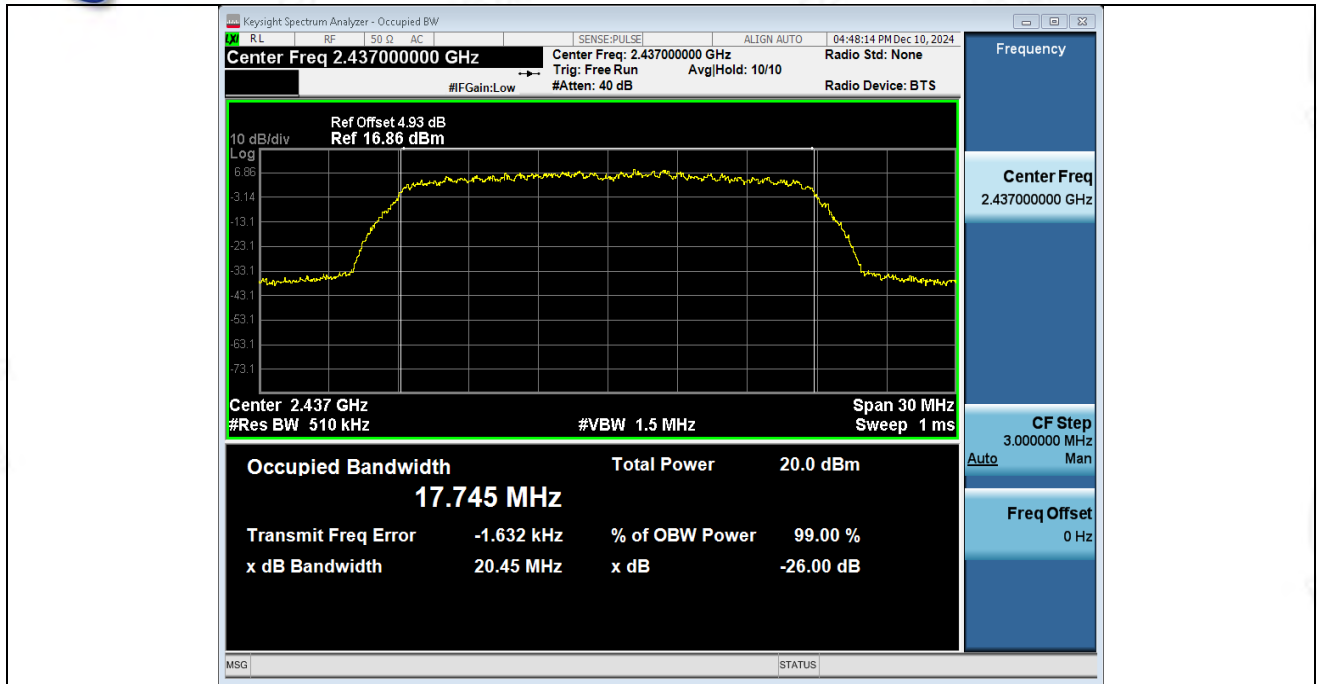


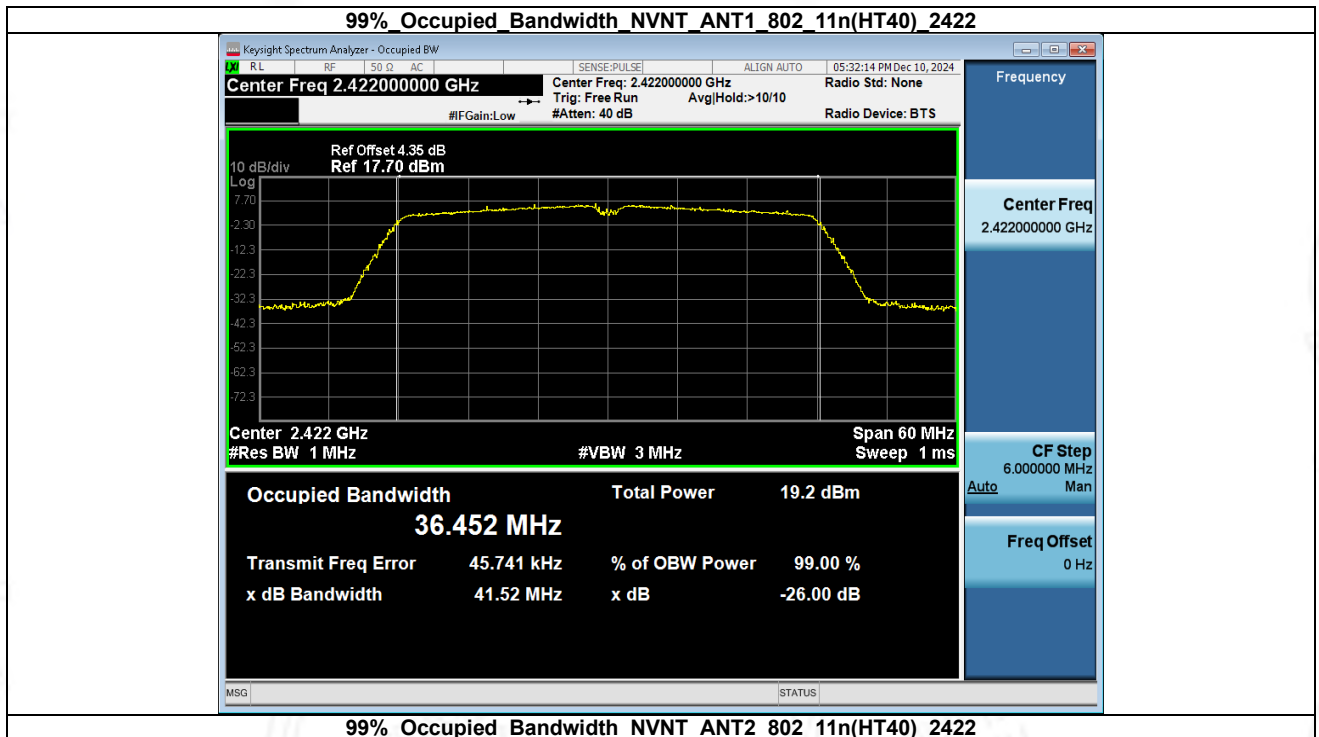
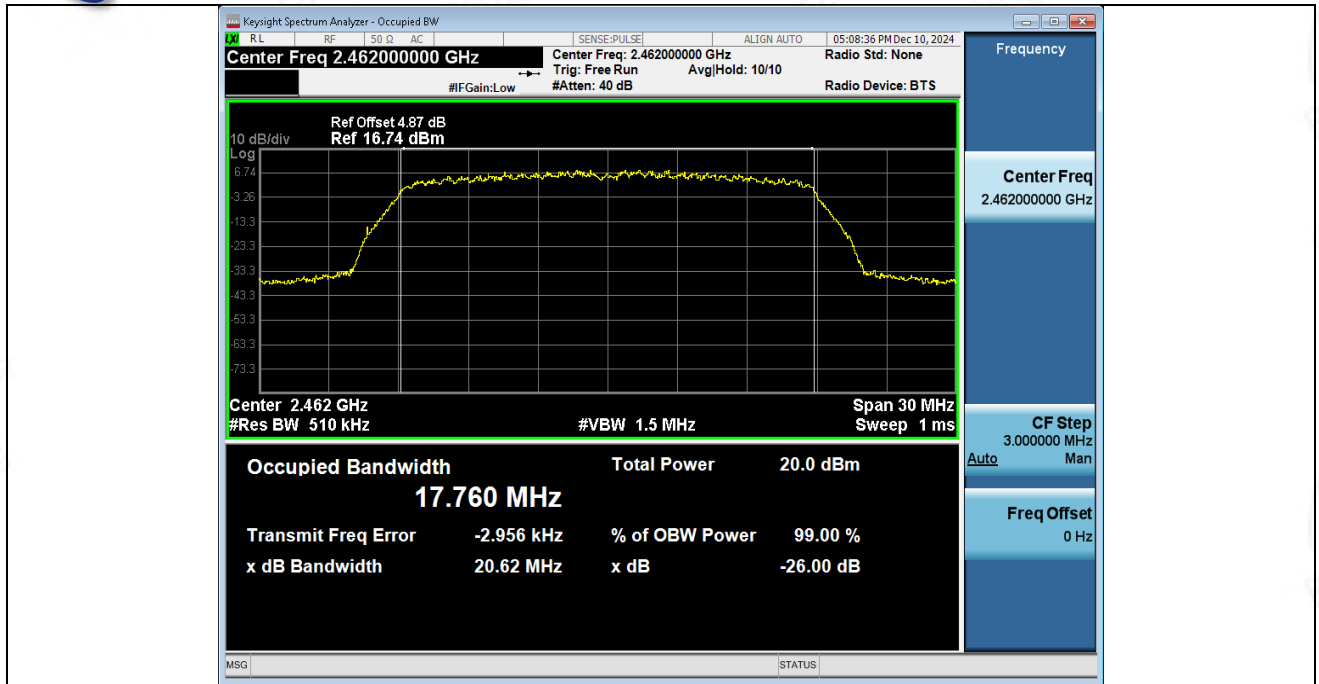


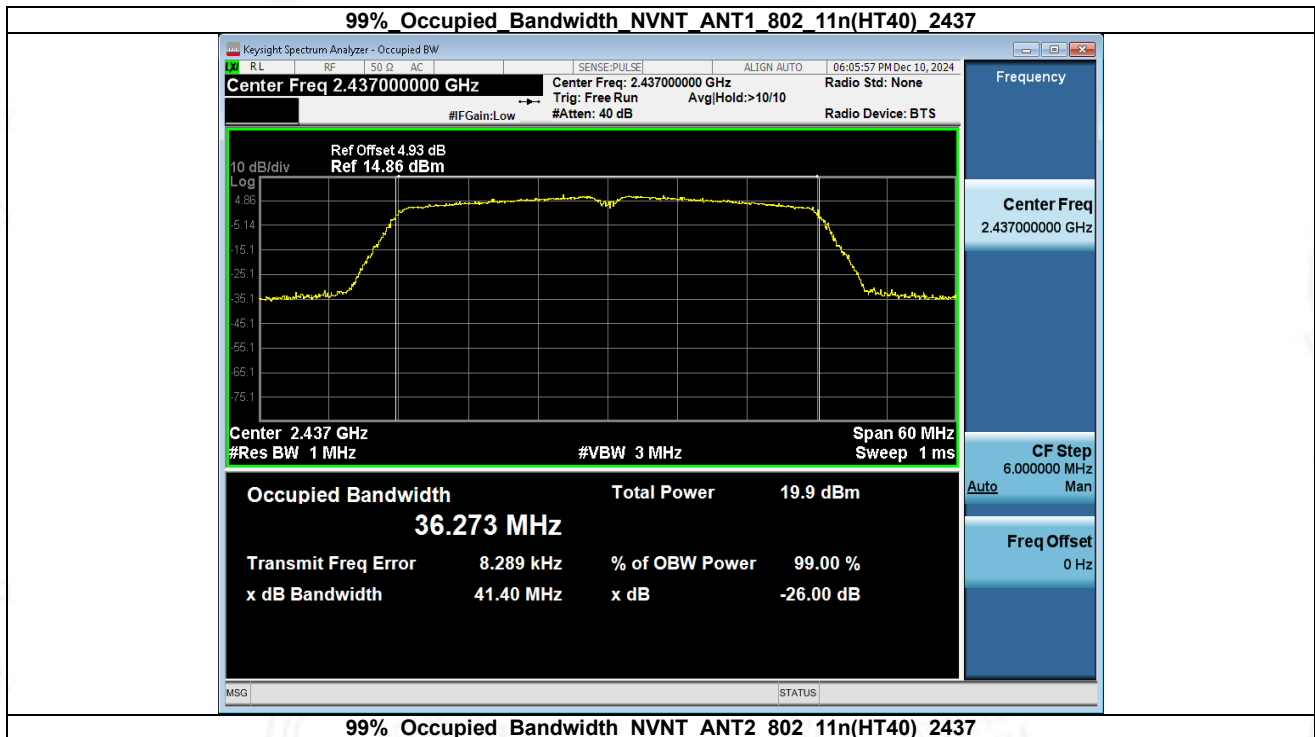
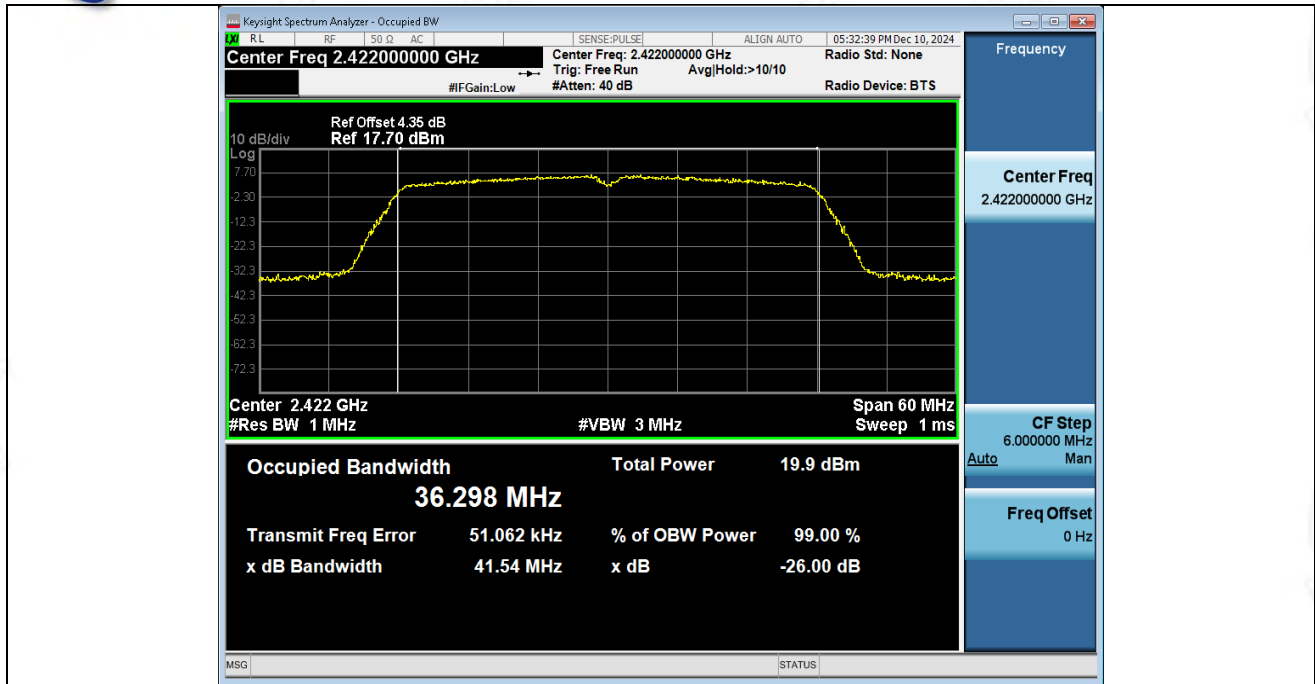


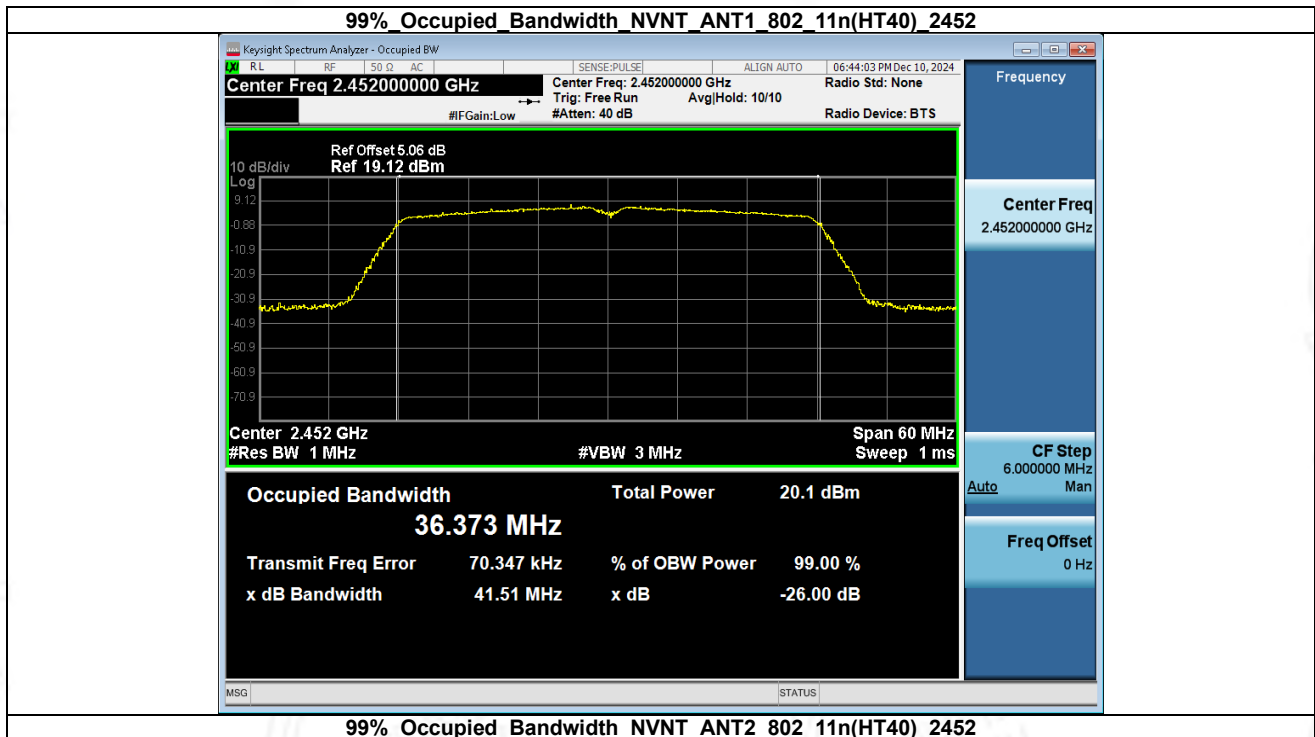
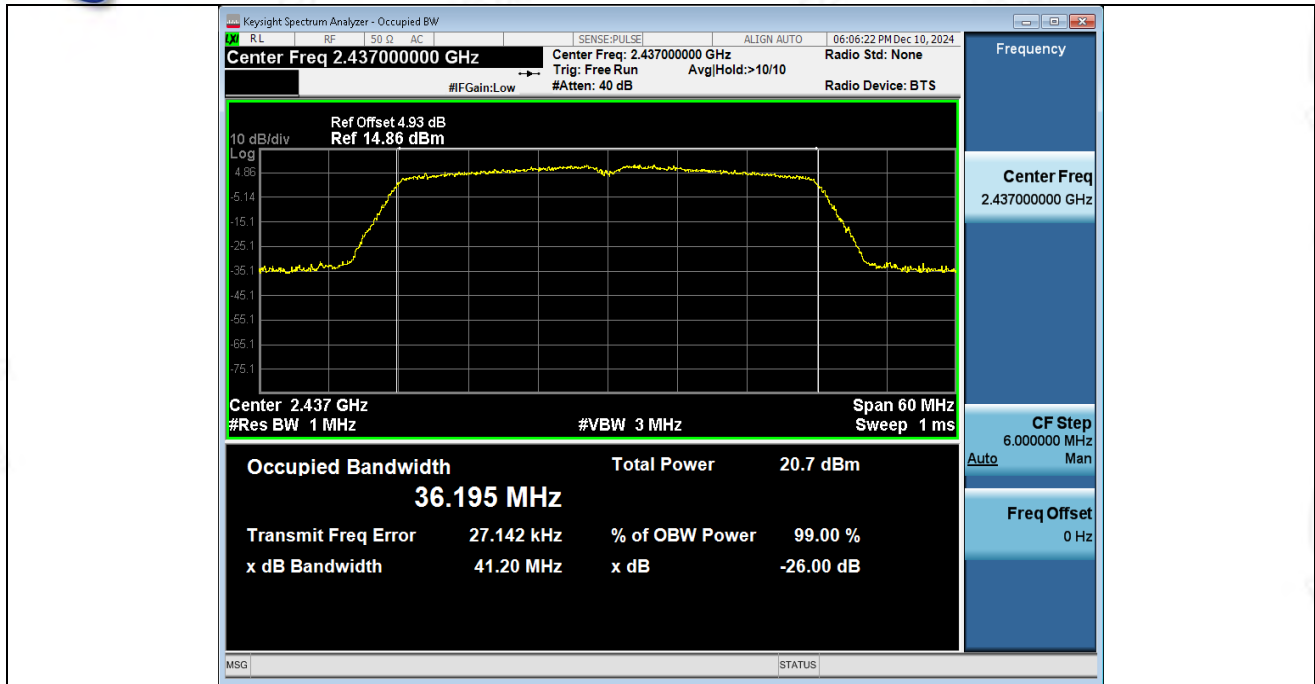


