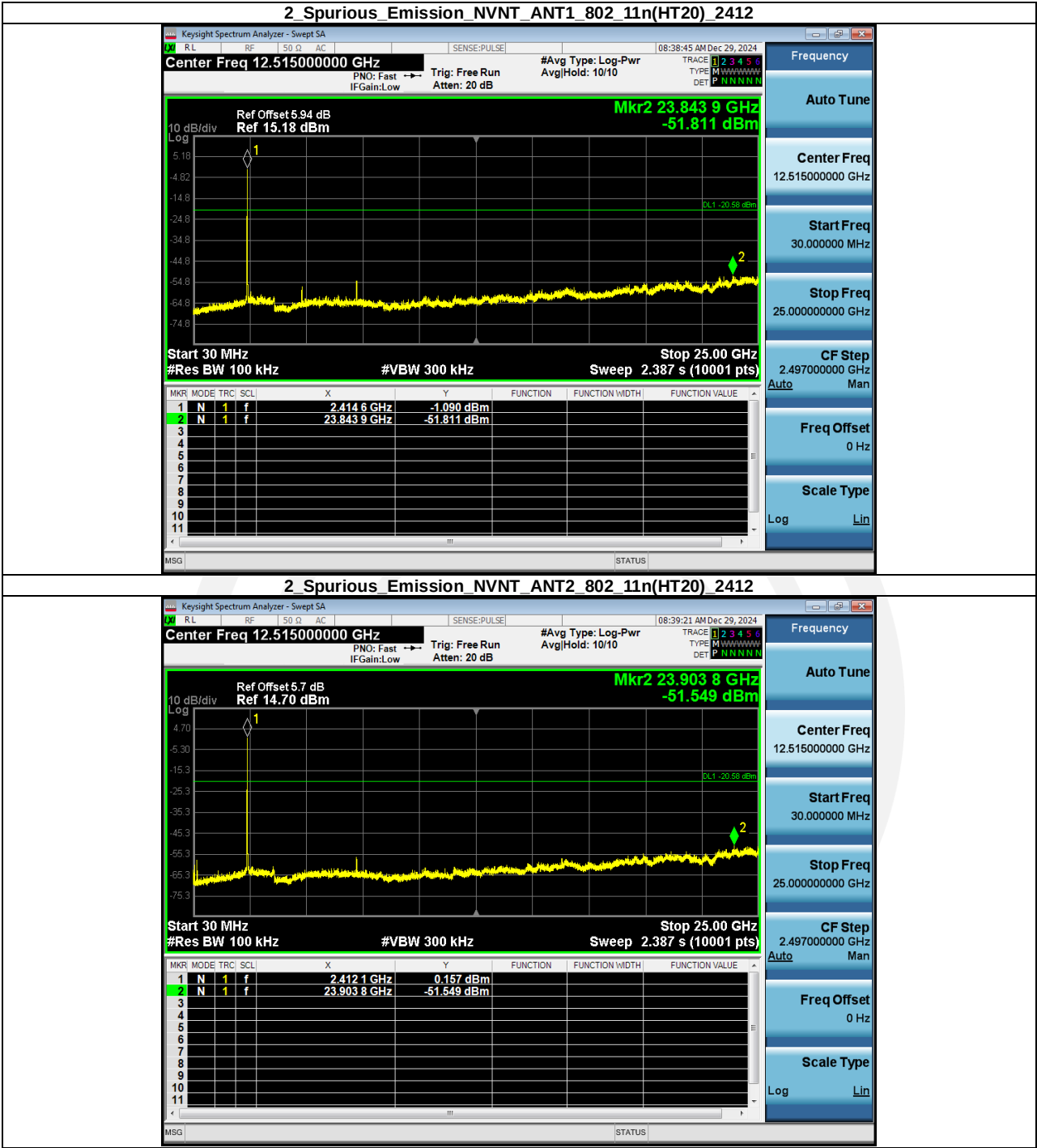
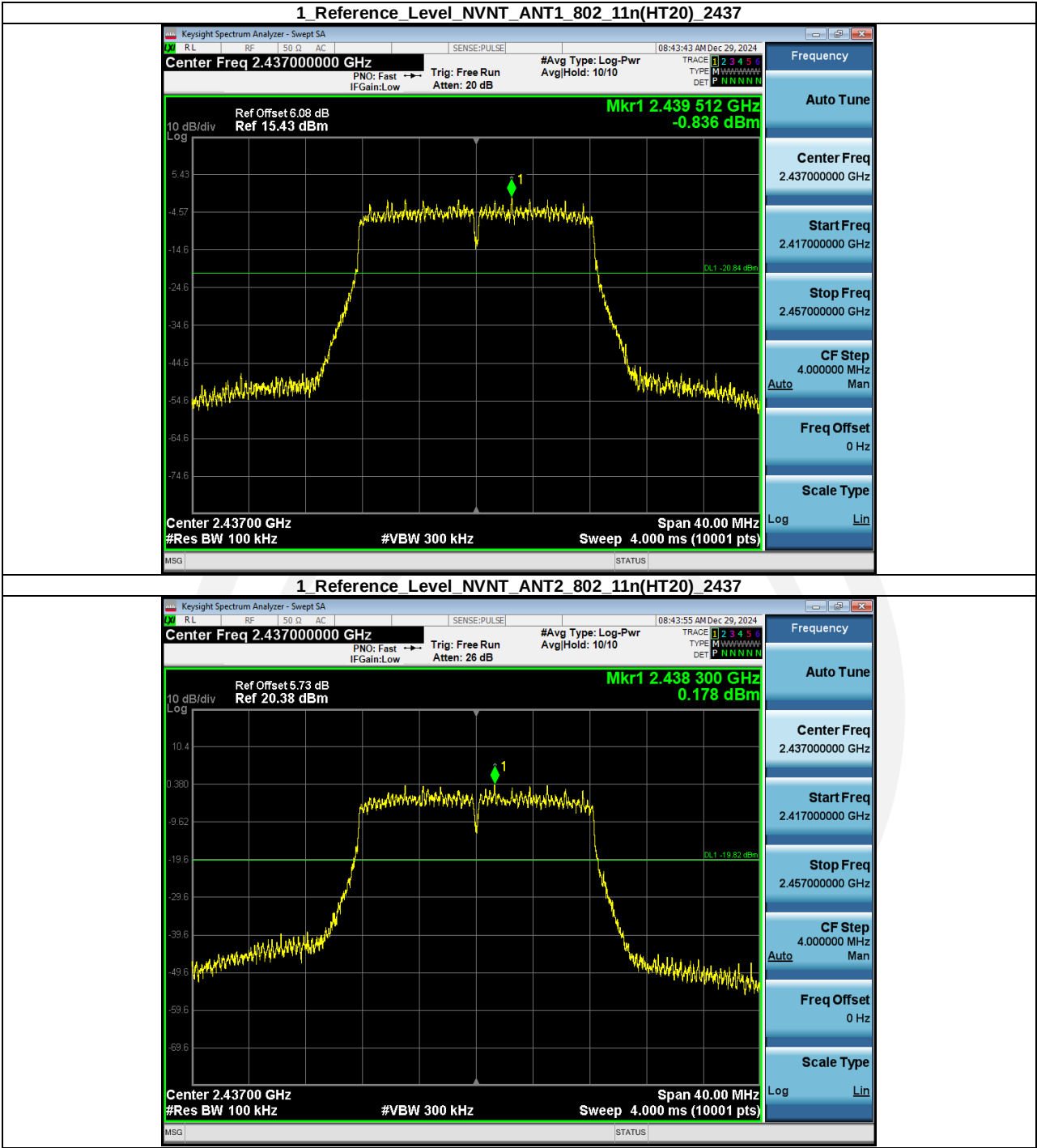