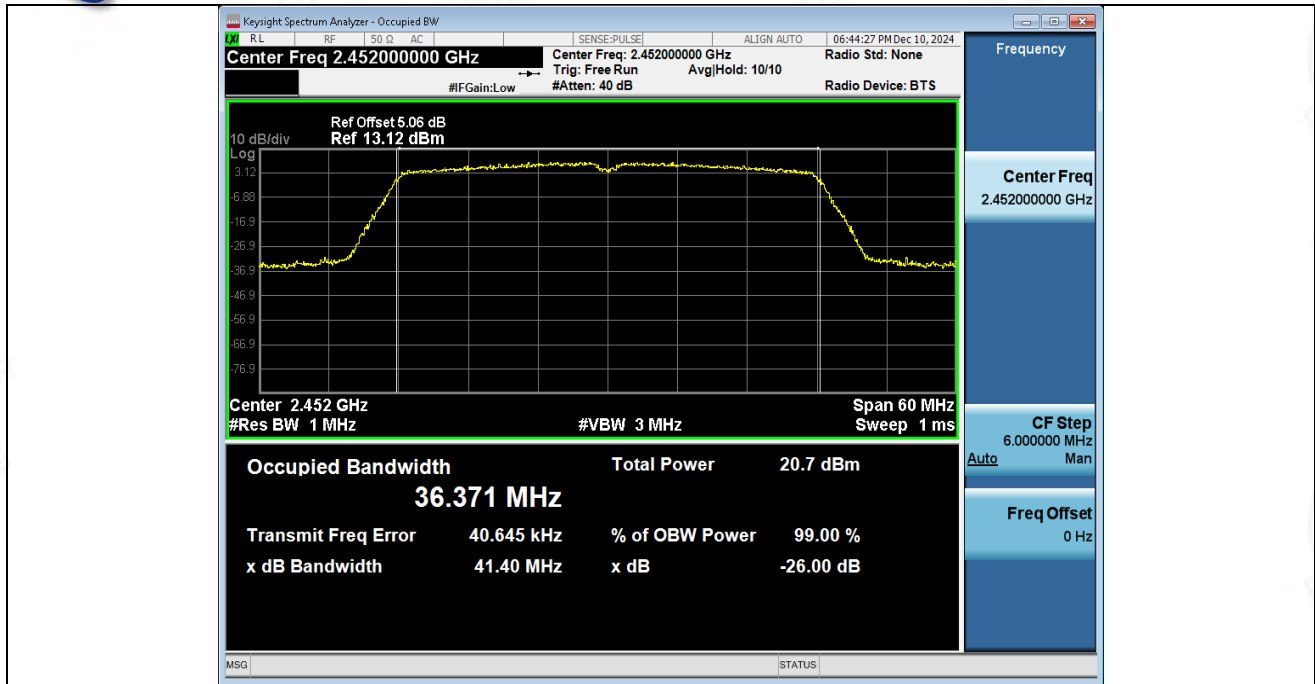






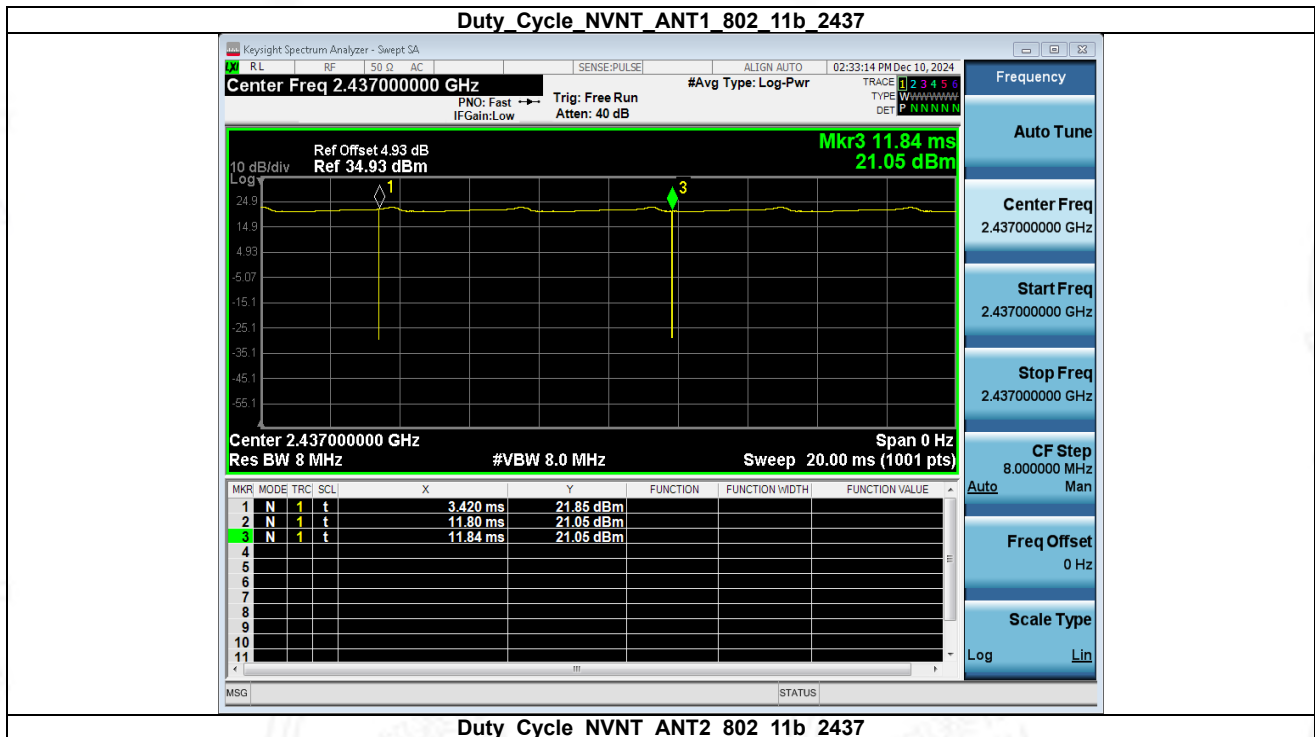
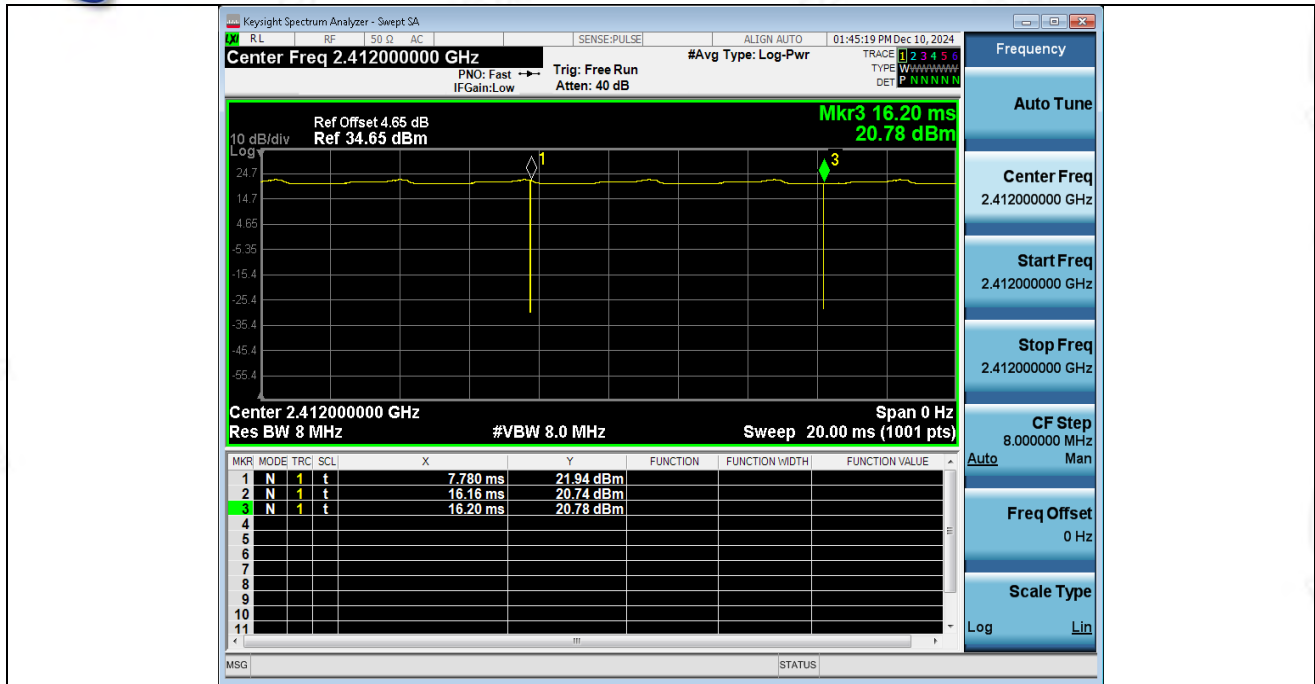


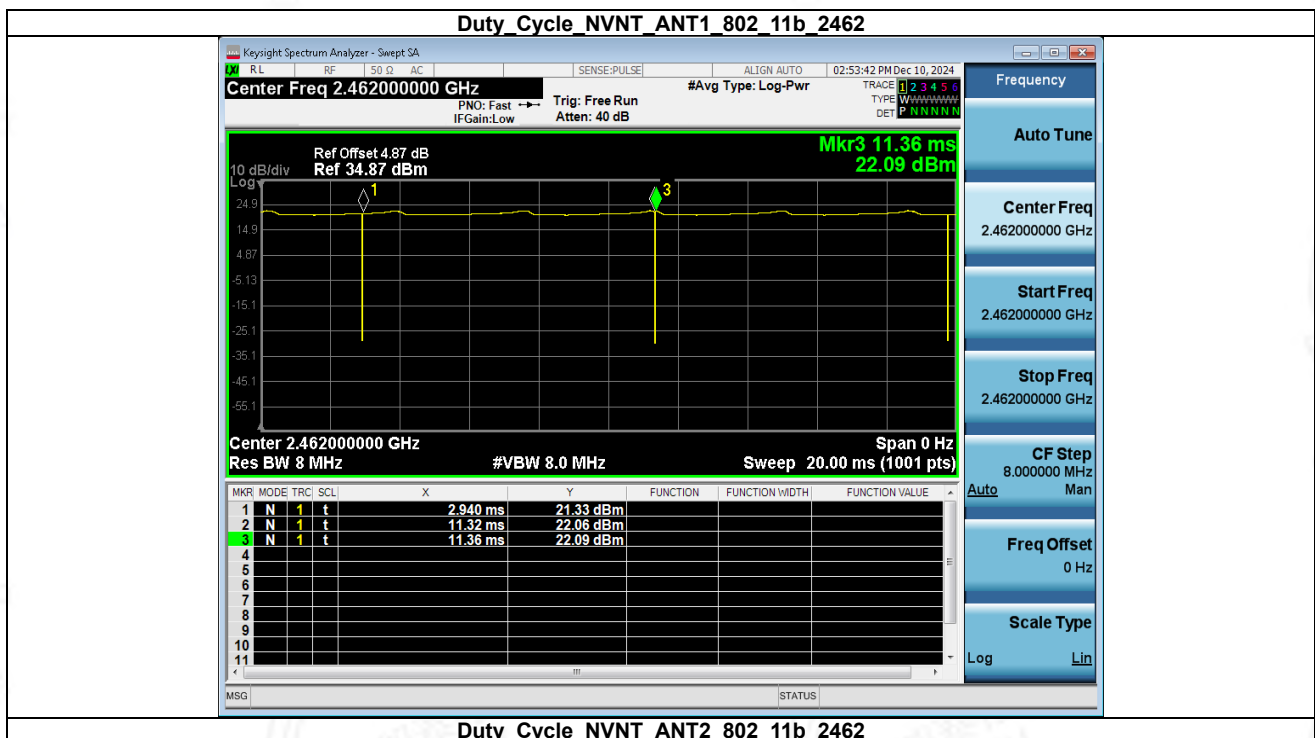
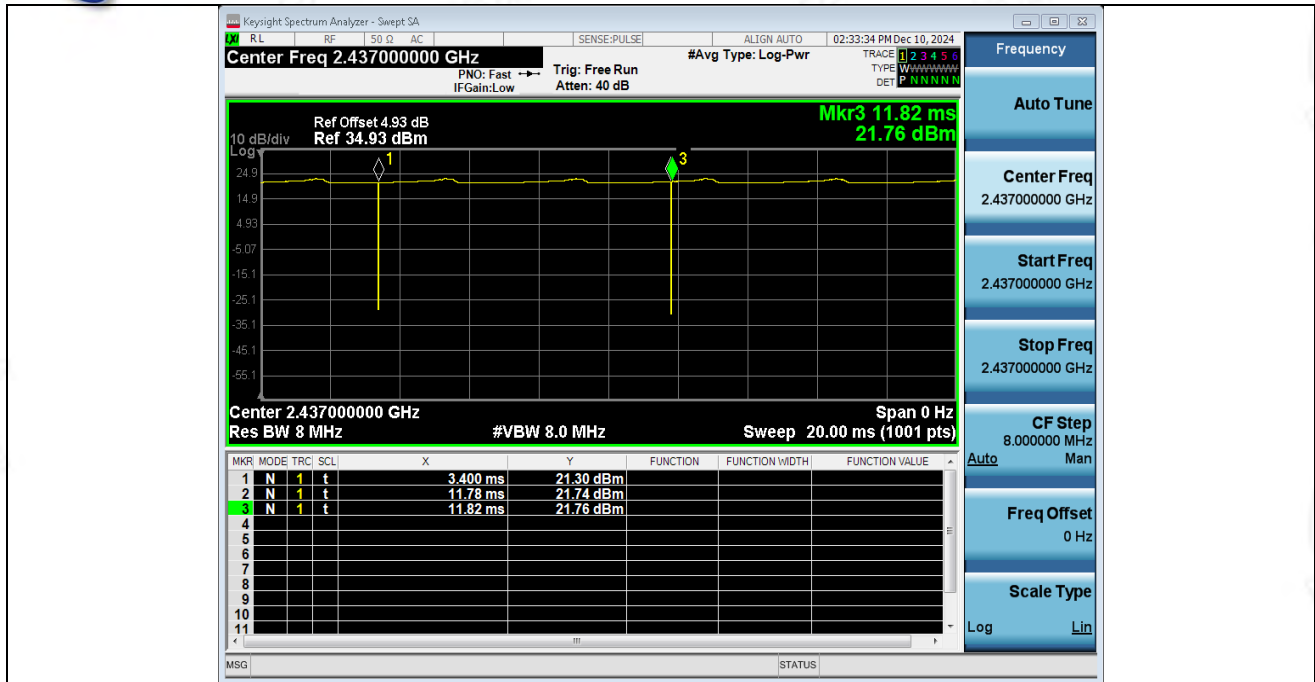


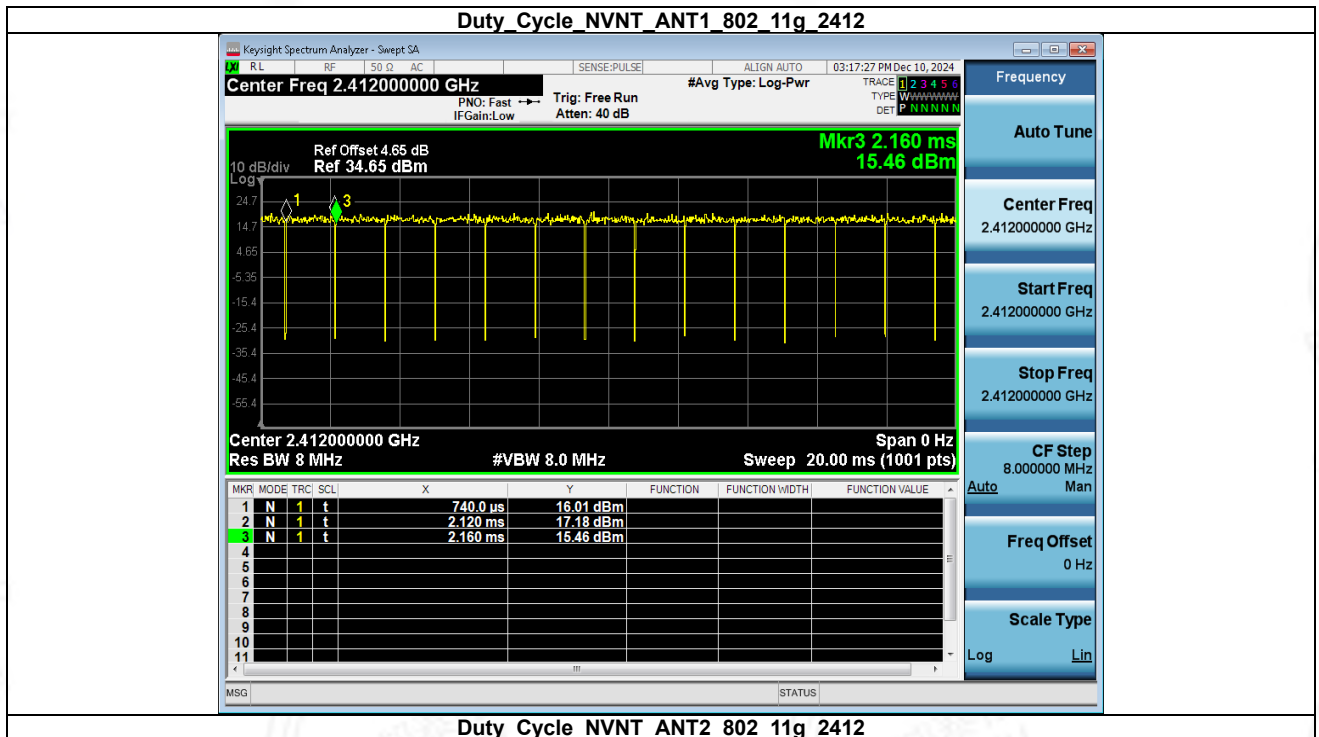
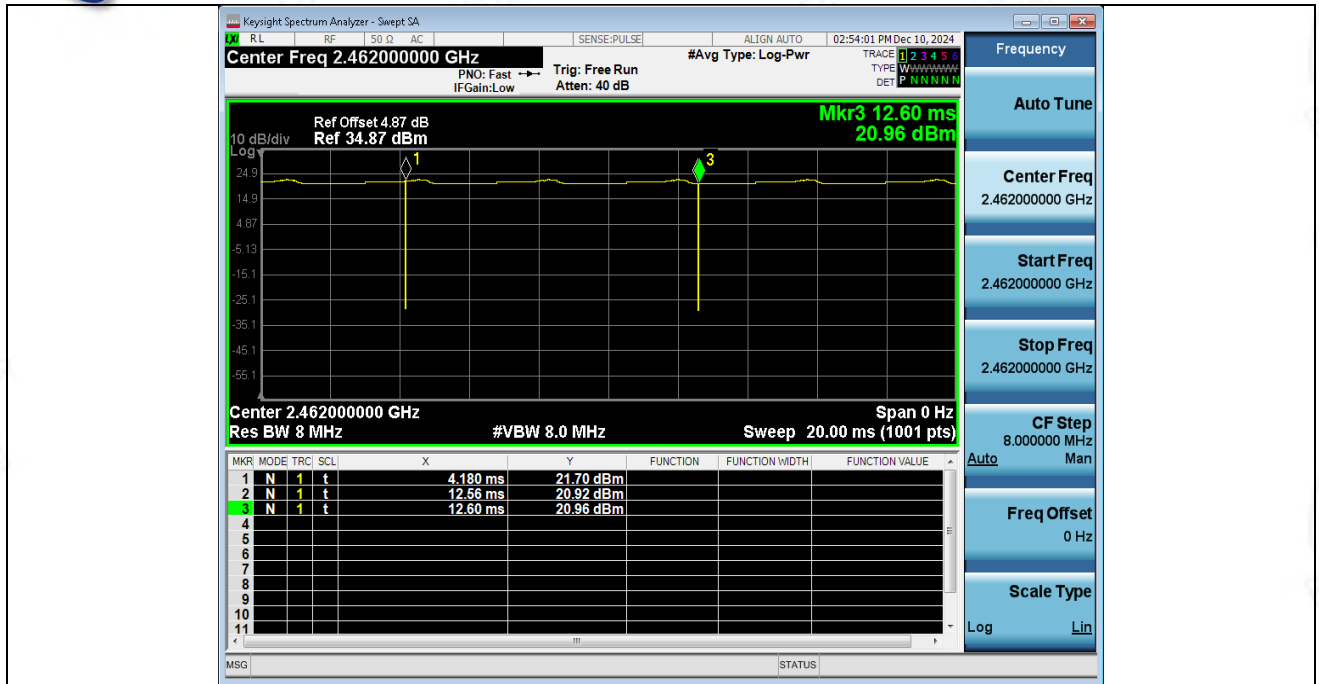


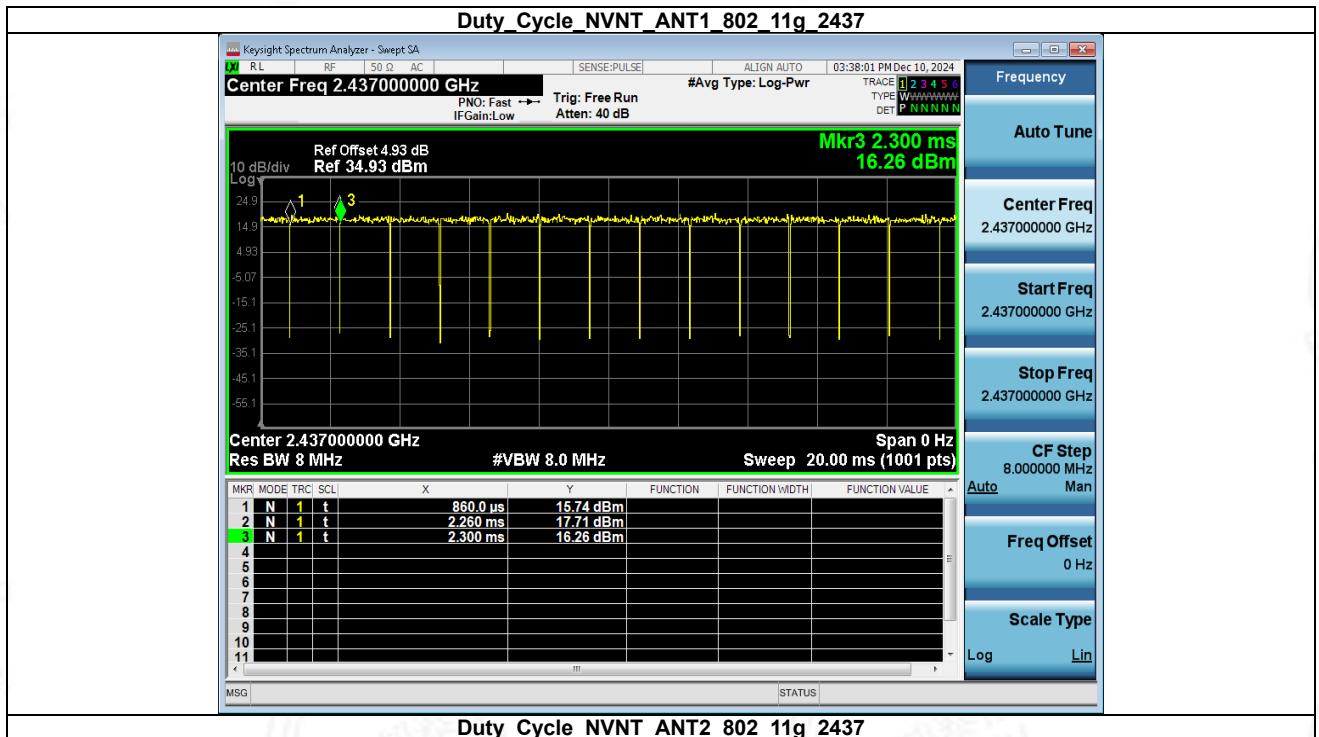
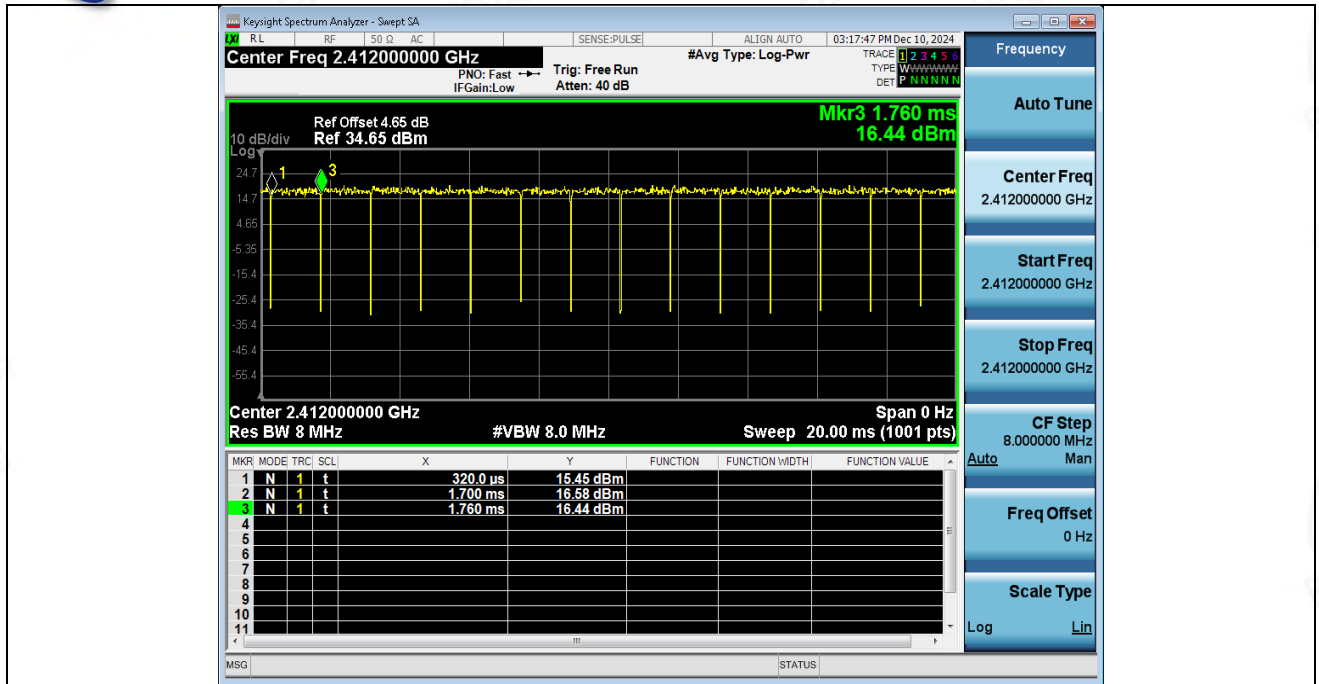
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	99.76	0.00
NVNT	ANT2	802.11b	2412.00	99.76	0.00
NVNT	ANT1	802.11b	2437.00	99.76	0.00
NVNT	ANT2	802.11b	2437.00	99.76	0.00
NVNT	ANT1	802.11b	2462.00	99.76	0.00
NVNT	ANT2	802.11b	2462.00	99.76	0.00
NVNT	ANT1	802.11g	2412.00	98.59	0.00
NVNT	ANT2	802.11g	2412.00	97.22	0.12
NVNT	ANT1	802.11g	2437.00	98.61	0.00
NVNT	ANT2	802.11g	2437.00	97.22	0.12
NVNT	ANT1	802.11g	2462.00	98.61	0.00
NVNT	ANT2	802.11g	2462.00	98.59	0.00
NVNT	ANT1	802.11n(HT20)	2412.00	98.51	0.00
NVNT	ANT2	802.11n(HT20)	2412.00	98.51	0.00
NVNT	ANT1	802.11n(HT20)	2437.00	98.51	0.00
NVNT	ANT2	802.11n(HT20)	2437.00	97.06	0.13
NVNT	ANT1	802.11n(HT20)	2462.00	97.06	0.13
NVNT	ANT2	802.11n(HT20)	2462.00	98.51	0.00
NVNT	ANT1	802.11n(HT40)	2422.00	97.14	0.13
NVNT	ANT2	802.11n(HT40)	2422.00	97.06	0.13
NVNT	ANT1	802.11n(HT40)	2437.00	97.06	0.13
NVNT	ANT2	802.11n(HT40)	2437.00	97.06	0.13
NVNT	ANT1	802.11n(HT40)	2452.00	94.29	0.26
NVNT	ANT2	802.11n(HT40)	2452.00	97.14	0.13

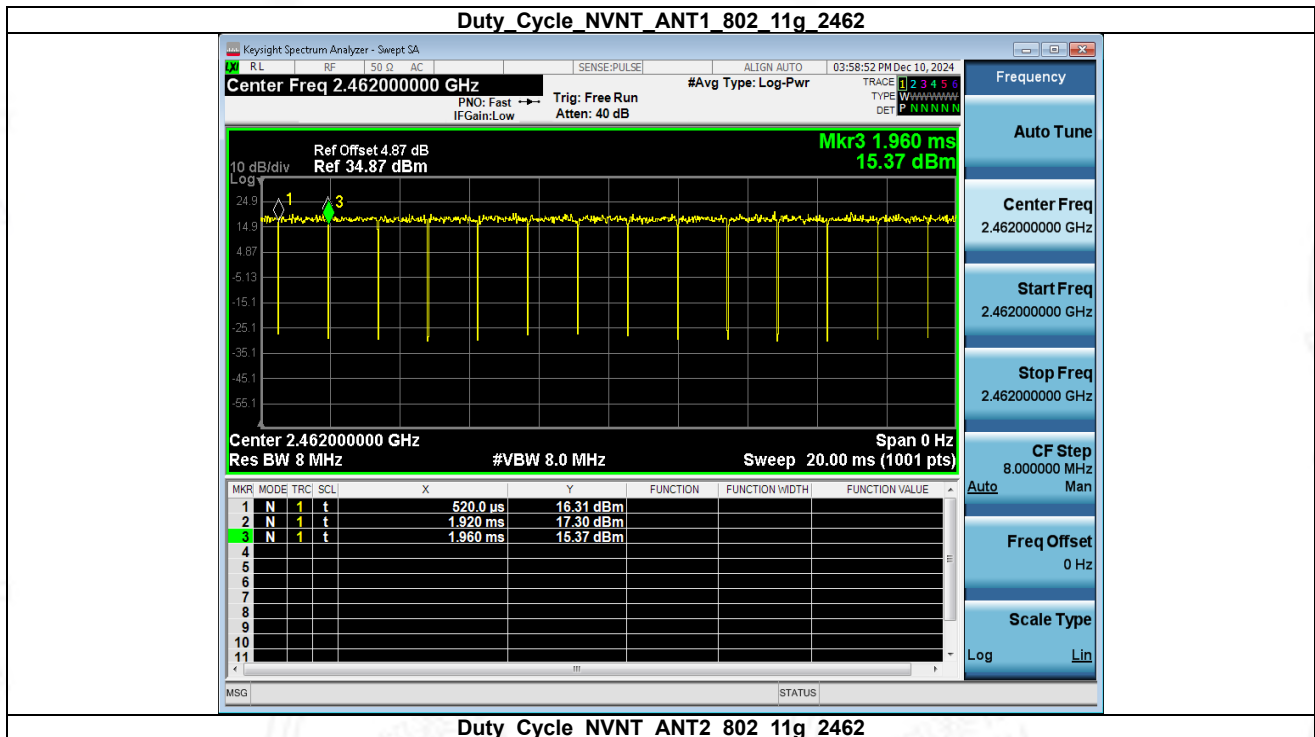
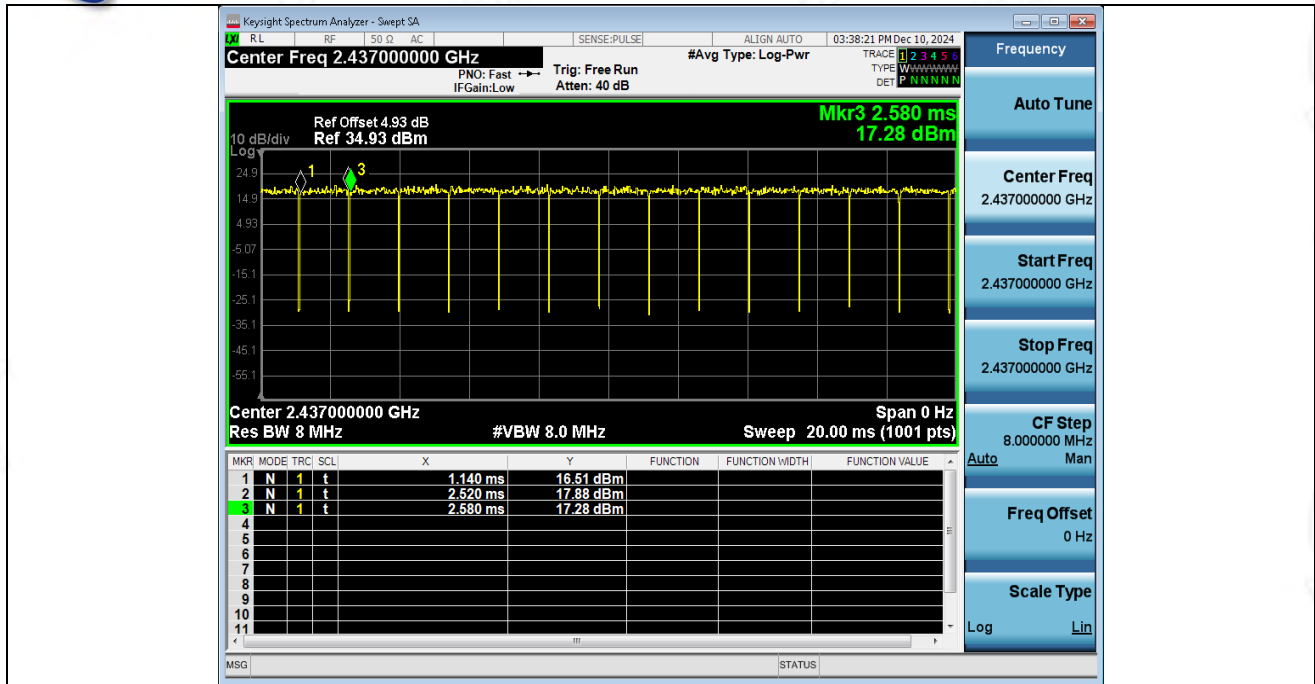


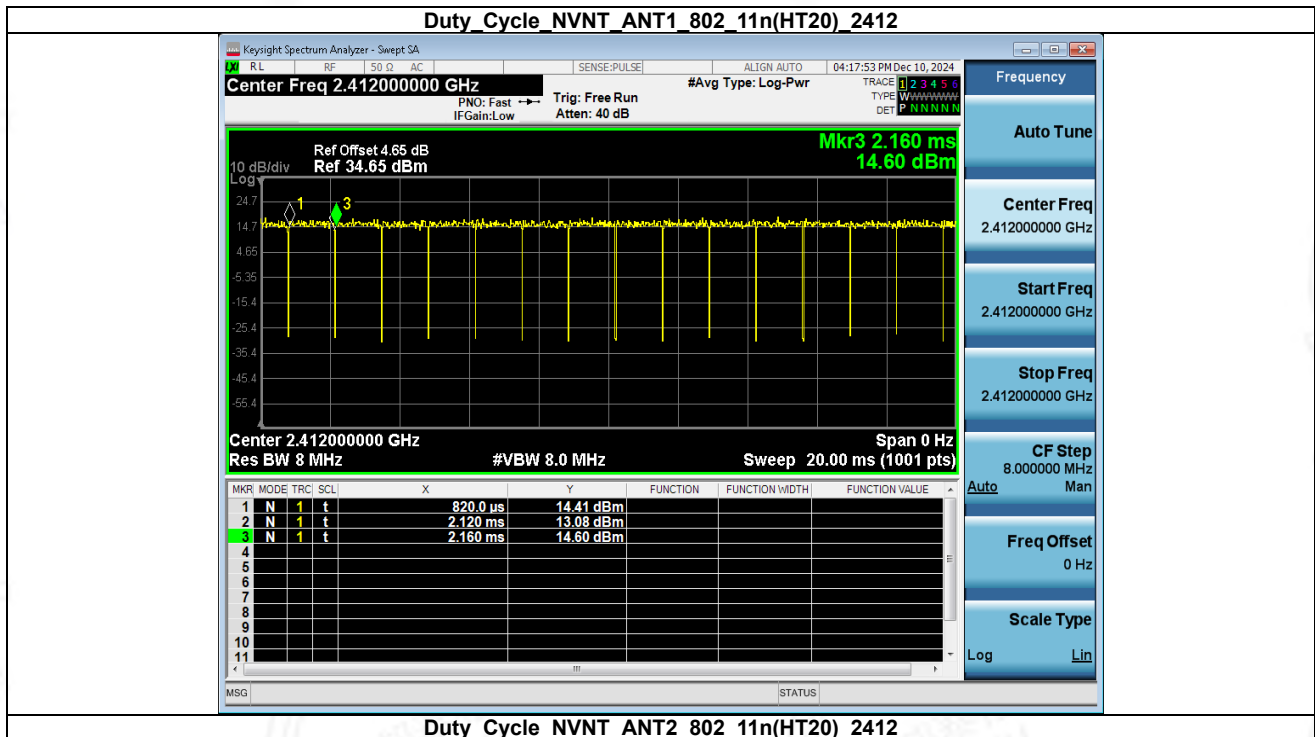
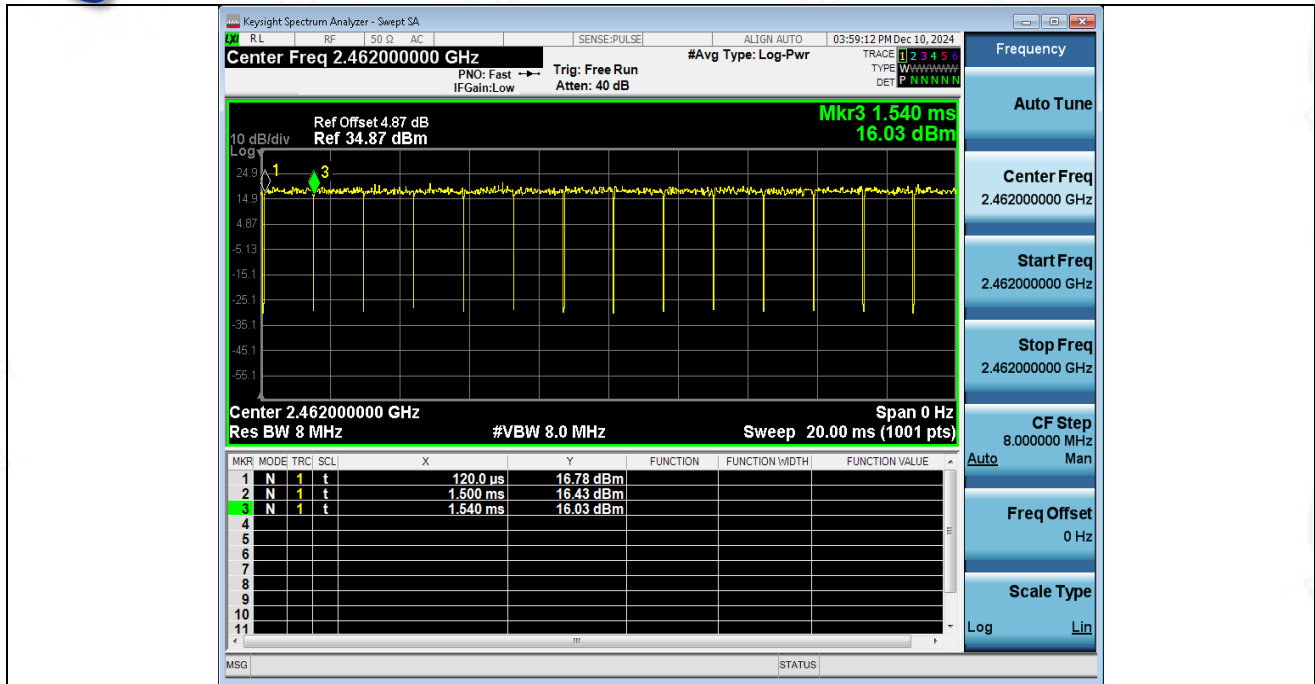