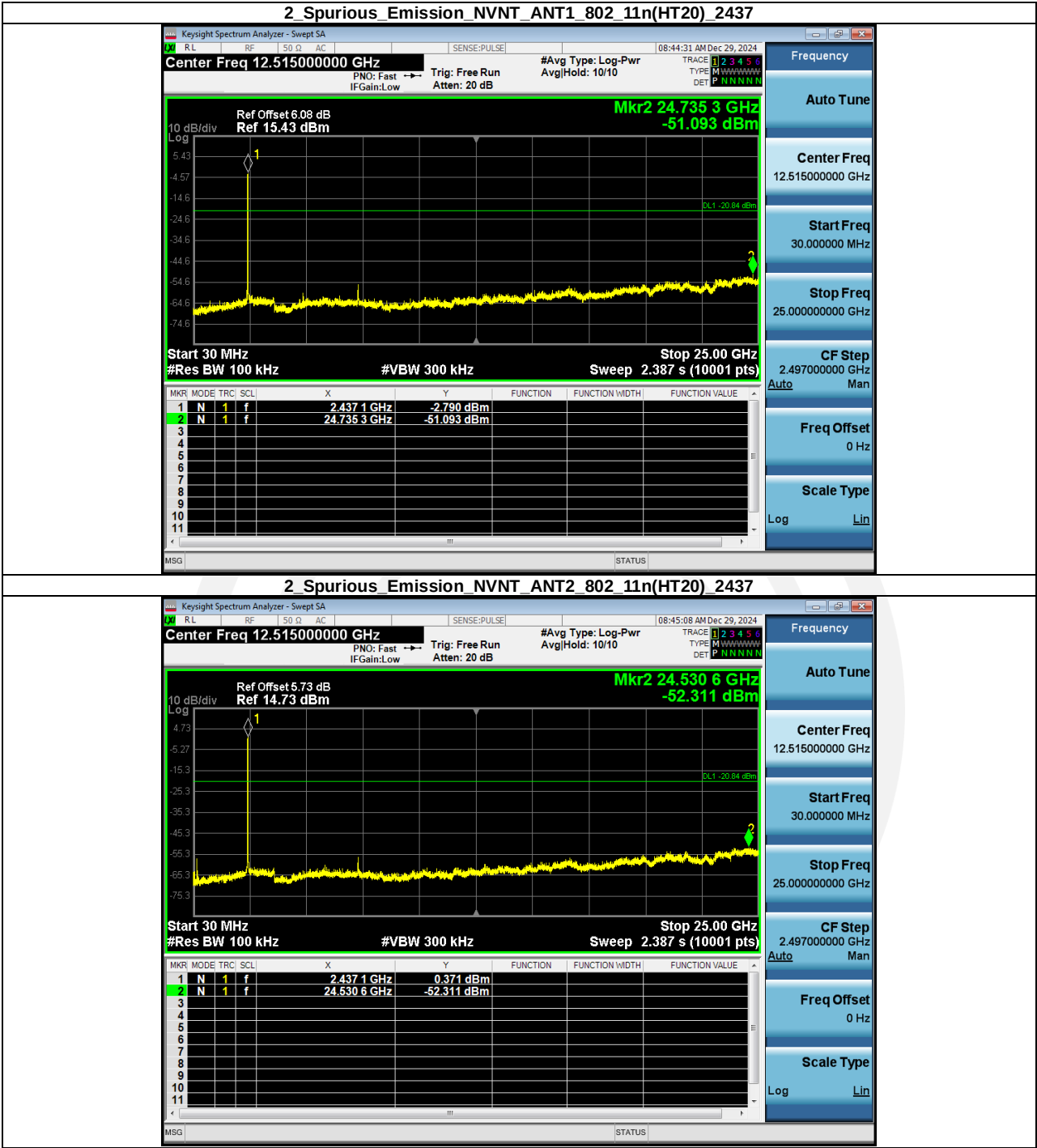