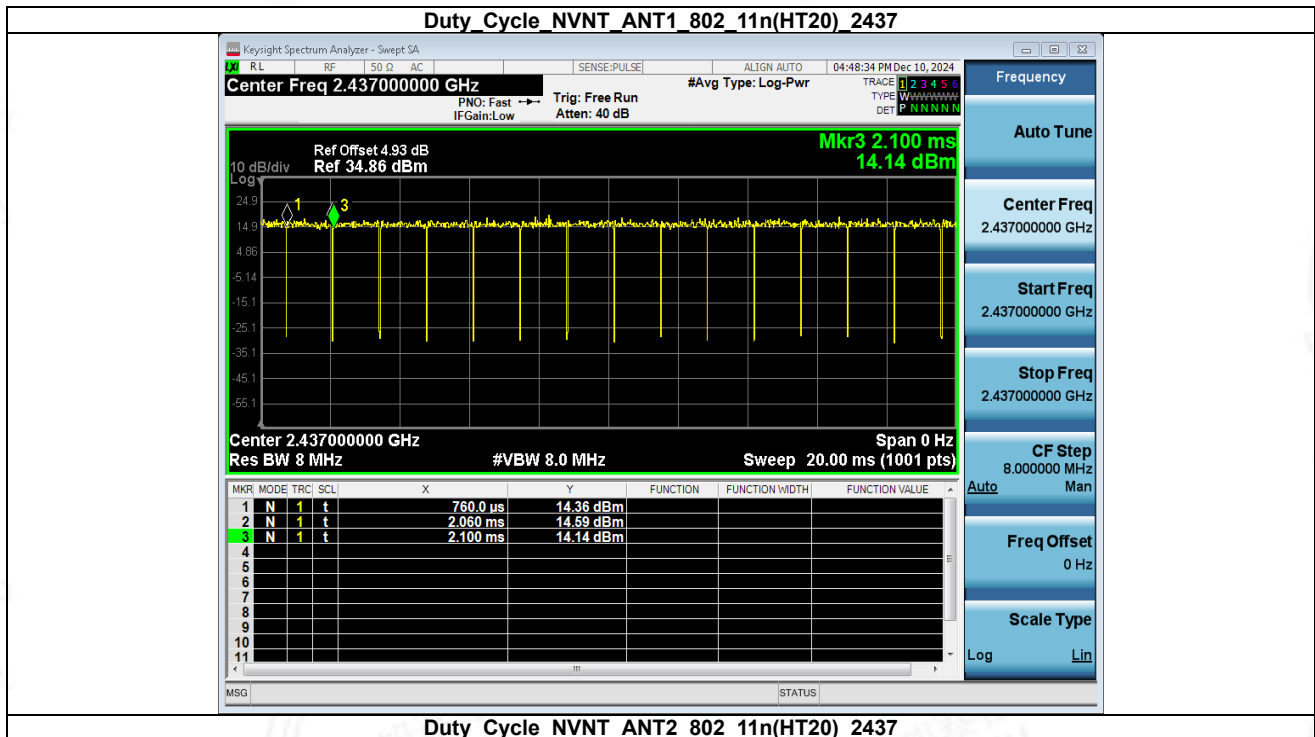
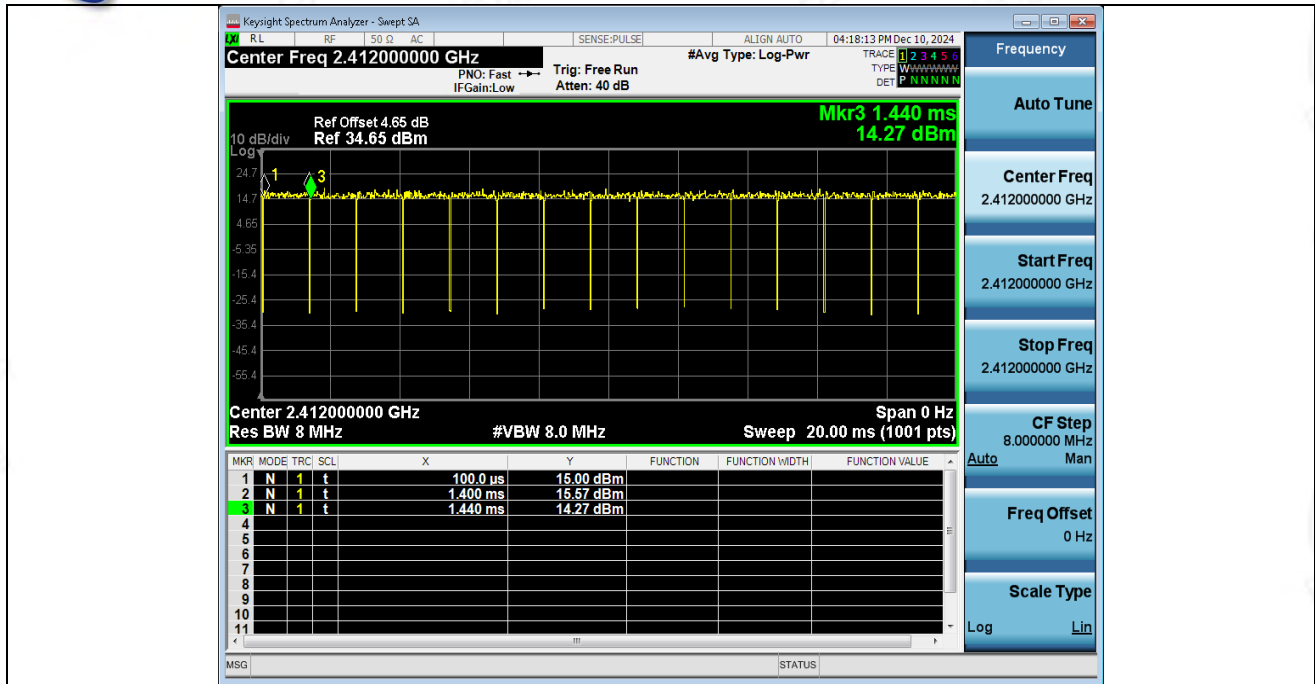


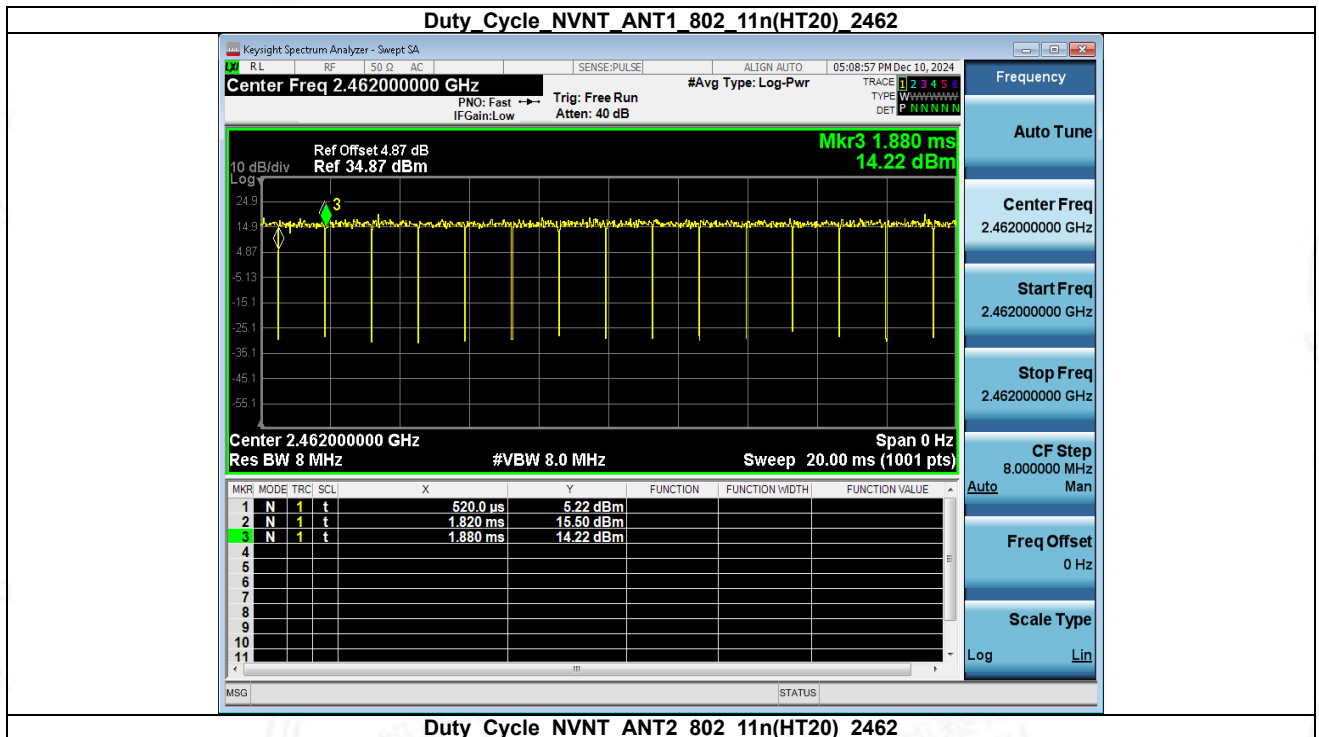
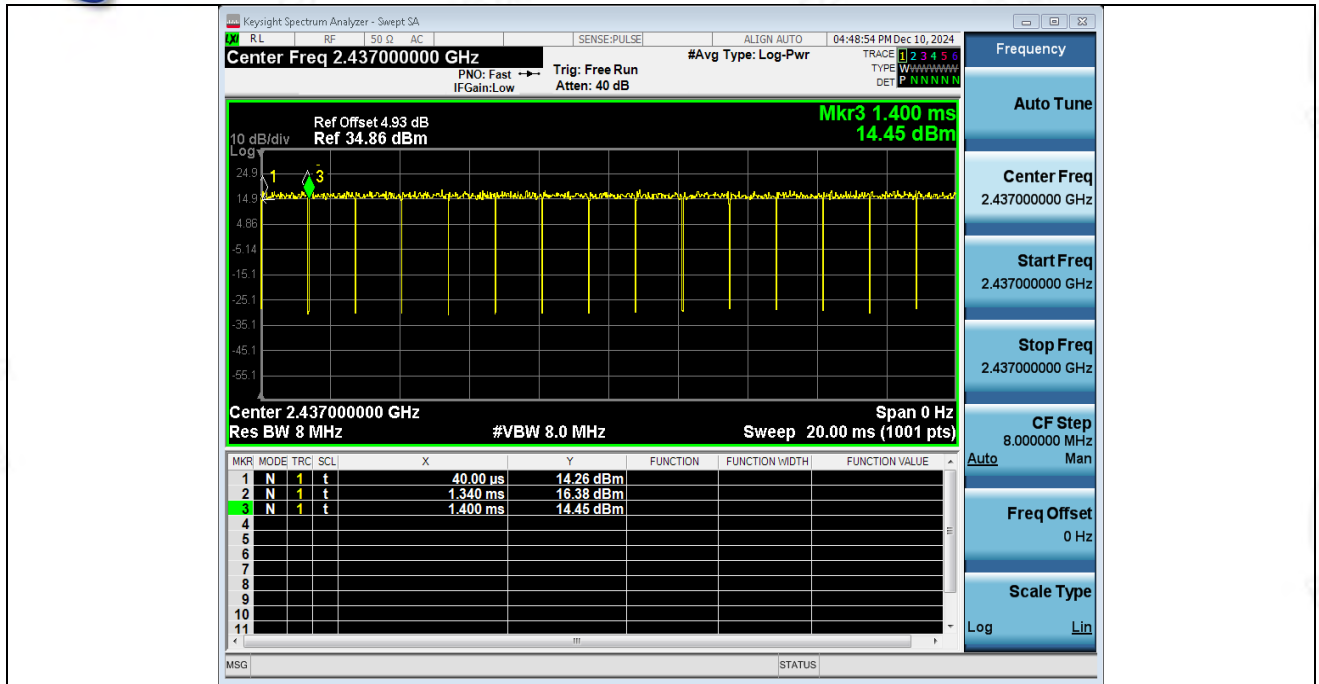


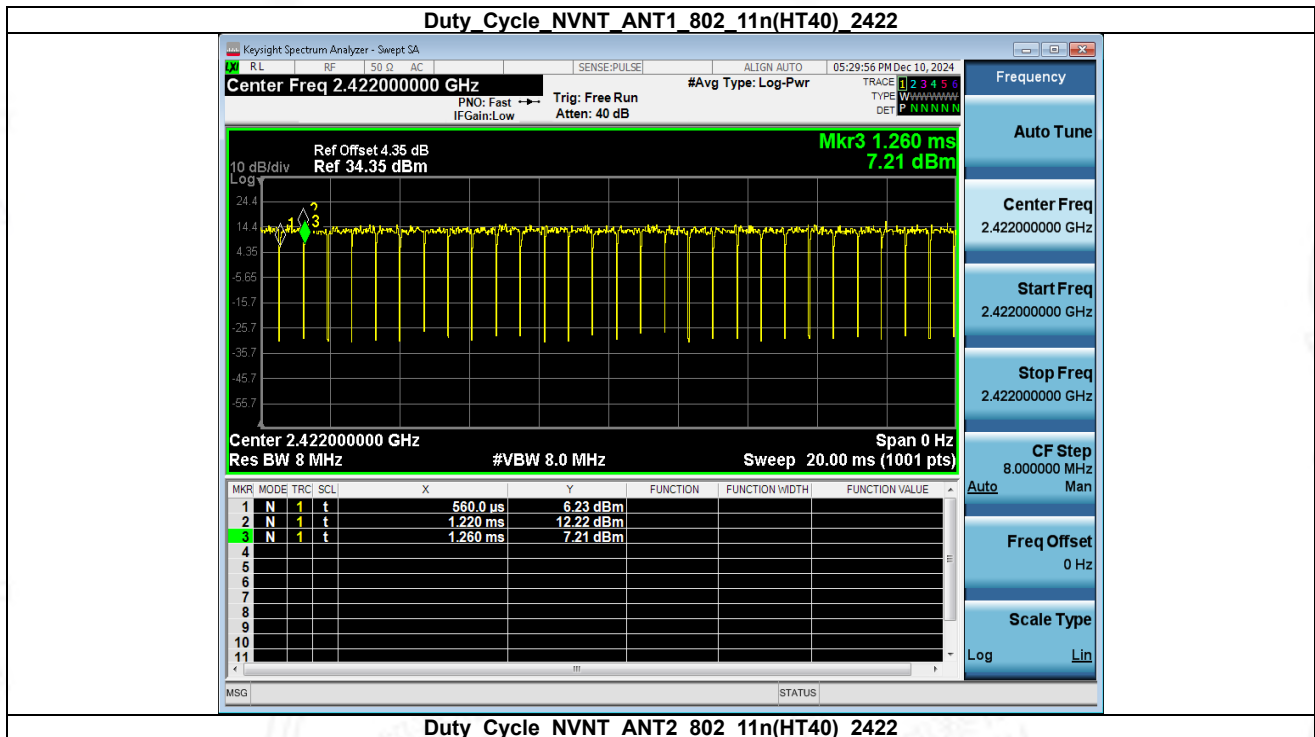
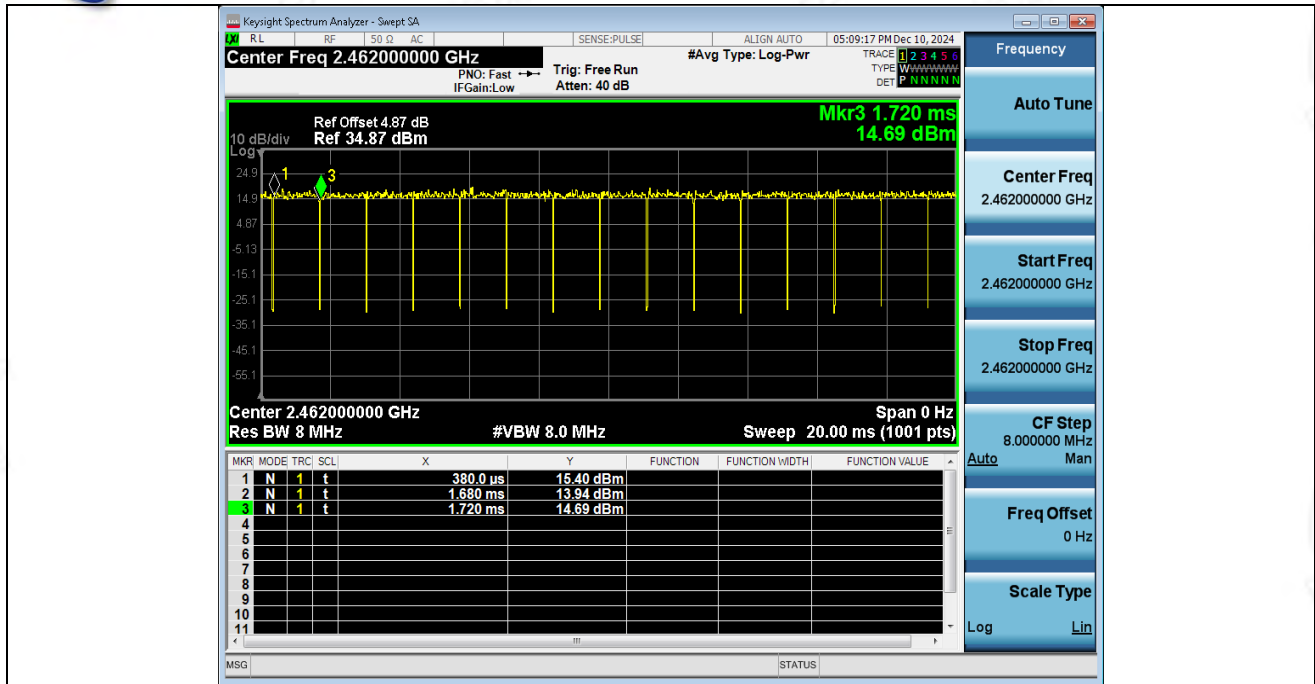


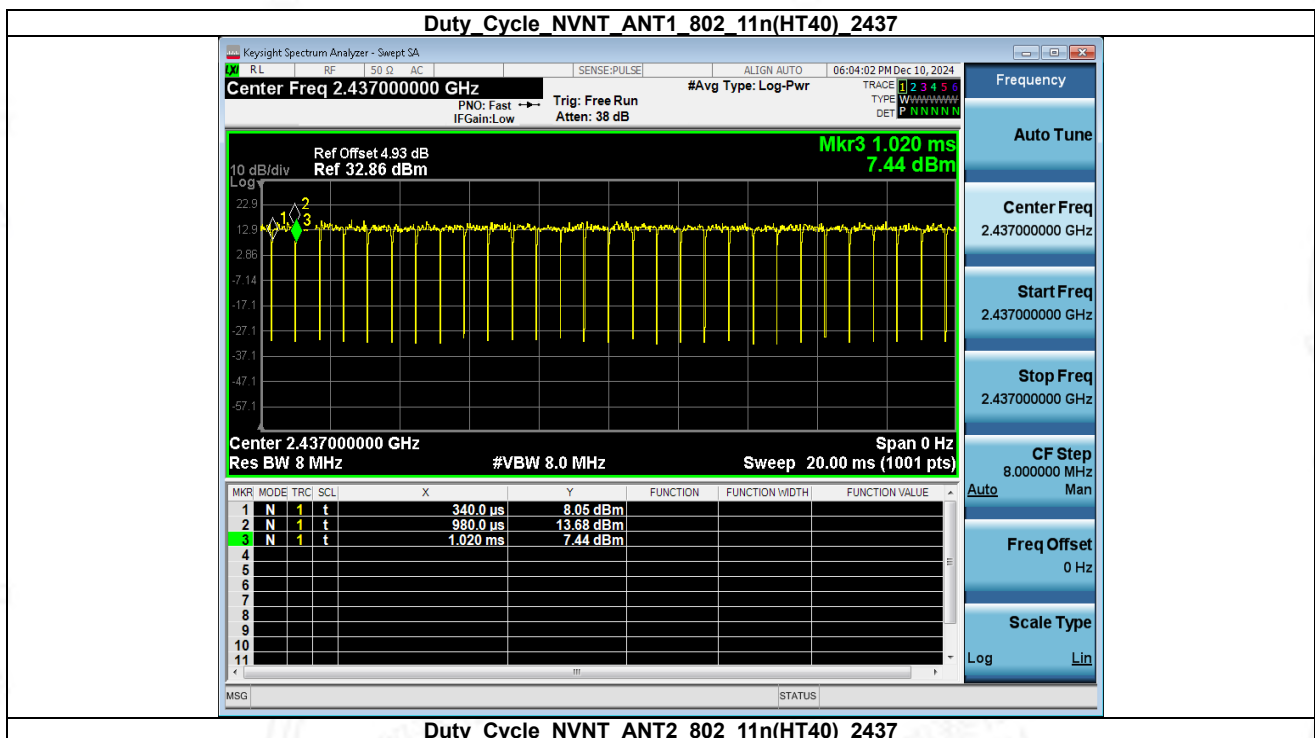
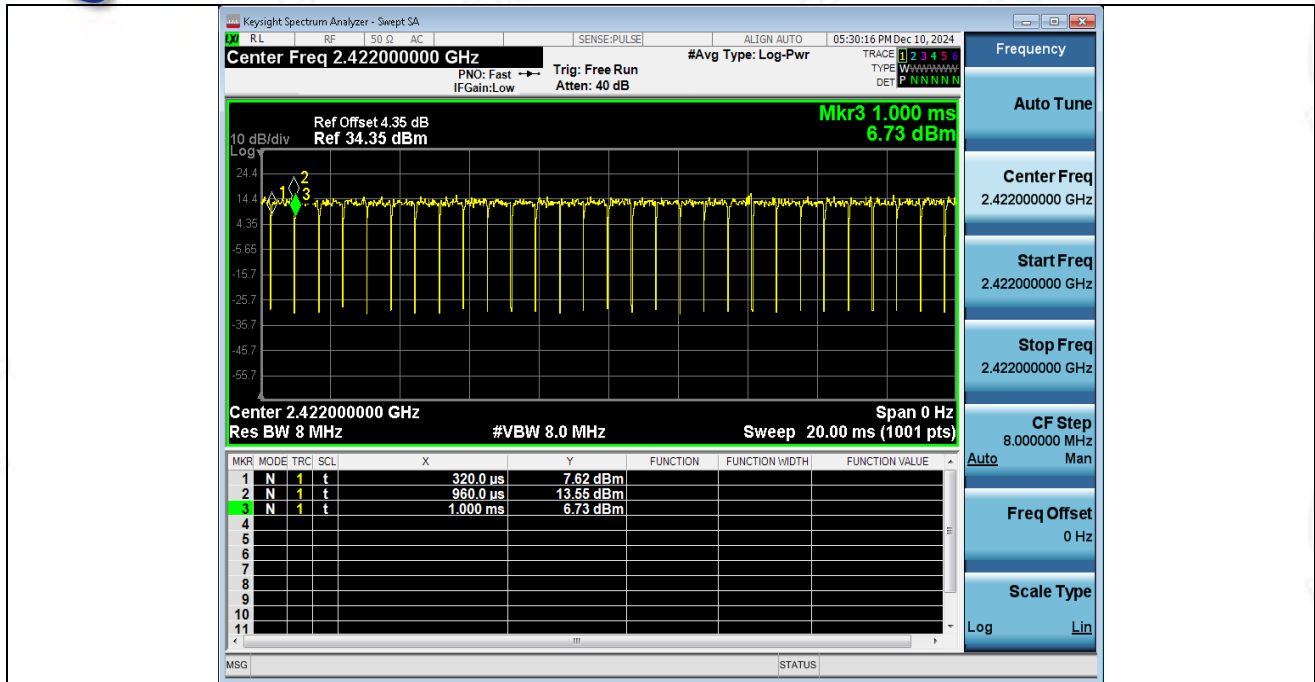


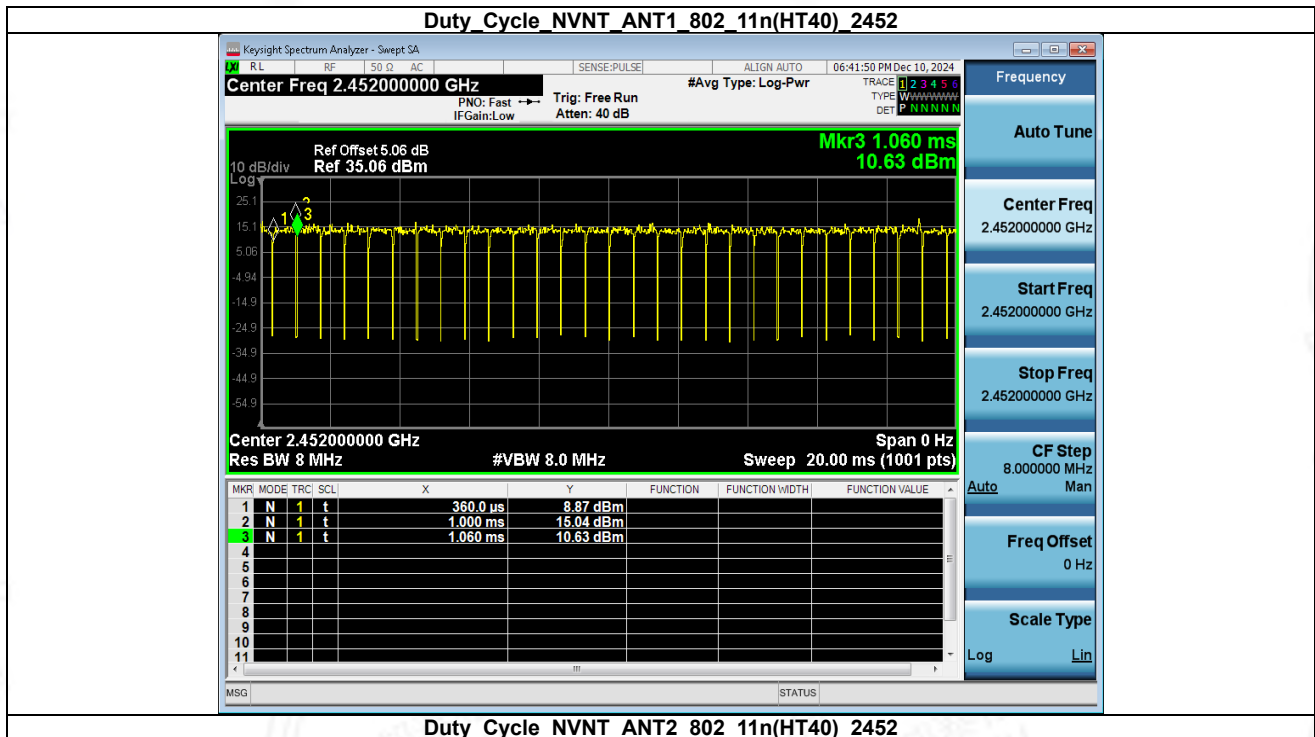
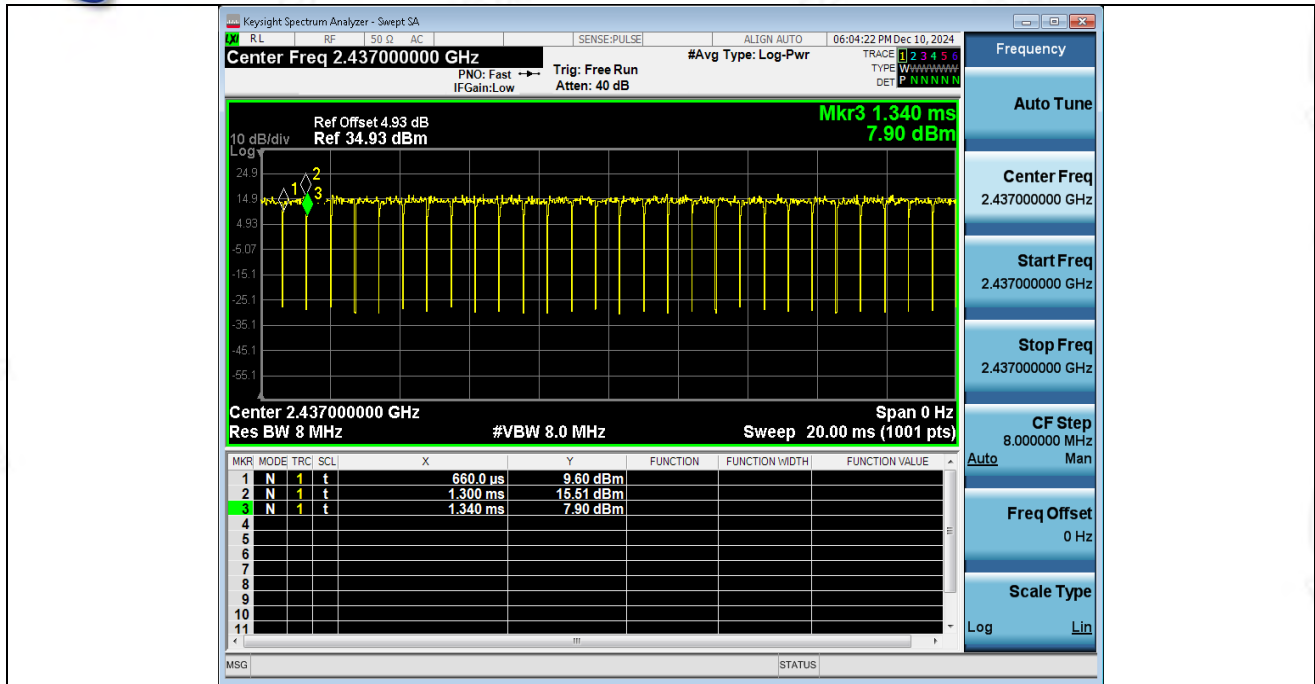


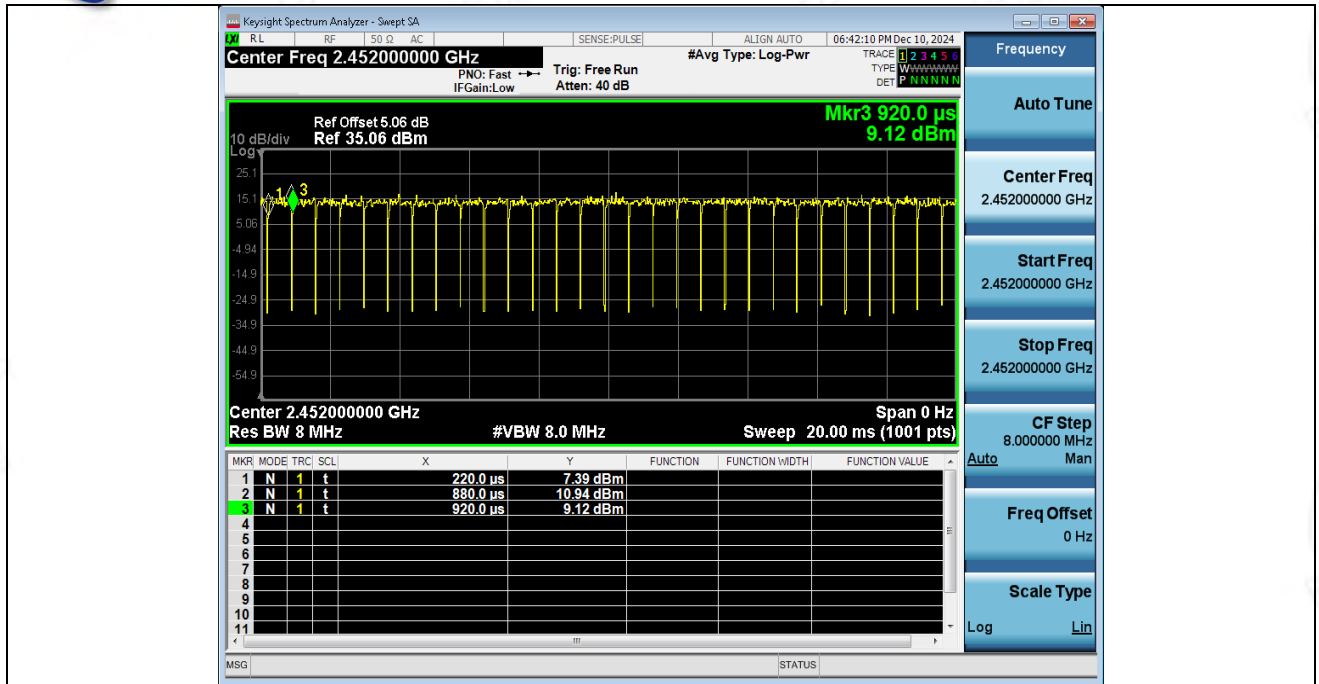








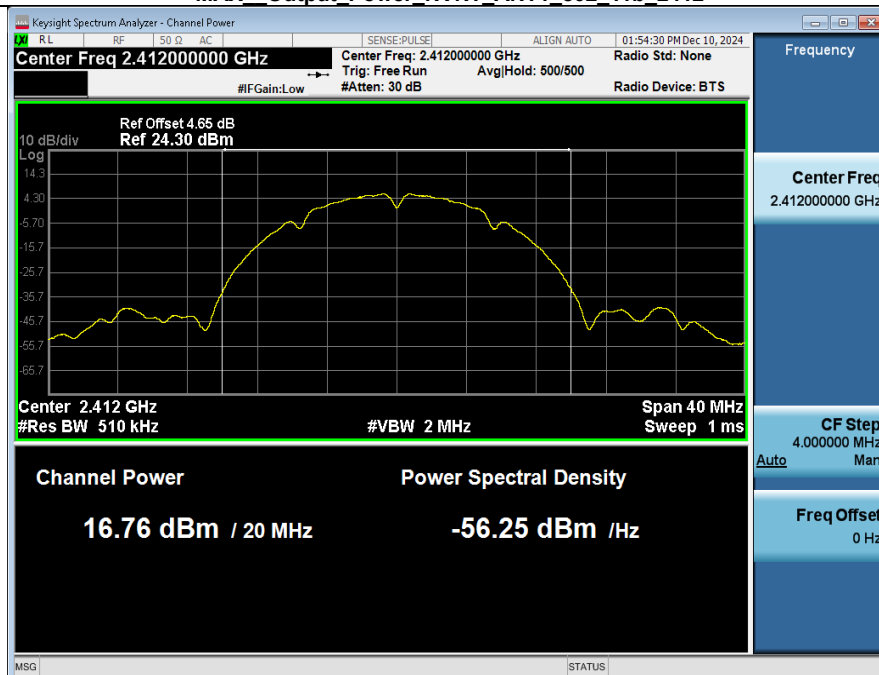




4. MAX. Output Power

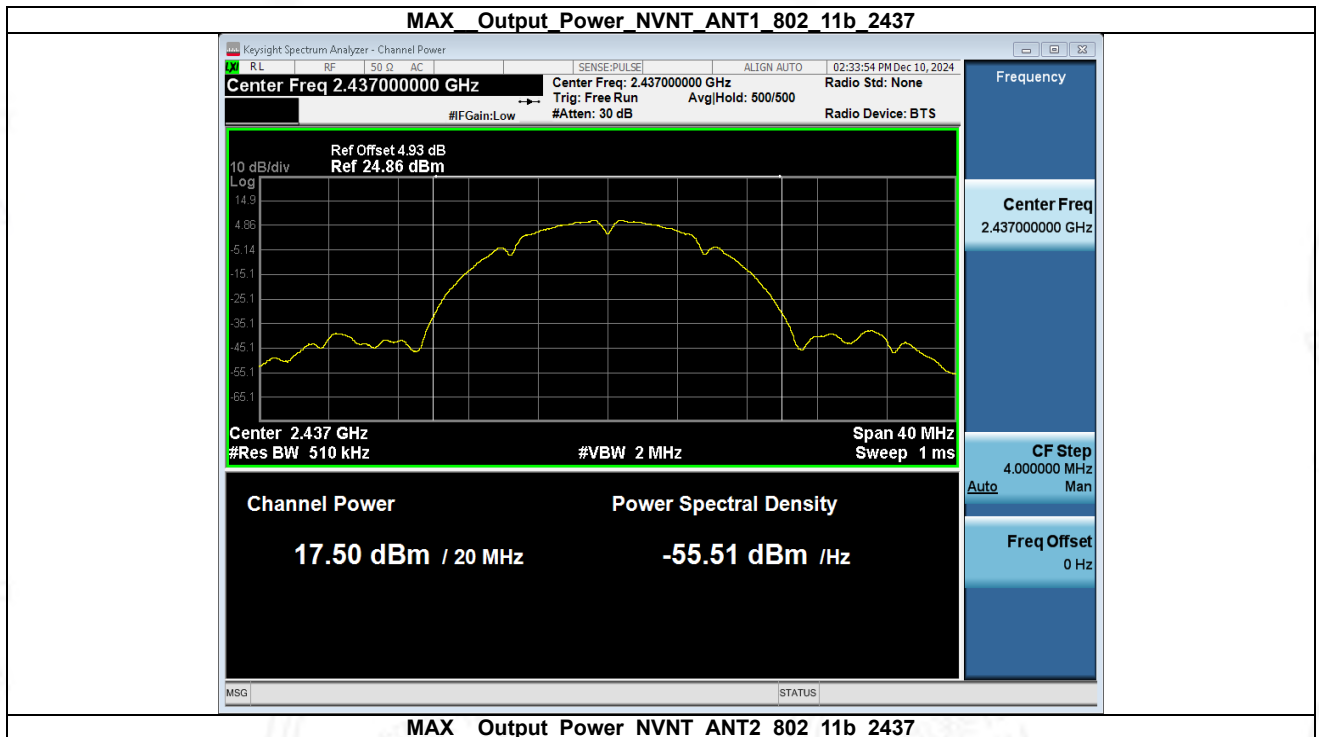
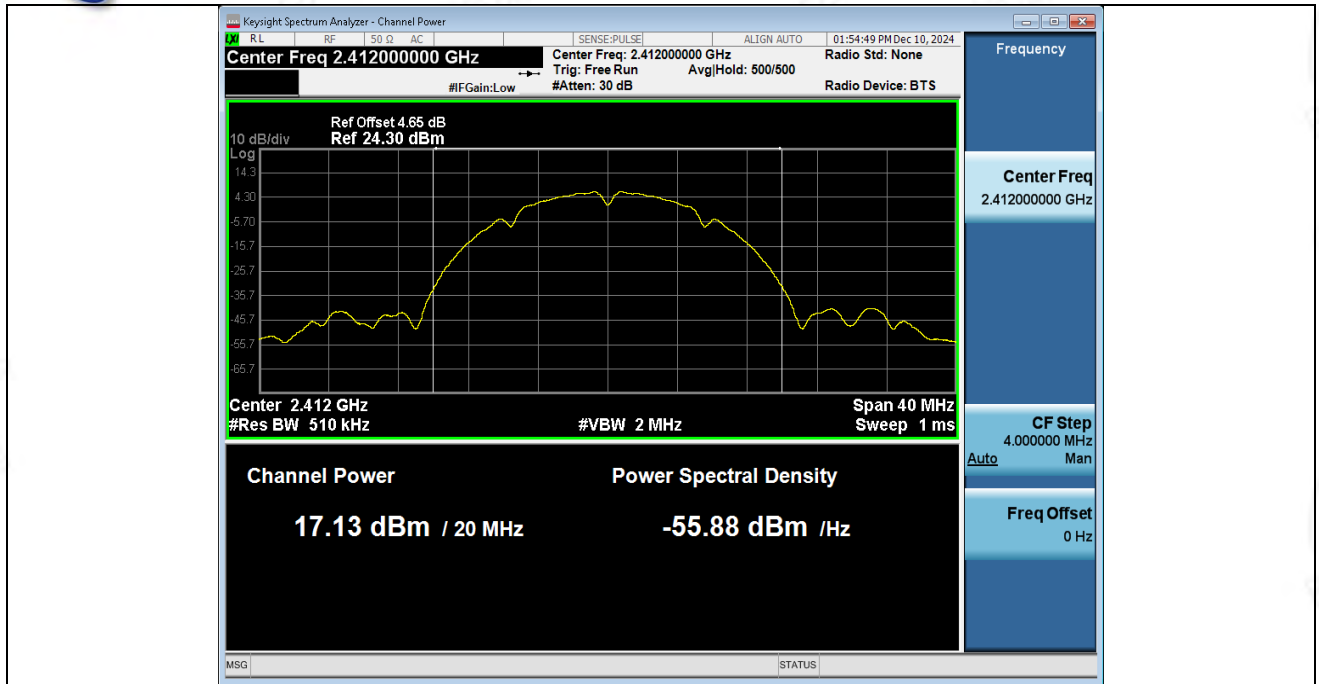
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Duty factor(dB)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	RMS	16.76	0.00	16.76	30	Pass
NVNT	ANT2	802.11b	2412.00	RMS	17.13	0.00	17.13	30	Pass
NVNT	ANT1	802.11b	2437.00	RMS	17.50	0.00	17.50	30	Pass
NVNT	ANT2	802.11b	2437.00	RMS	17.78	0.00	17.78	30	Pass
NVNT	ANT1	802.11b	2462.00	RMS	17.39	0.00	17.39	30	Pass
NVNT	ANT2	802.11b	2462.00	RMS	17.49	0.00	17.49	30	Pass
NVNT	ANT1	802.11g	2412.00	RMS	12.82	0.00	12.82	30	Pass
NVNT	ANT2	802.11g	2412.00	RMS	13.06	0.12	13.18	30	Pass
NVNT	ANT1	802.11g	2437.00	RMS	13.16	0.00	13.16	30	Pass
NVNT	ANT2	802.11g	2437.00	RMS	13.37	0.12	13.49	30	Pass
NVNT	ANT1	802.11g	2462.00	RMS	13.26	0.00	13.26	30	Pass
NVNT	ANT2	802.11g	2462.00	RMS	13.32	0.00	13.32	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	RMS	11.20	0.00	11.20	30	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	RMS	11.43	0.00	11.43	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	RMS	11.34	0.00	11.34	30	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	RMS	11.57	0.13	11.70	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	RMS	11.61	0.13	11.74	30	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	RMS	11.71	0.00	11.71	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	RMS	10.87	0.13	11.00	30	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	RMS	11.07	0.13	11.20	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	RMS	11.50	0.13	11.63	30	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	RMS	11.87	0.13	12.00	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	RMS	11.70	0.26	11.96	30	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	RMS	11.83	0.13	11.96	30	Pass