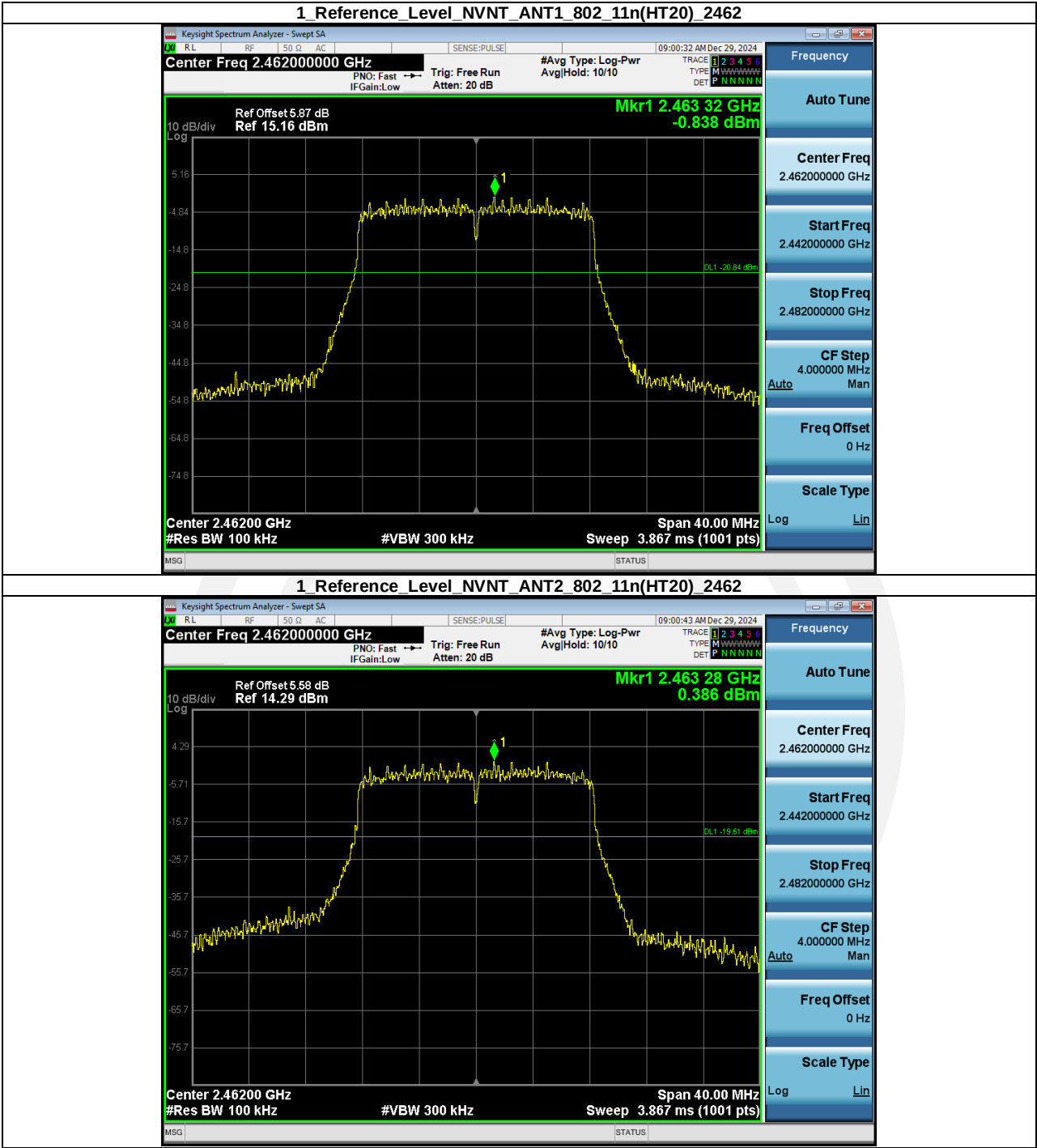
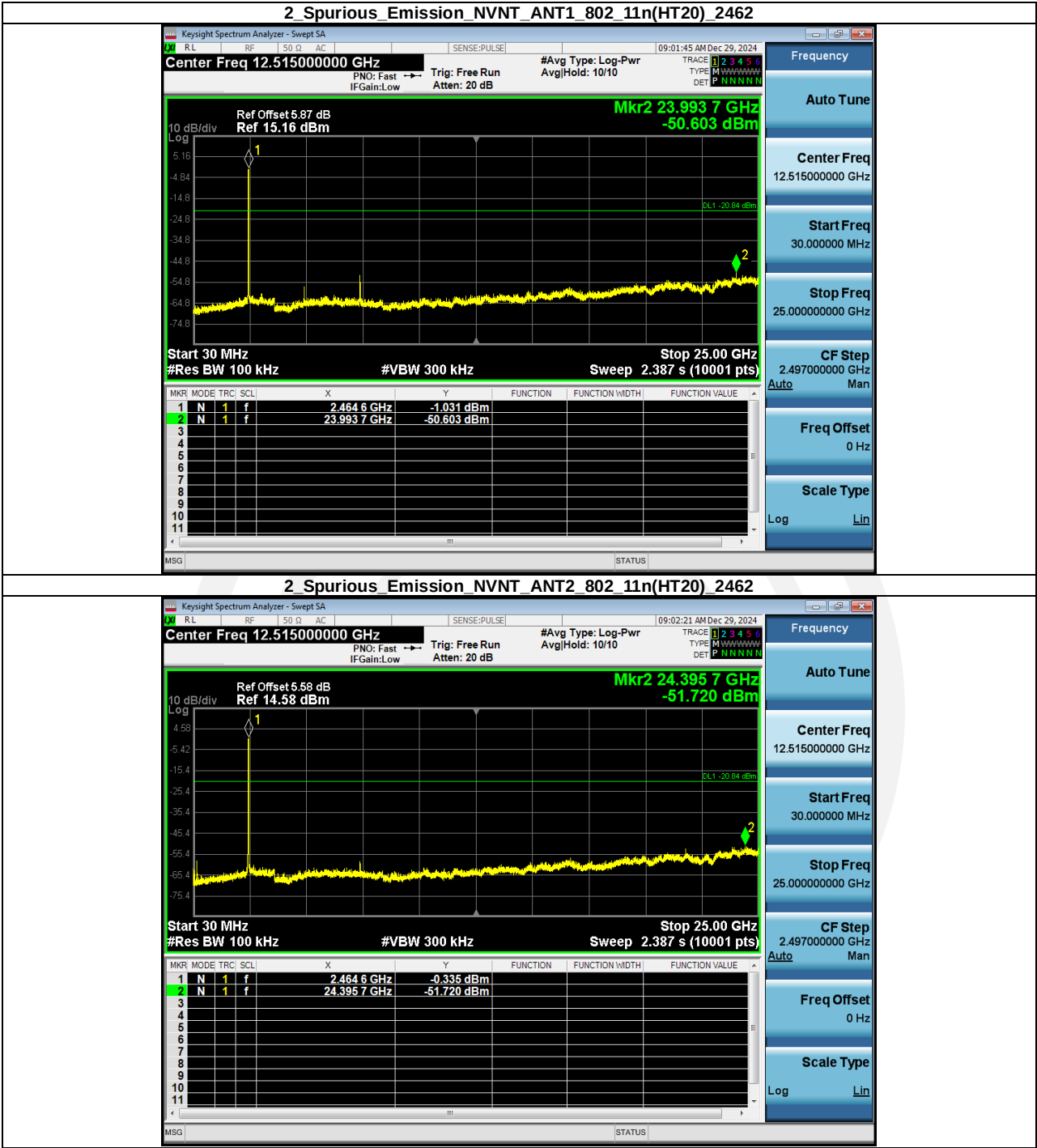