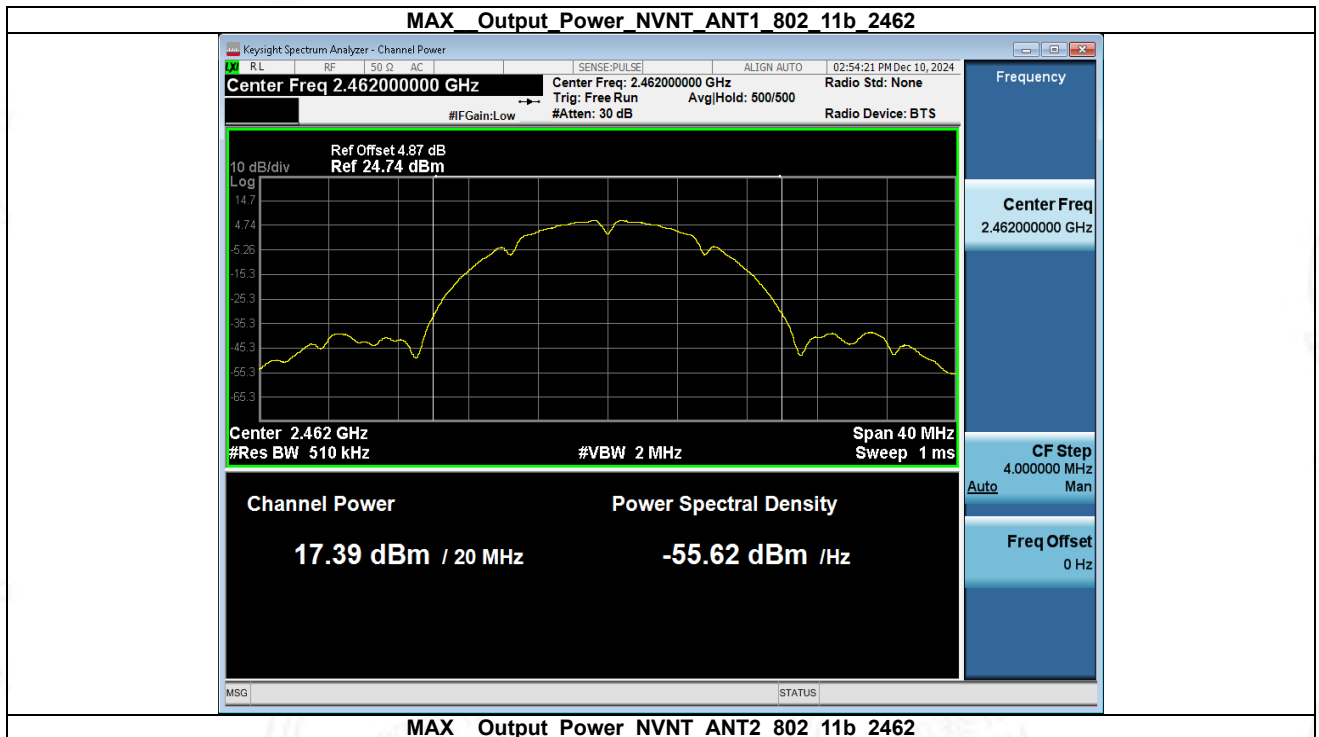
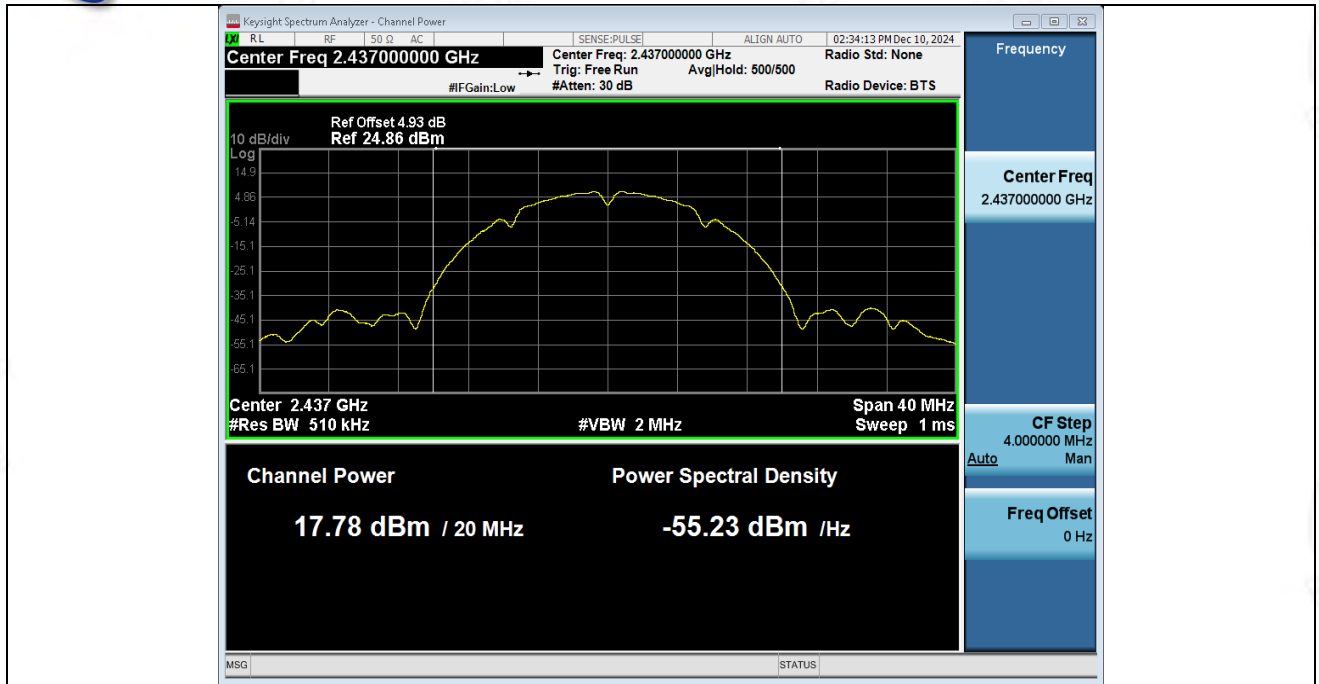
MAX Output Power NVNT ANT1 802 11b 2412

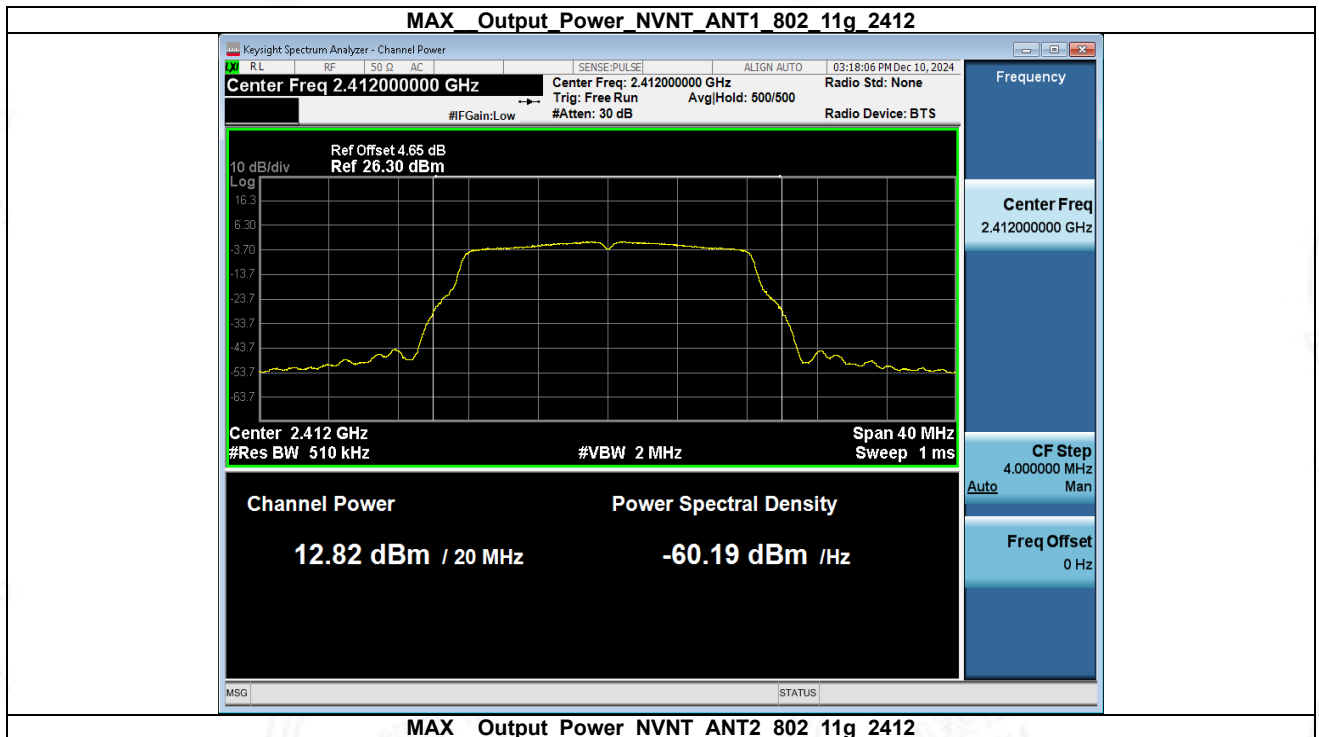
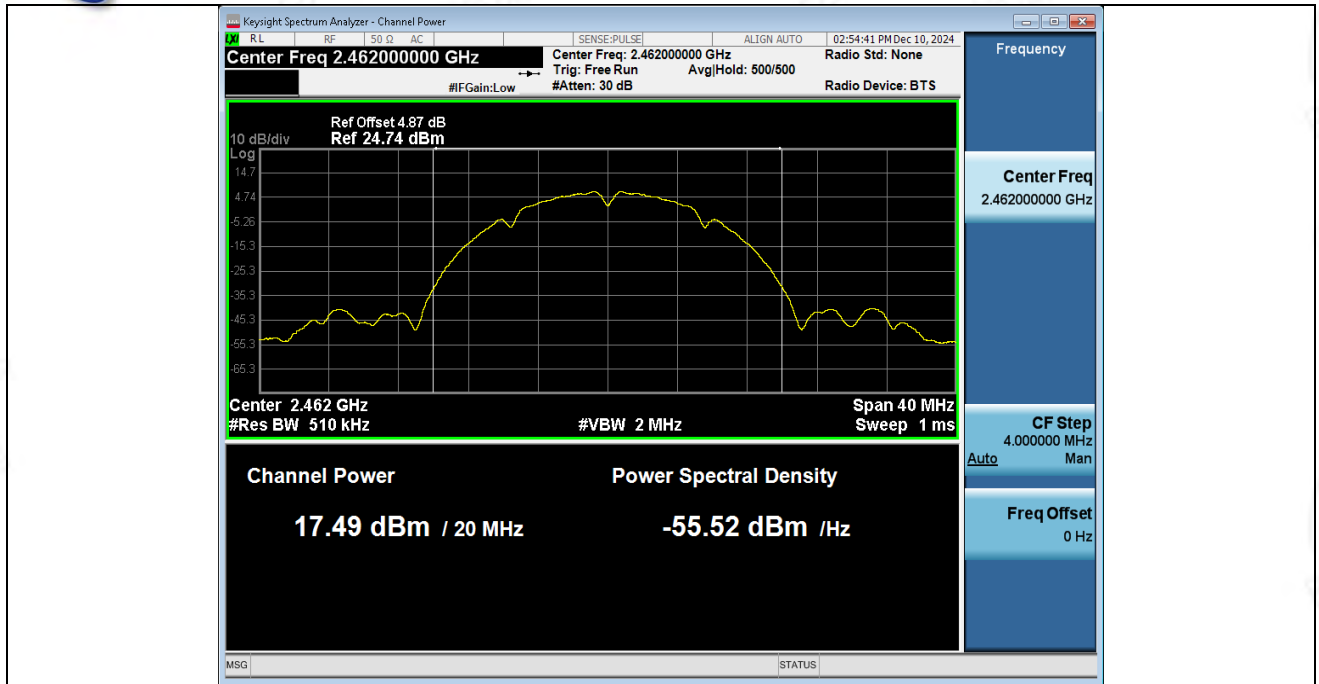


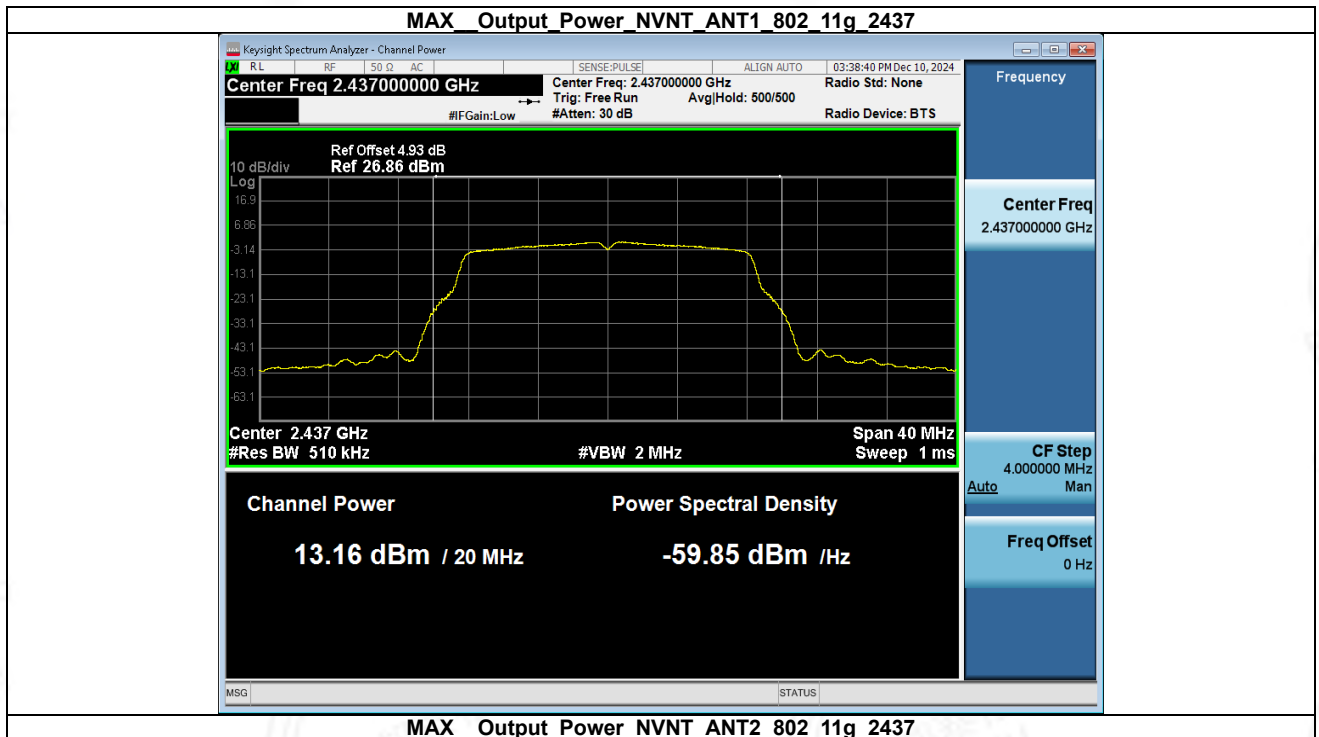
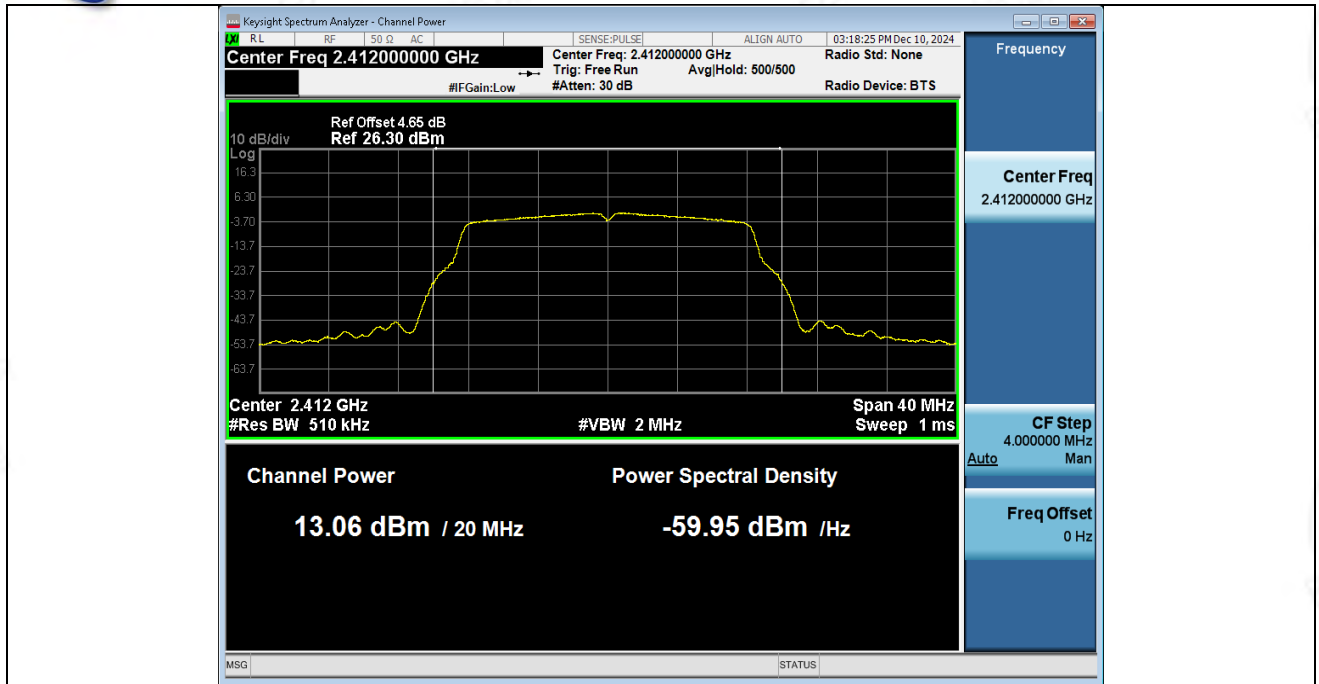
MAX Output Power NVNT ANT2 802 11b 2412

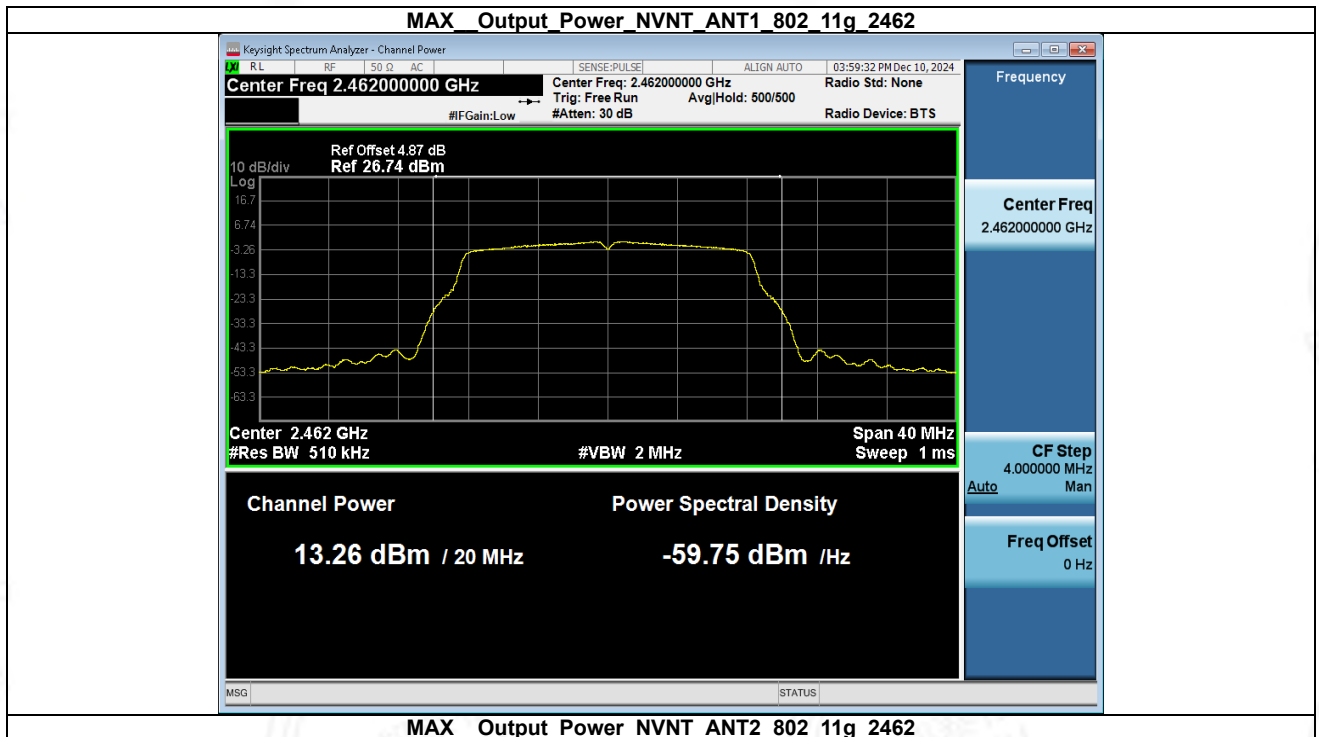
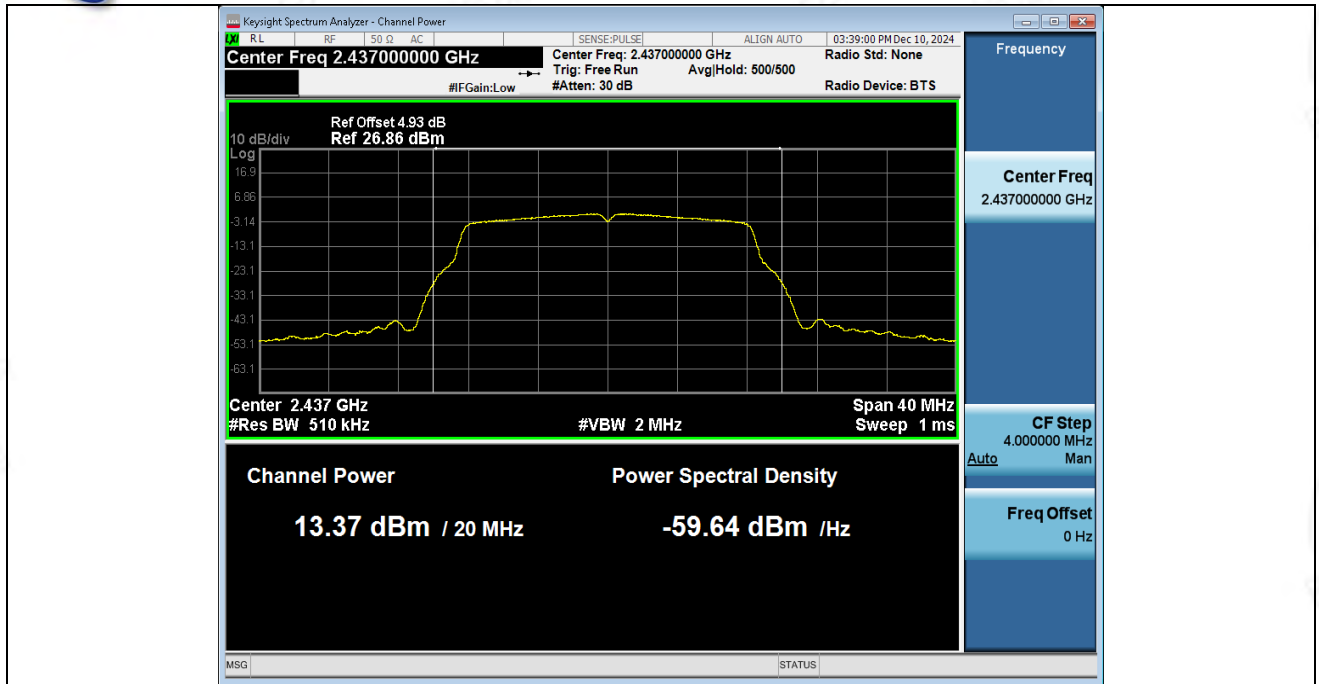