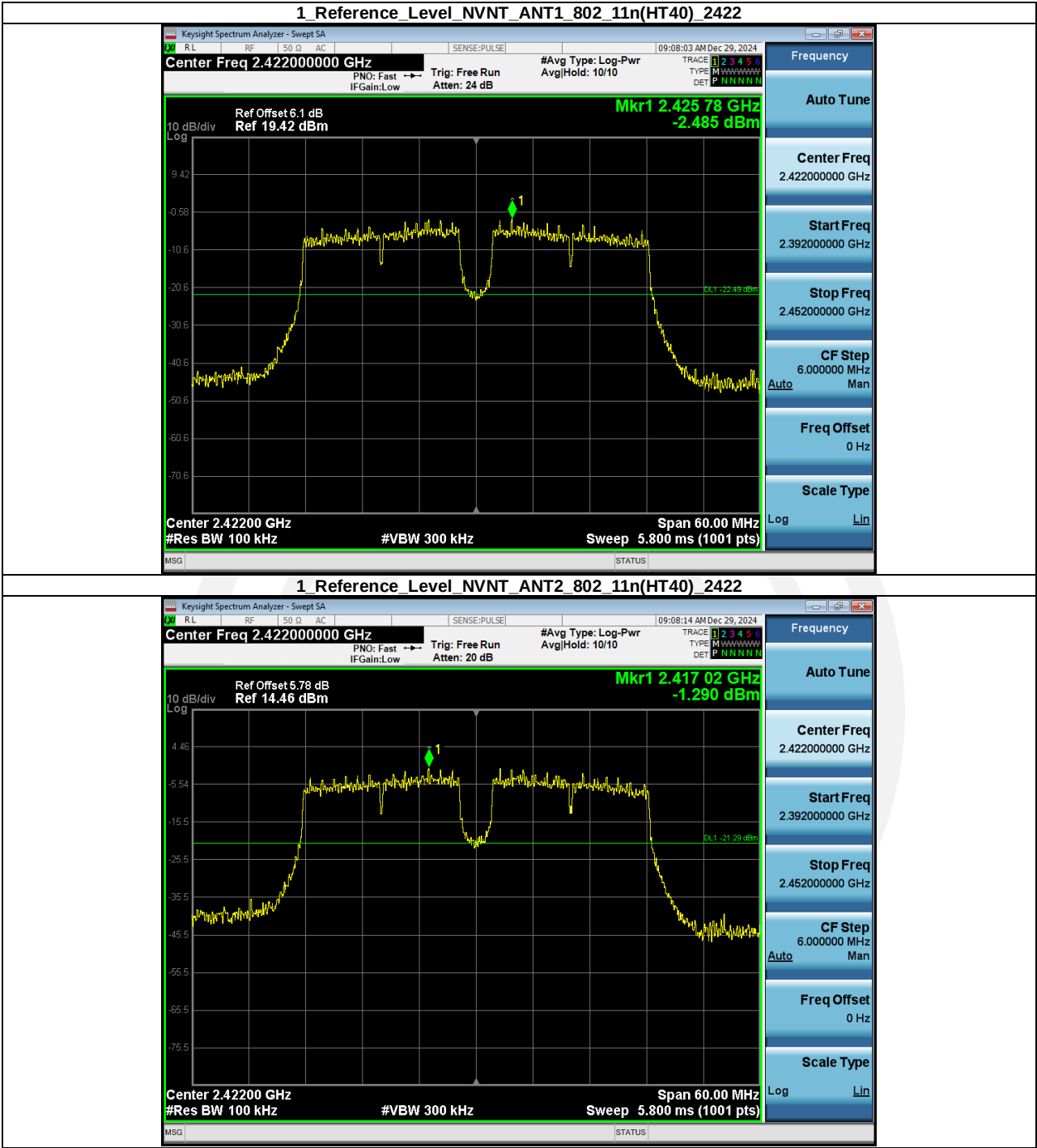


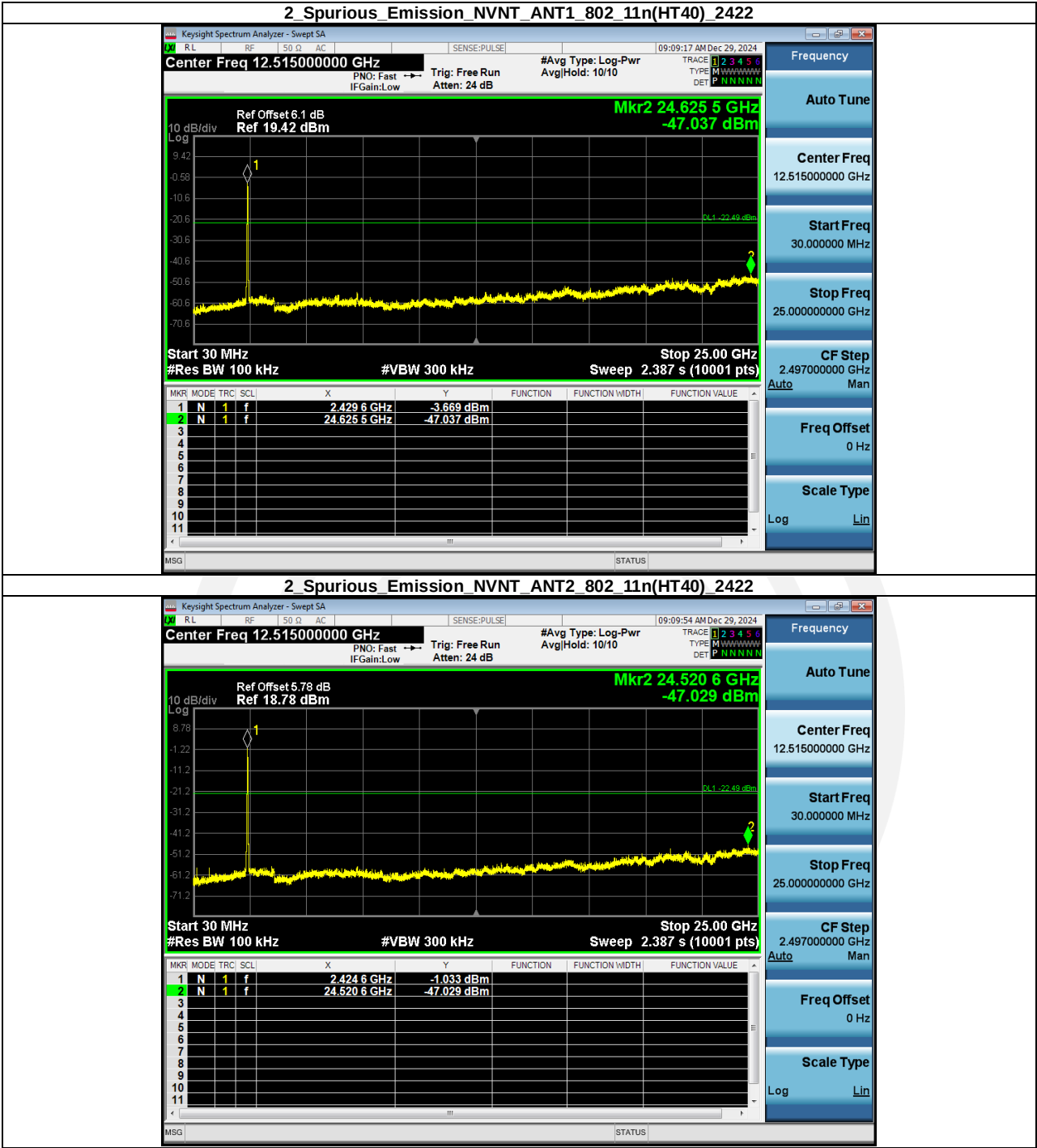


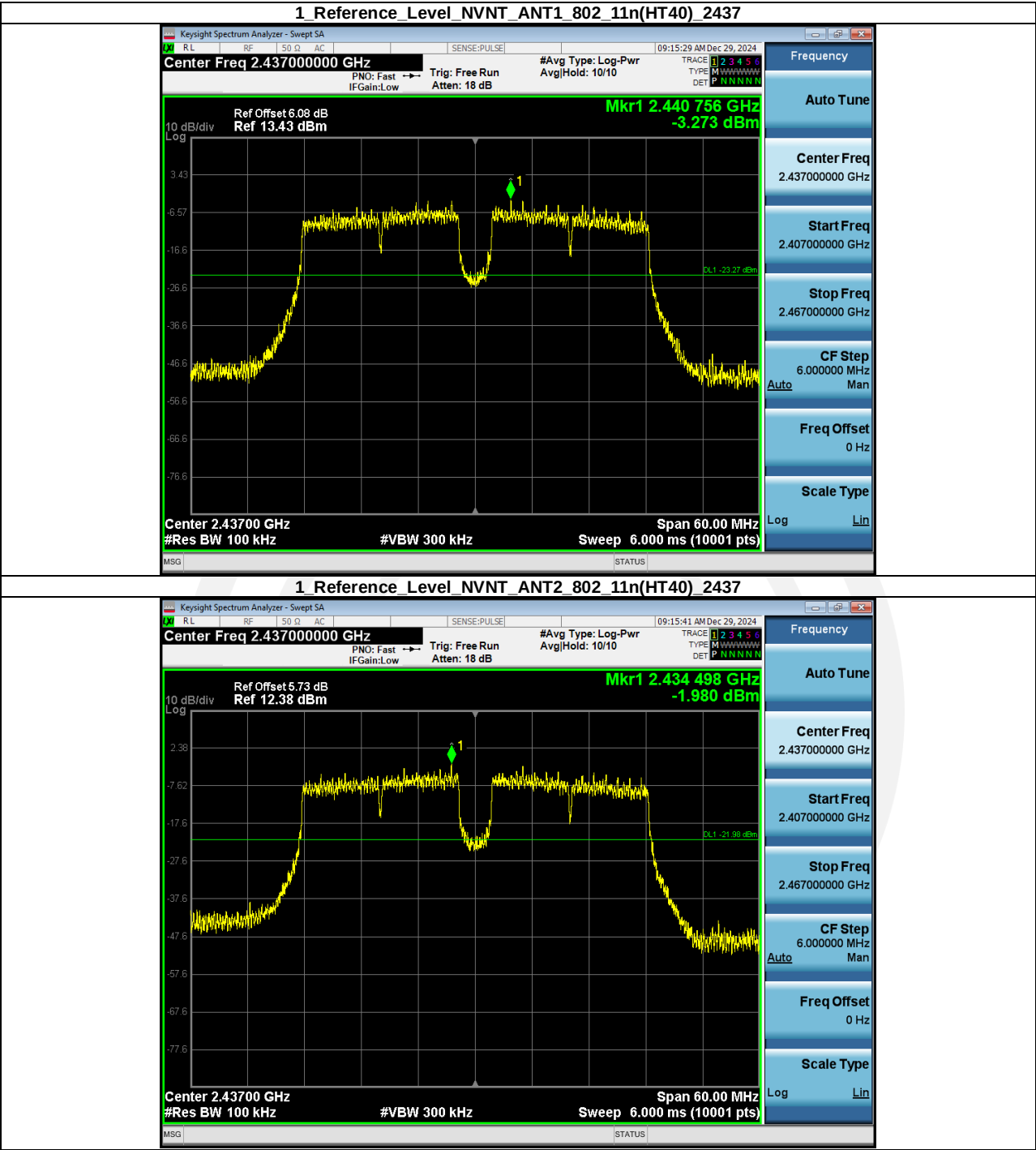