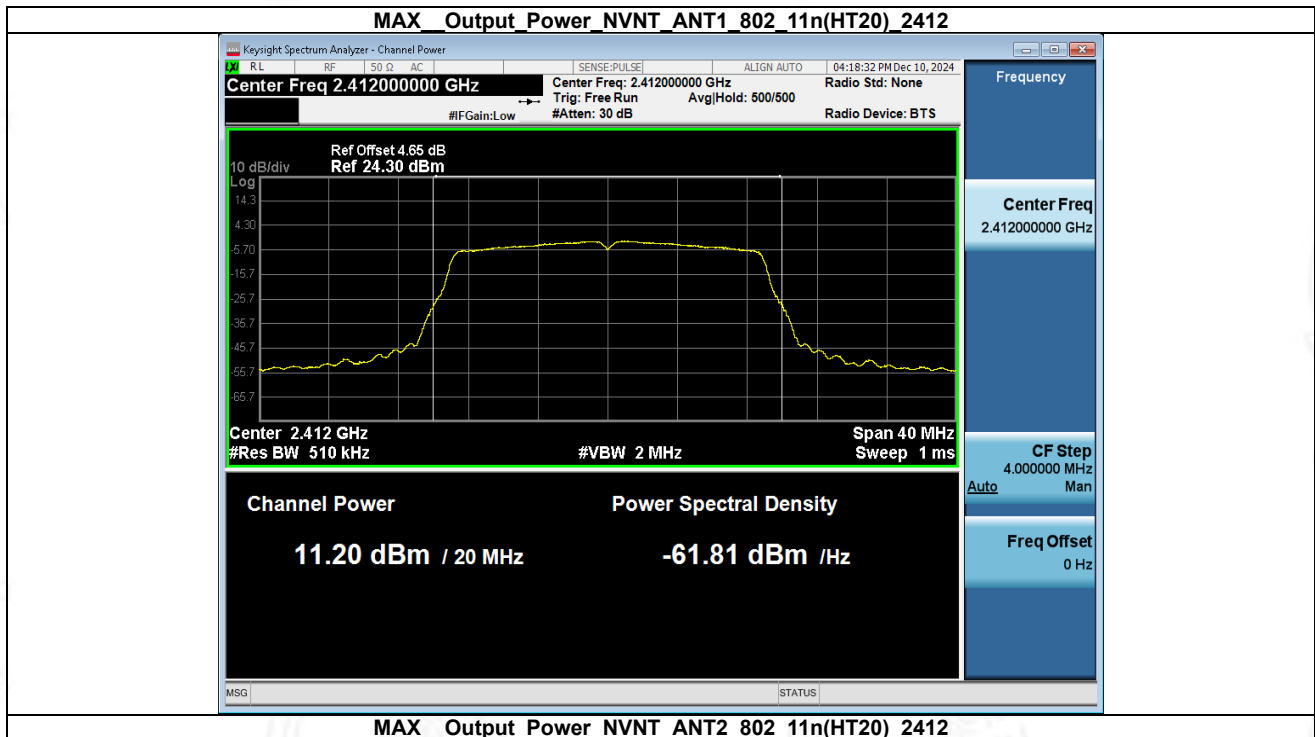
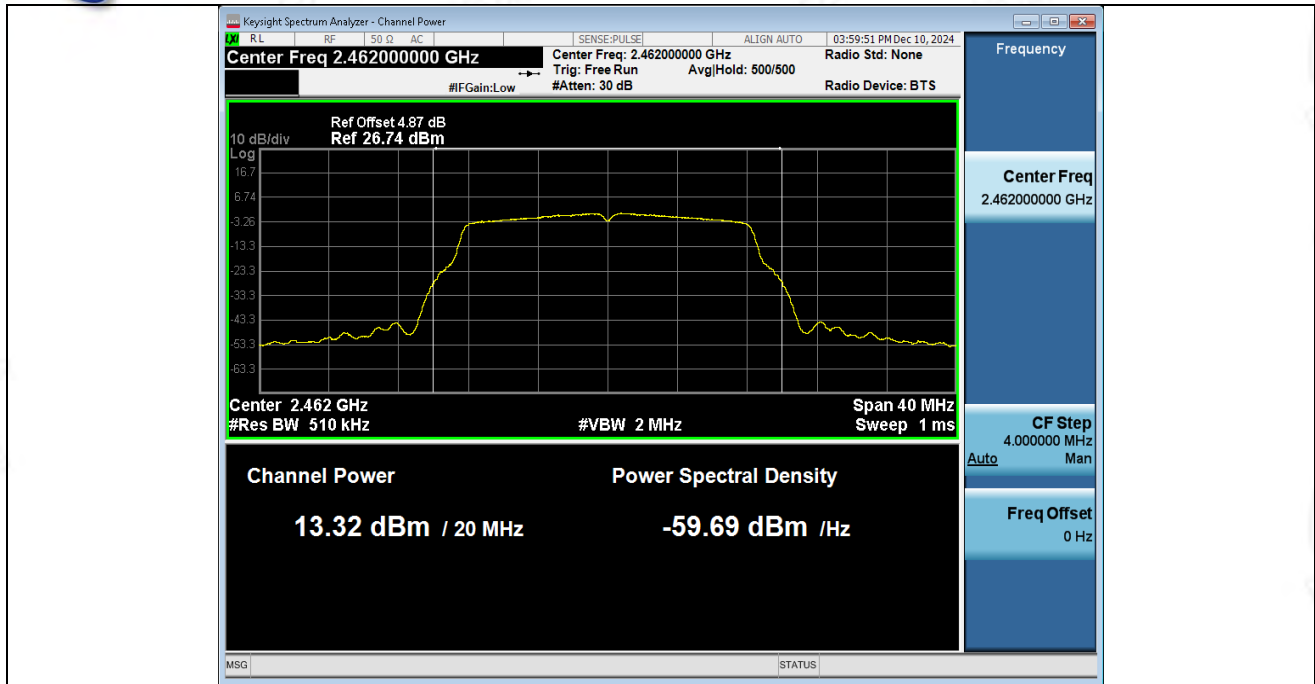


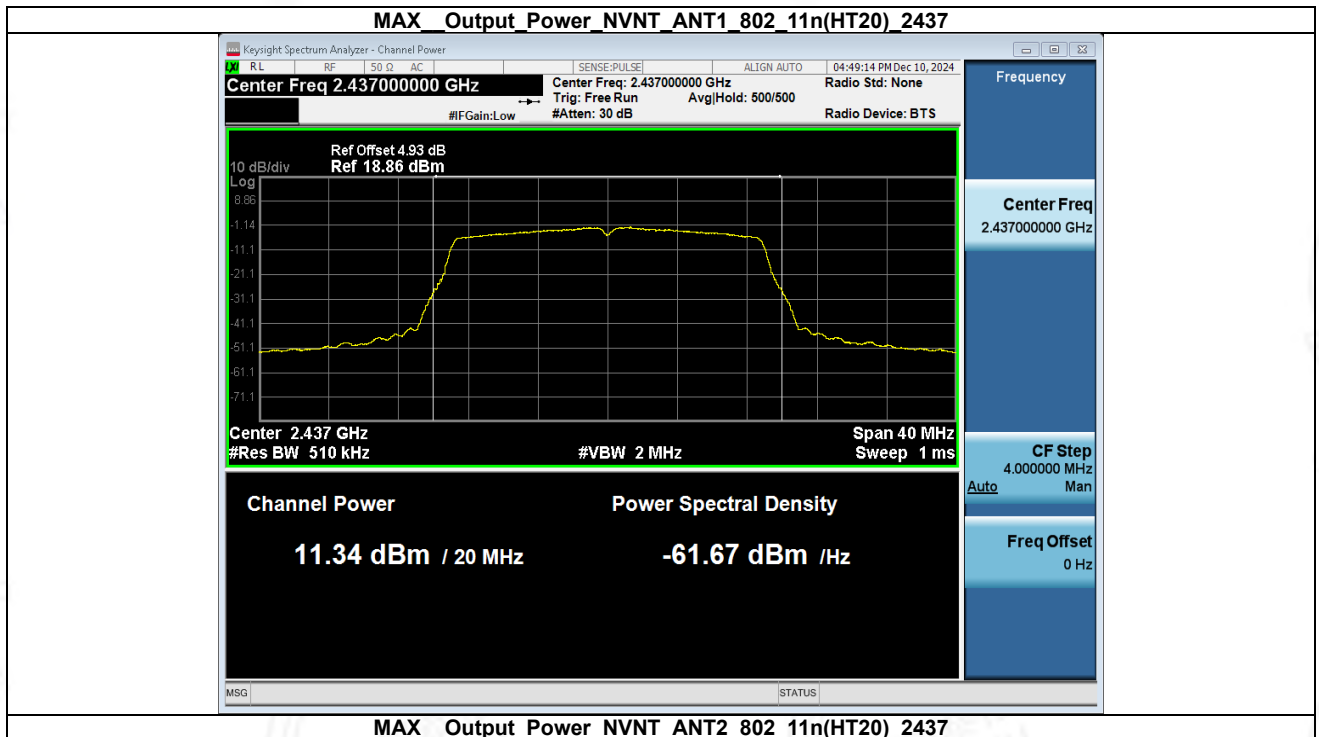
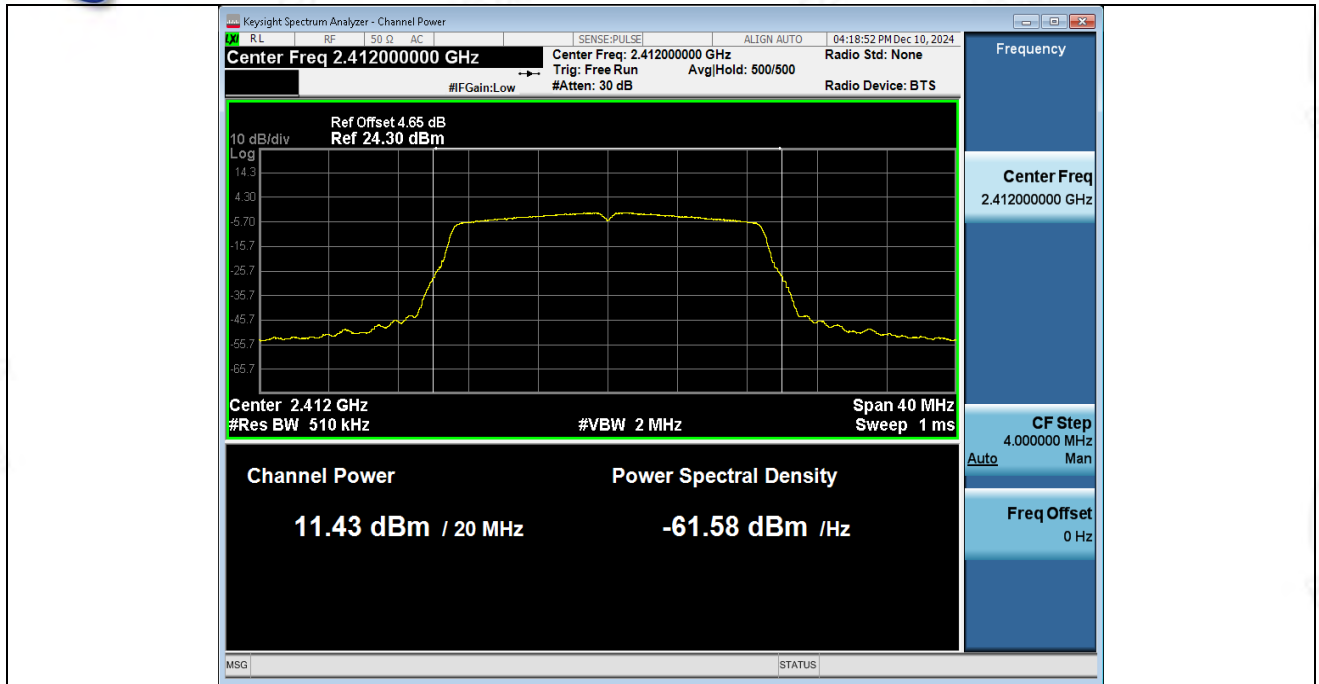


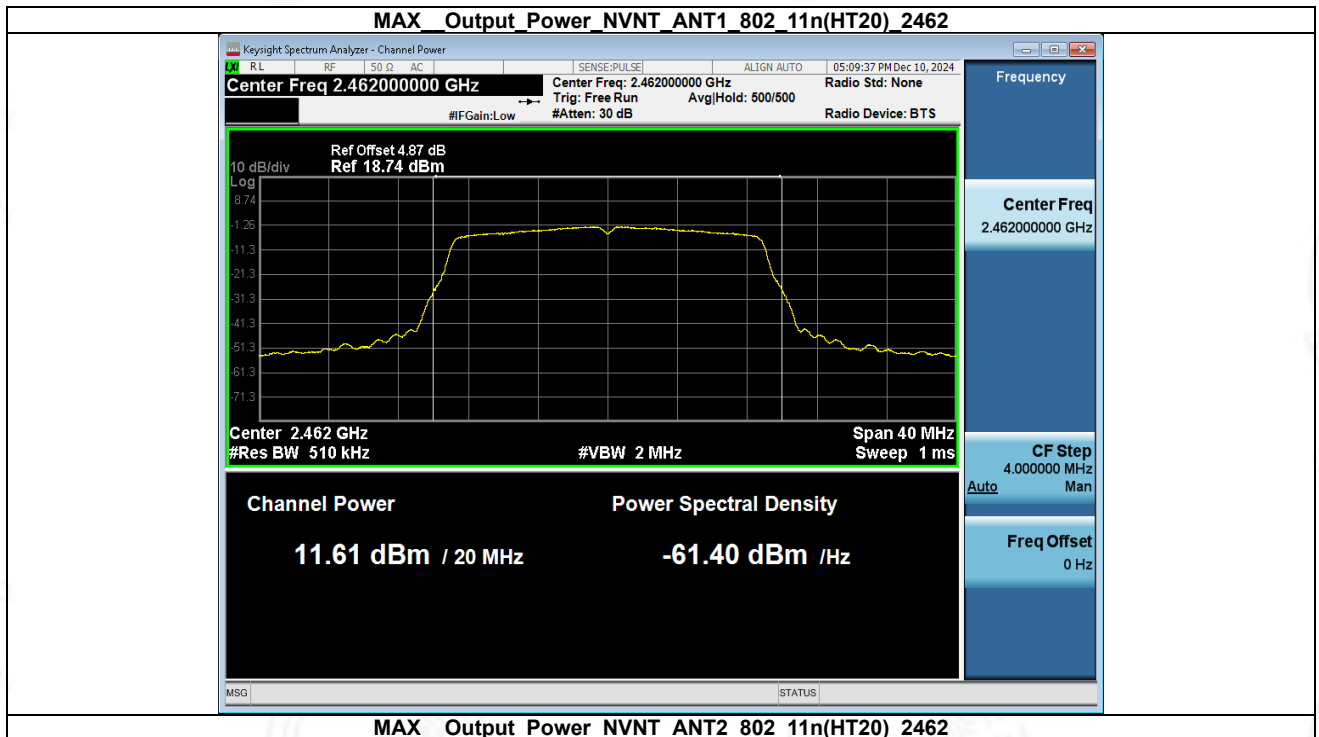
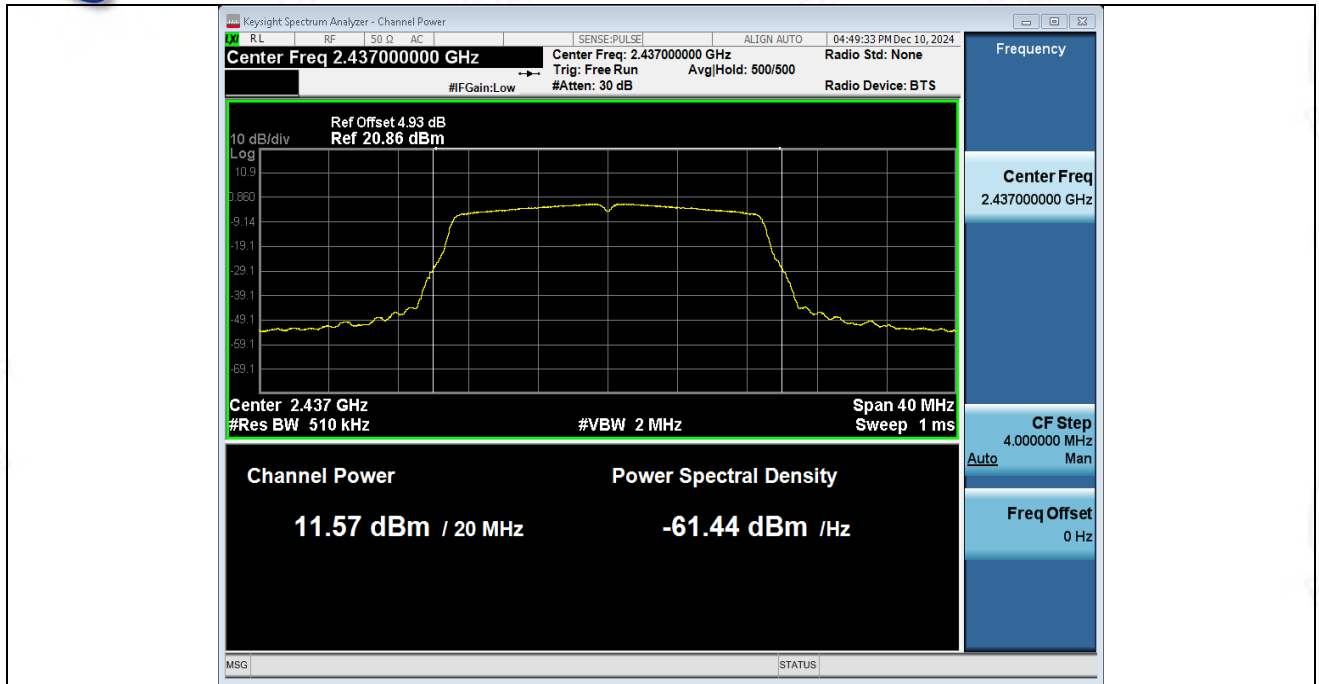