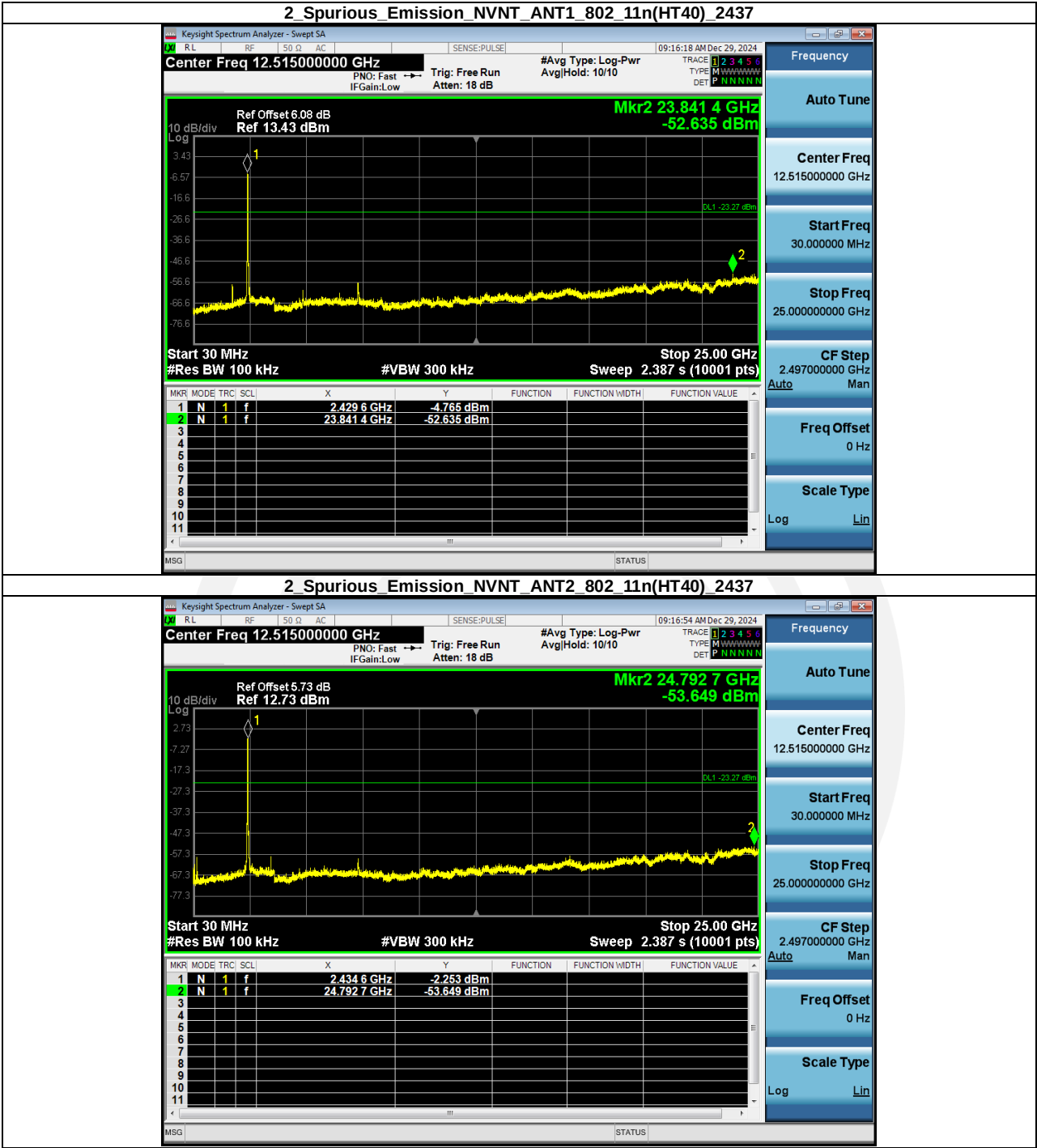


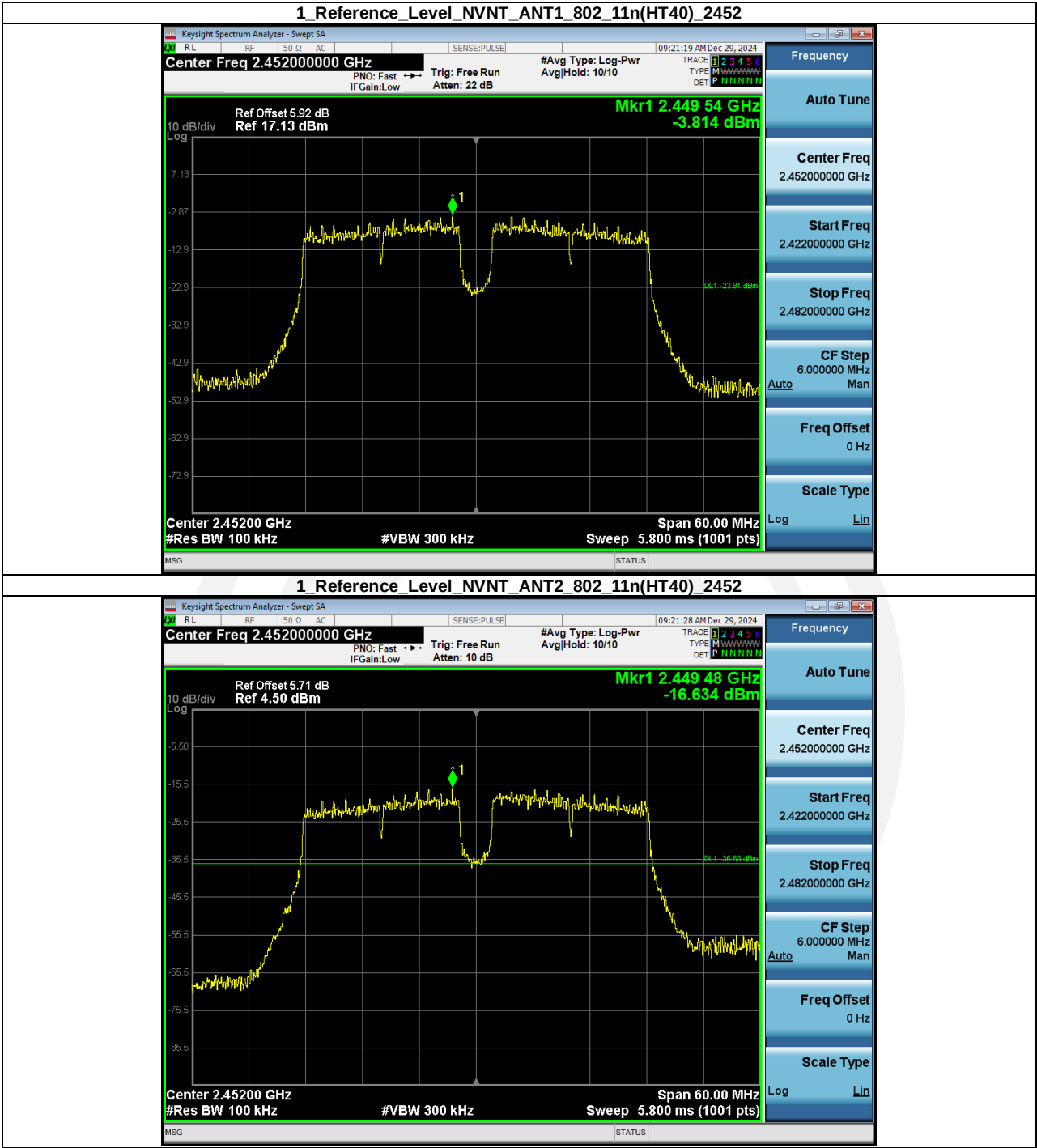


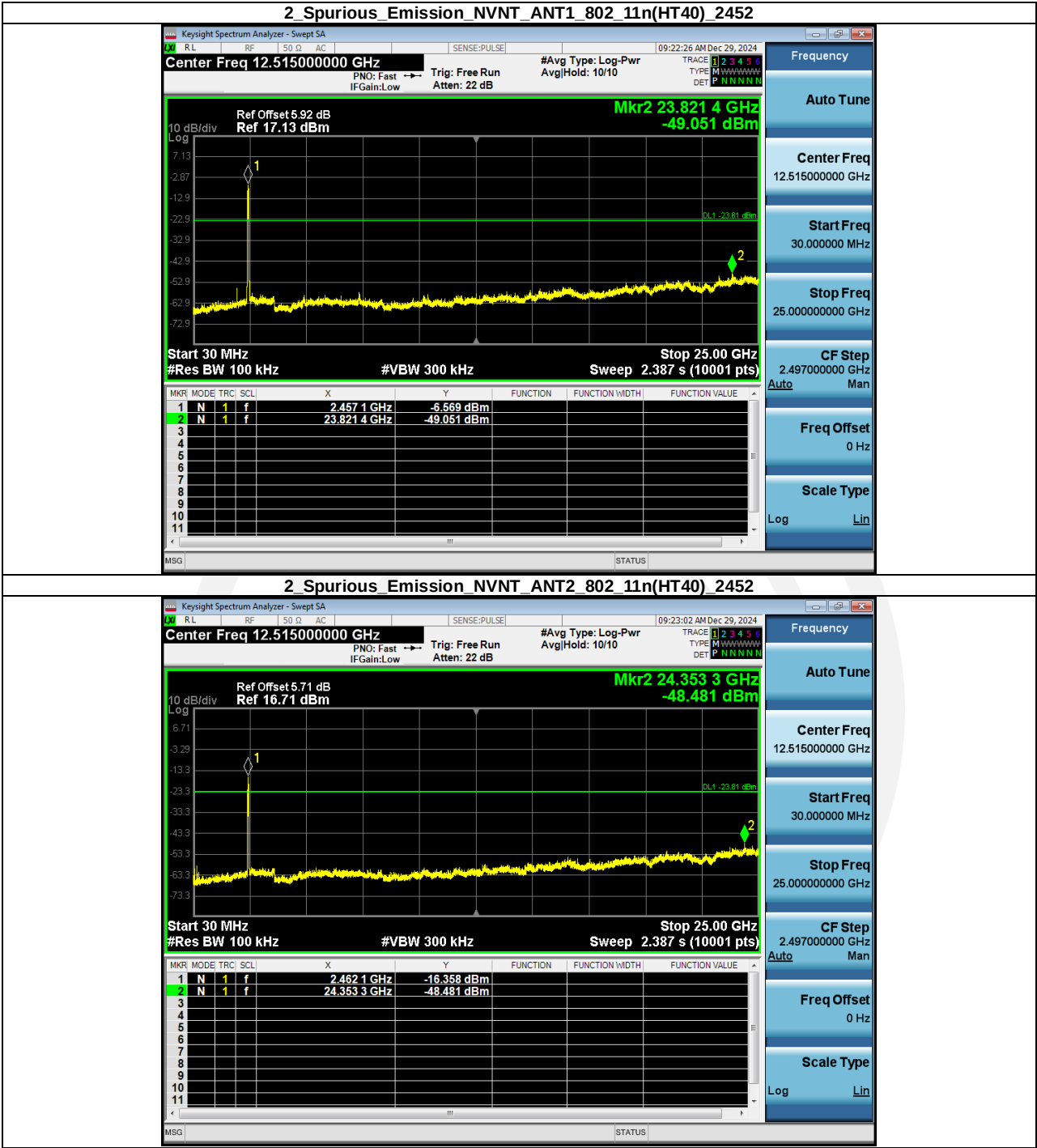