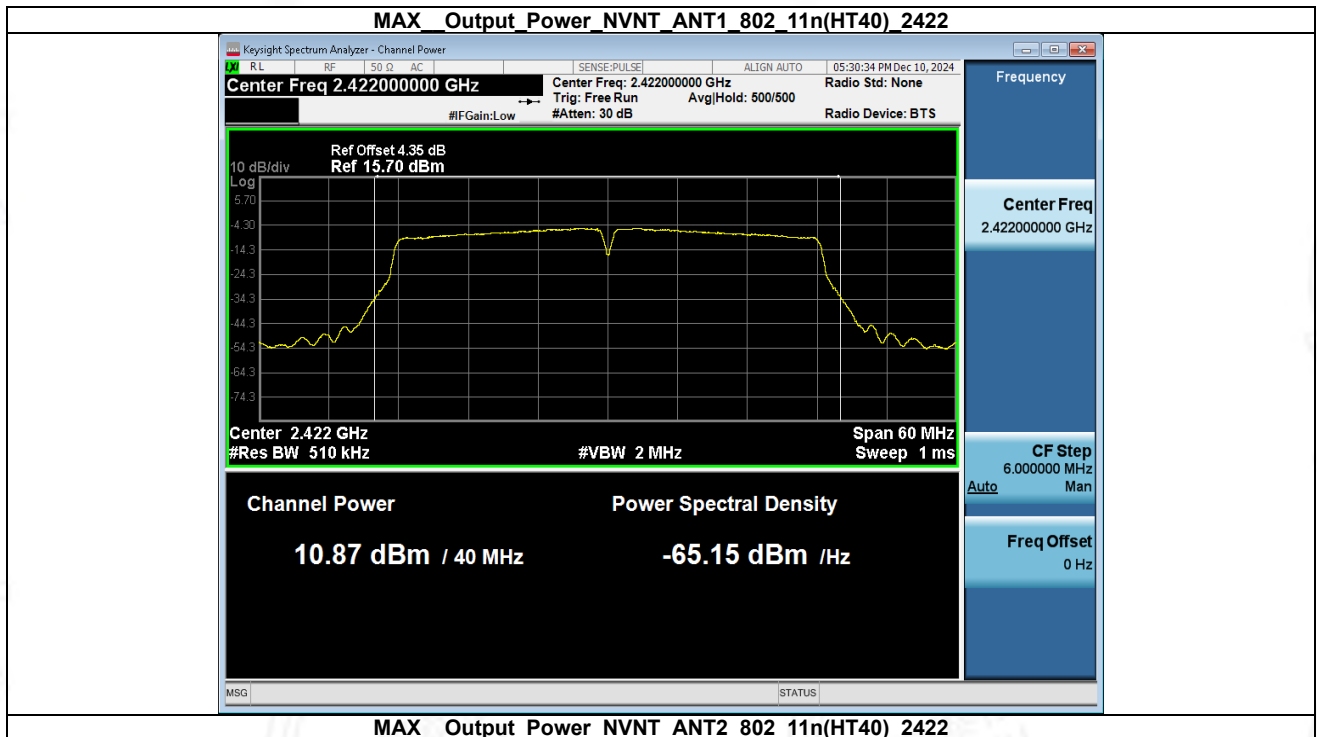
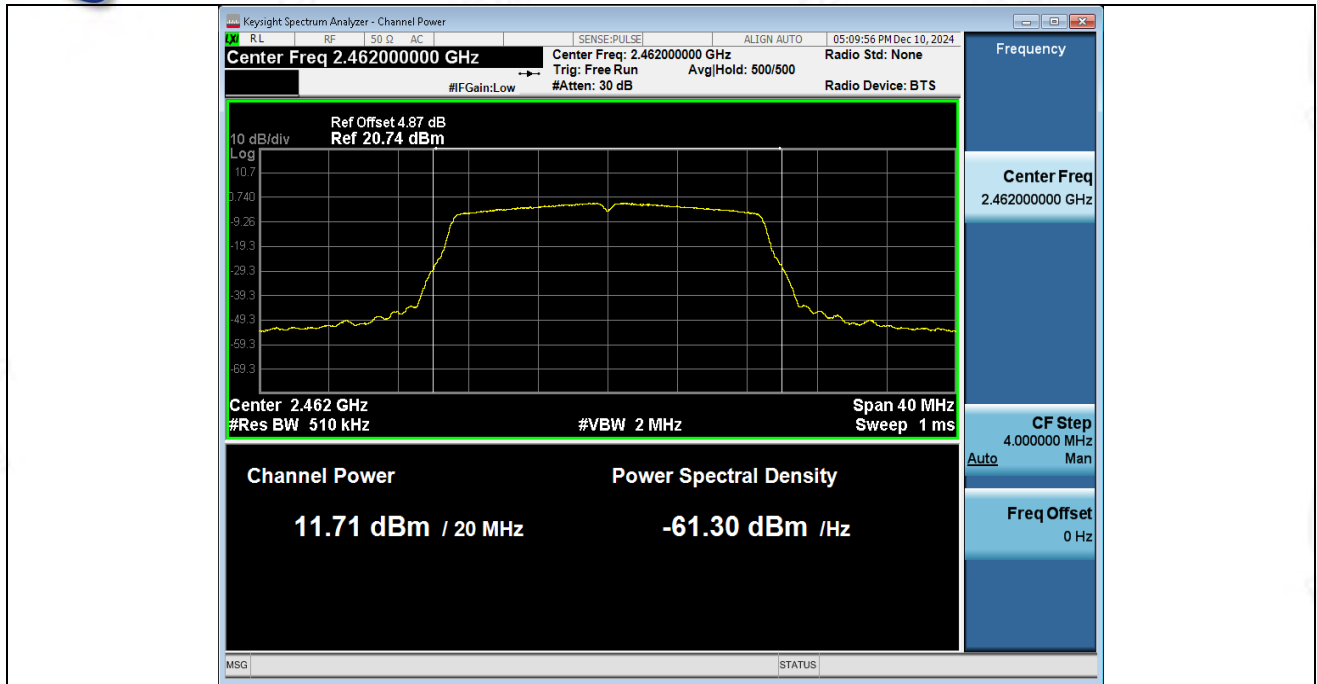


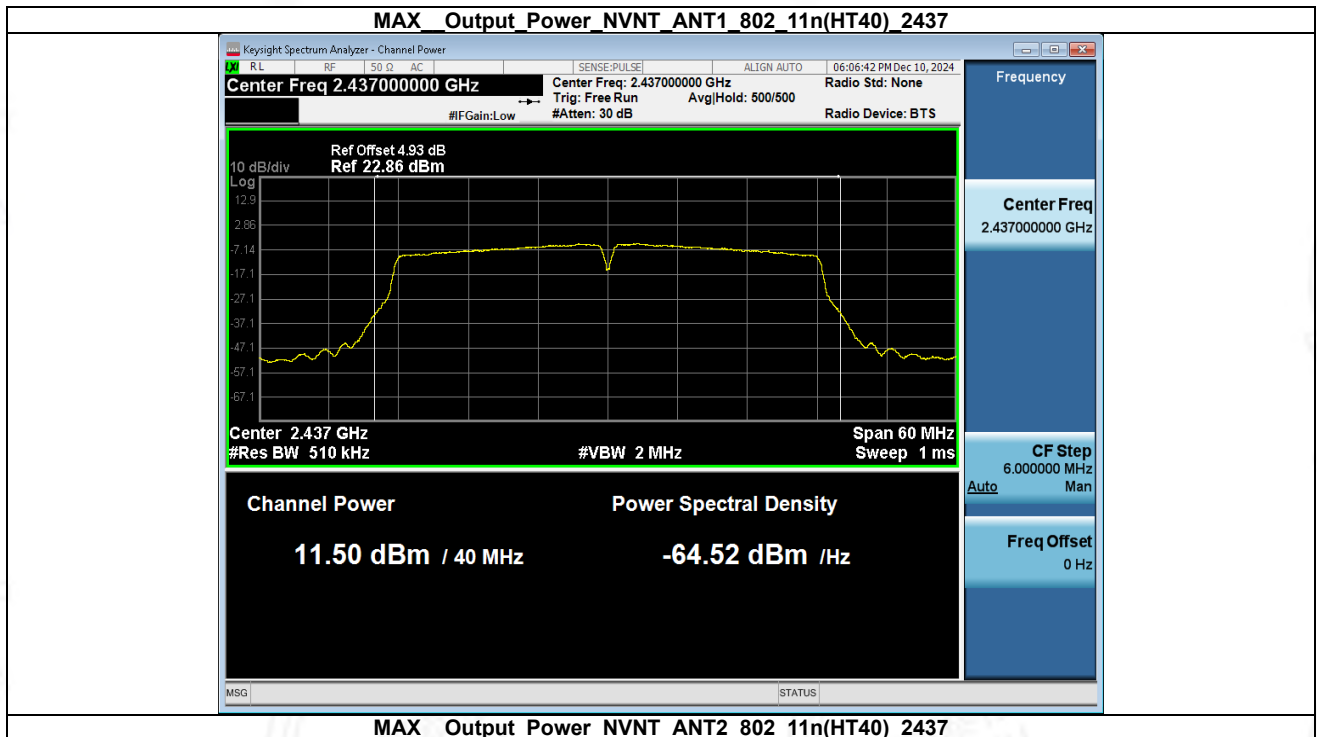
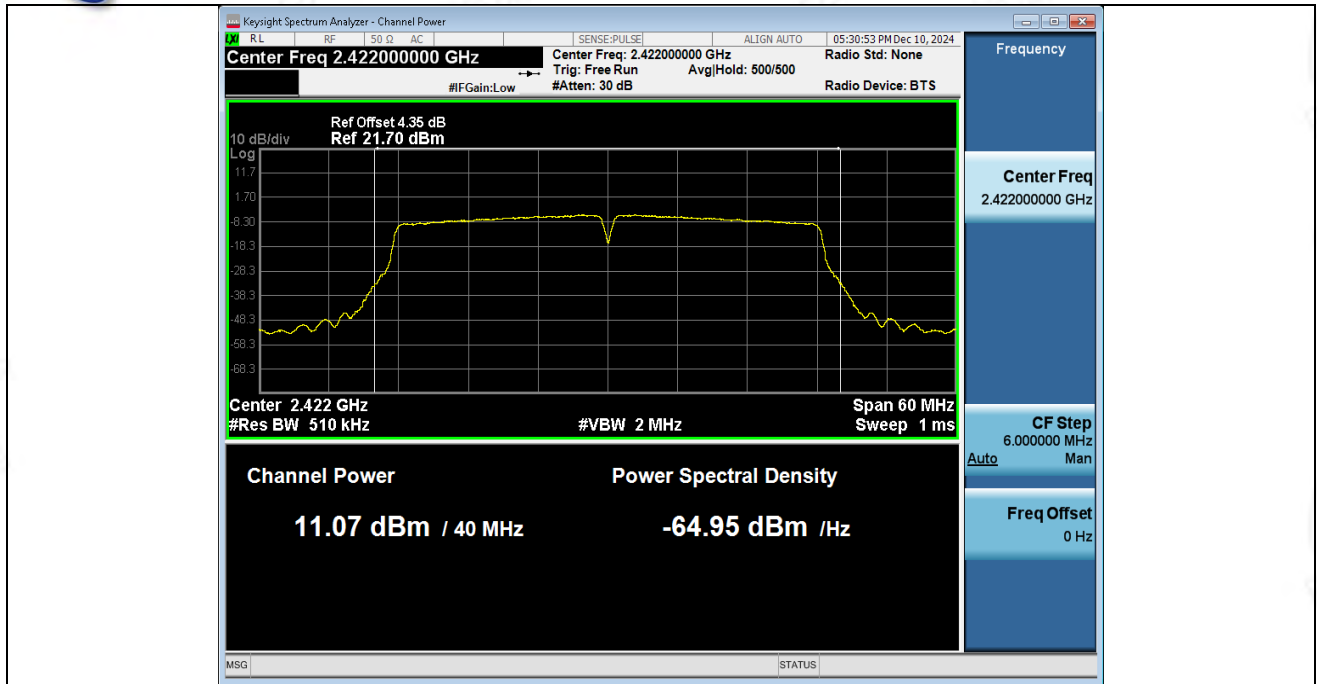


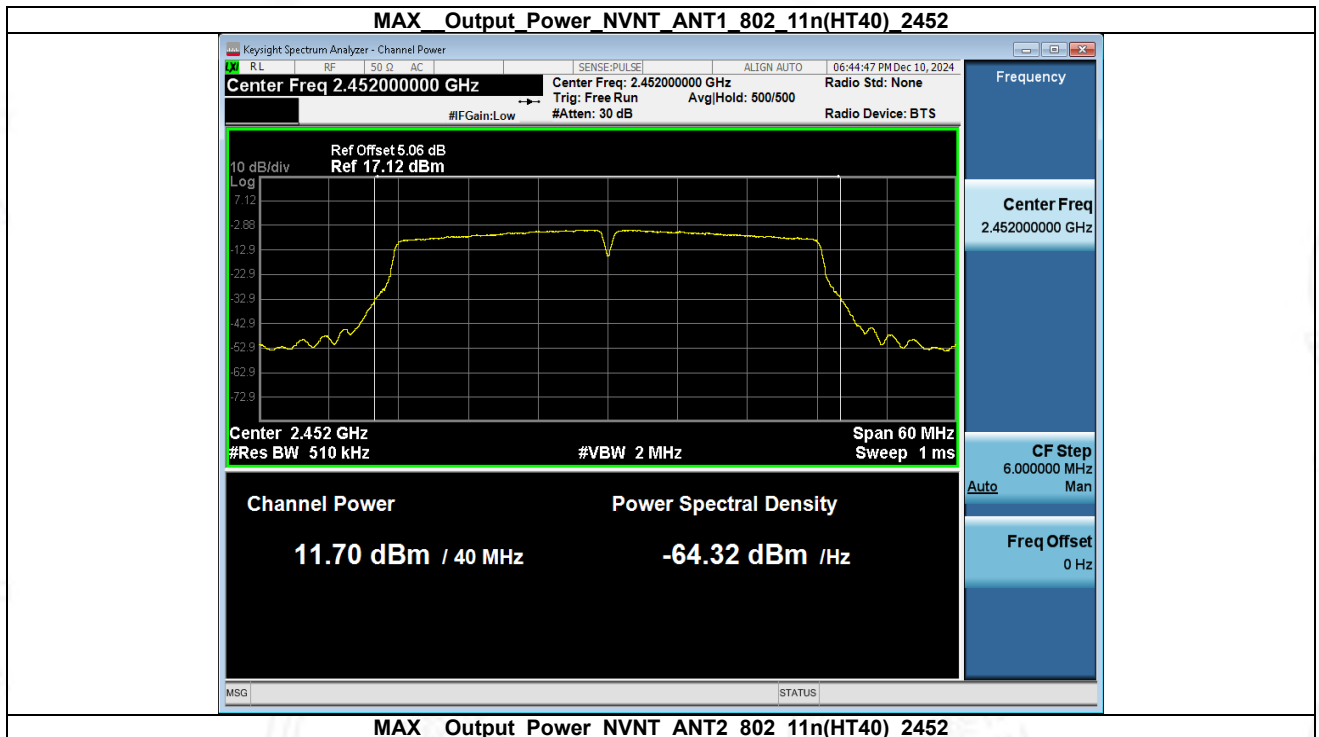
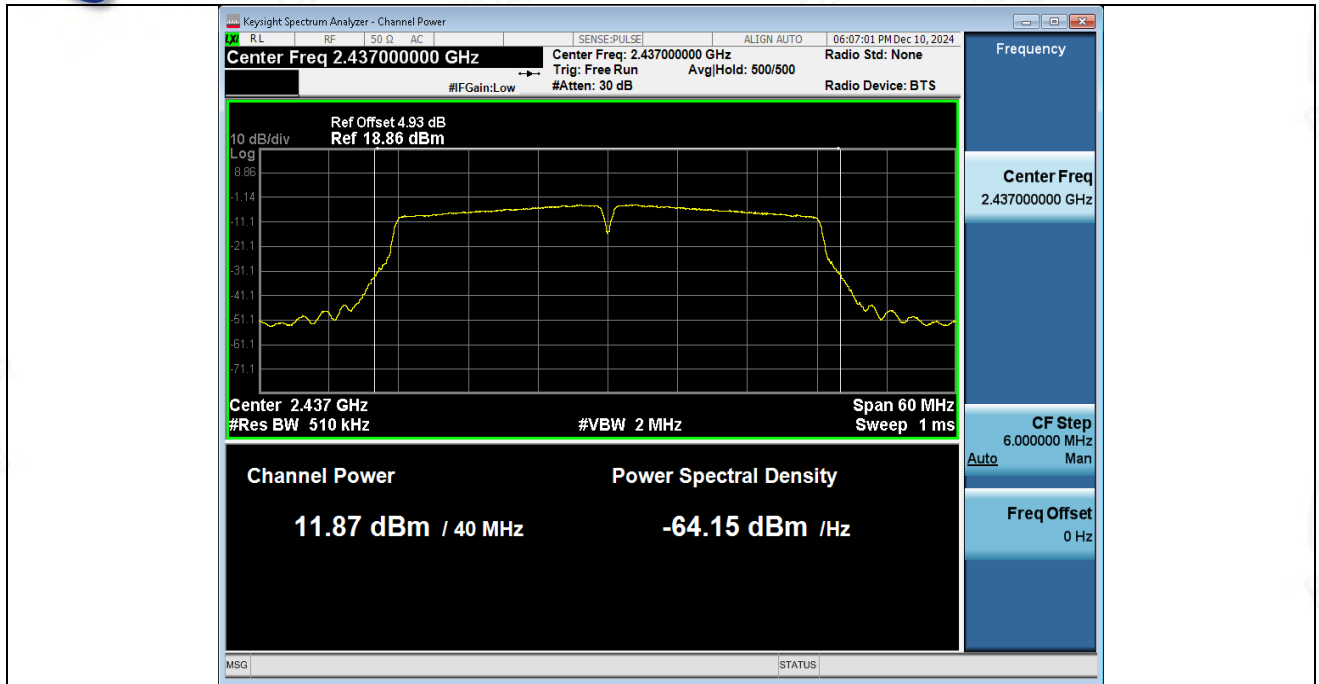


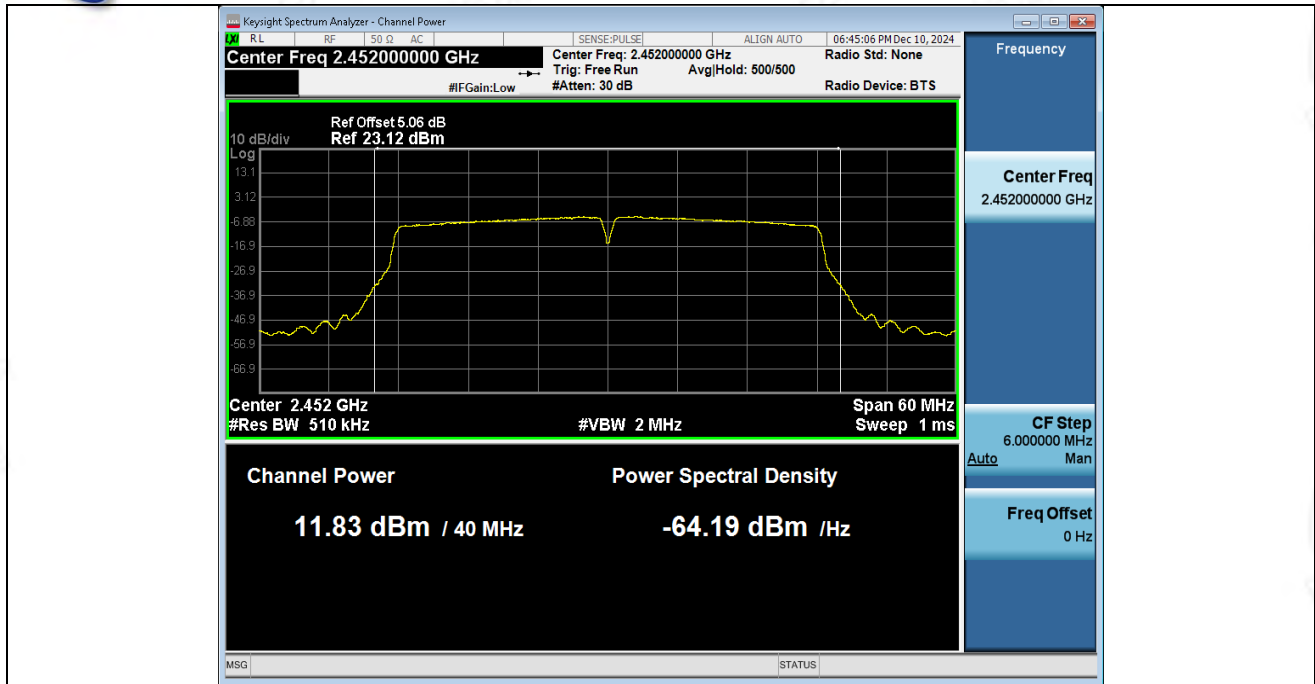












Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted_Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	2412.00	14.33	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2437.00	14.53	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2462.00	14.73	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2422.00	14.11	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2437.00	14.83	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2452.00	14.97	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	-17.16	0.00	0.00	-17.16	8	Pass
NVNT	ANT2	802.11b	2412.00	-16.98	0.00	0.00	-16.98	8	Pass
NVNT	ANT1	802.11b	2437.00	-16.42	0.00	0.00	-16.42	8	Pass
NVNT	ANT2	802.11b	2437.00	-16.48	0.00	0.00	-16.48	8	Pass
NVNT	ANT1	802.11b	2462.00	-16.67	0.00	0.00	-16.67	8	Pass
NVNT	ANT2	802.11b	2462.00	-16.55	0.00	0.00	-16.55	8	Pass
NVNT	ANT1	802.11g	2412.00	-22.18	0.00	0.00	-22.18	8	Pass
NVNT	ANT2	802.11g	2412.00	-22.16	0.12	0.00	-22.04	8	Pass
NVNT	ANT1	802.11g	2437.00	-22.09	0.00	0.00	-22.09	8	Pass
NVNT	ANT2	802.11g	2437.00	-21.72	0.12	0.00	-21.60	8	Pass
NVNT	ANT1	802.11g	2462.00	-22.06	0.00	0.00	-22.06	8	Pass
NVNT	ANT2	802.11g	2462.00	-22.14	0.00	0.00	-22.14	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-24.44	0.00	0.00	-24.44	8	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	-23.80	0.00	0.00	-23.80	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-24.11	0.00	0.00	-24.11	8	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	-23.65	0.13	0.00	-23.52	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-23.81	0.13	0.00	-23.68	8	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	-23.76	0.00	0.00	-23.76	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-26.11	0.13	0.00	-25.98	8	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	-25.55	0.13	0.00	-25.42	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-25.36	0.13	0.00	-25.23	8	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	-25.21	0.13	0.00	-25.08	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-25.50	0.26	0.00	-25.24	8	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	-25.52	0.13	0.00	-25.39	8	Pass

Power Spectral Density_NVNT_ANT1_802_11b_2412



Power Spectral Density_NVNT_ANT2_802_11b_2412