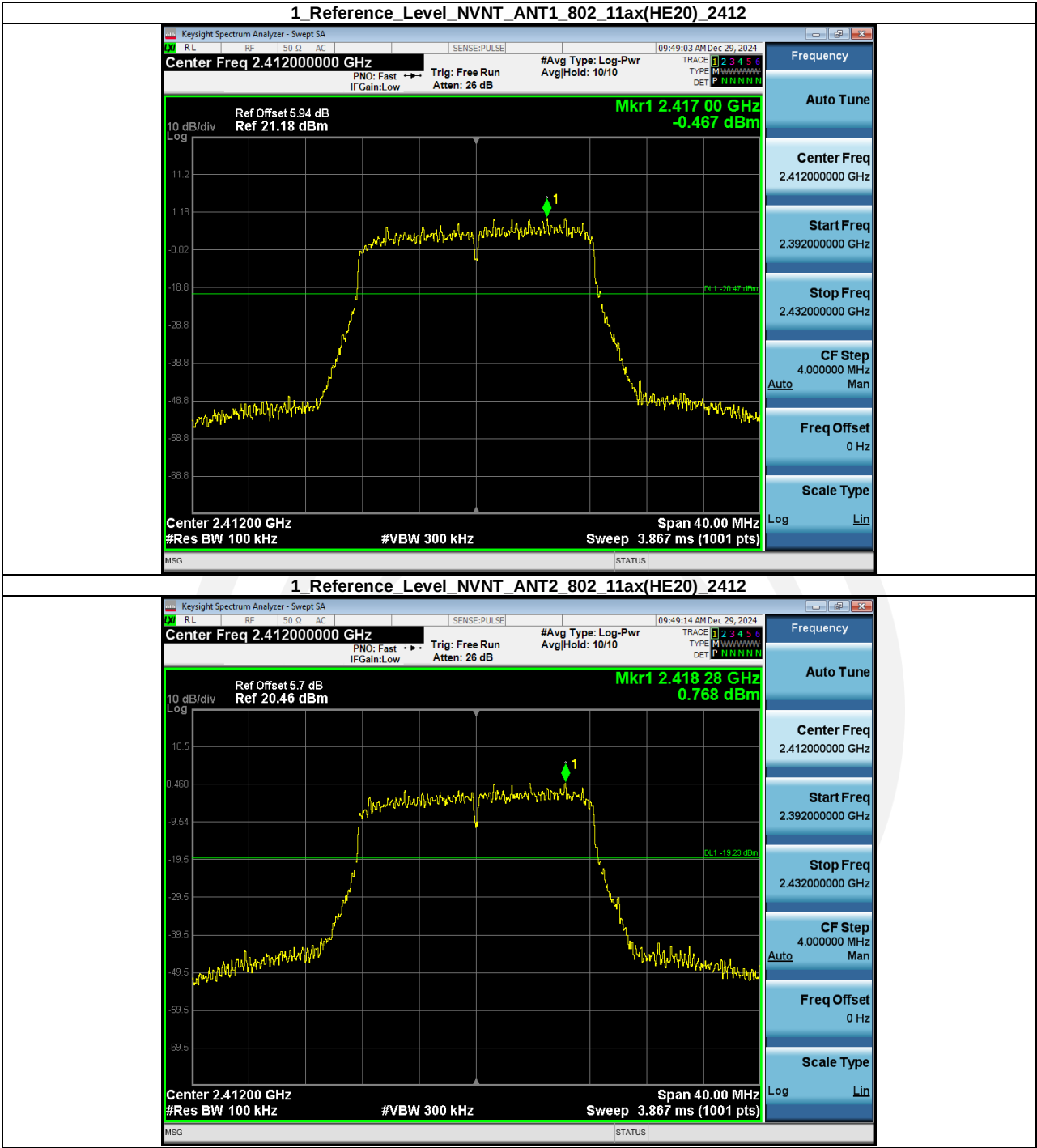


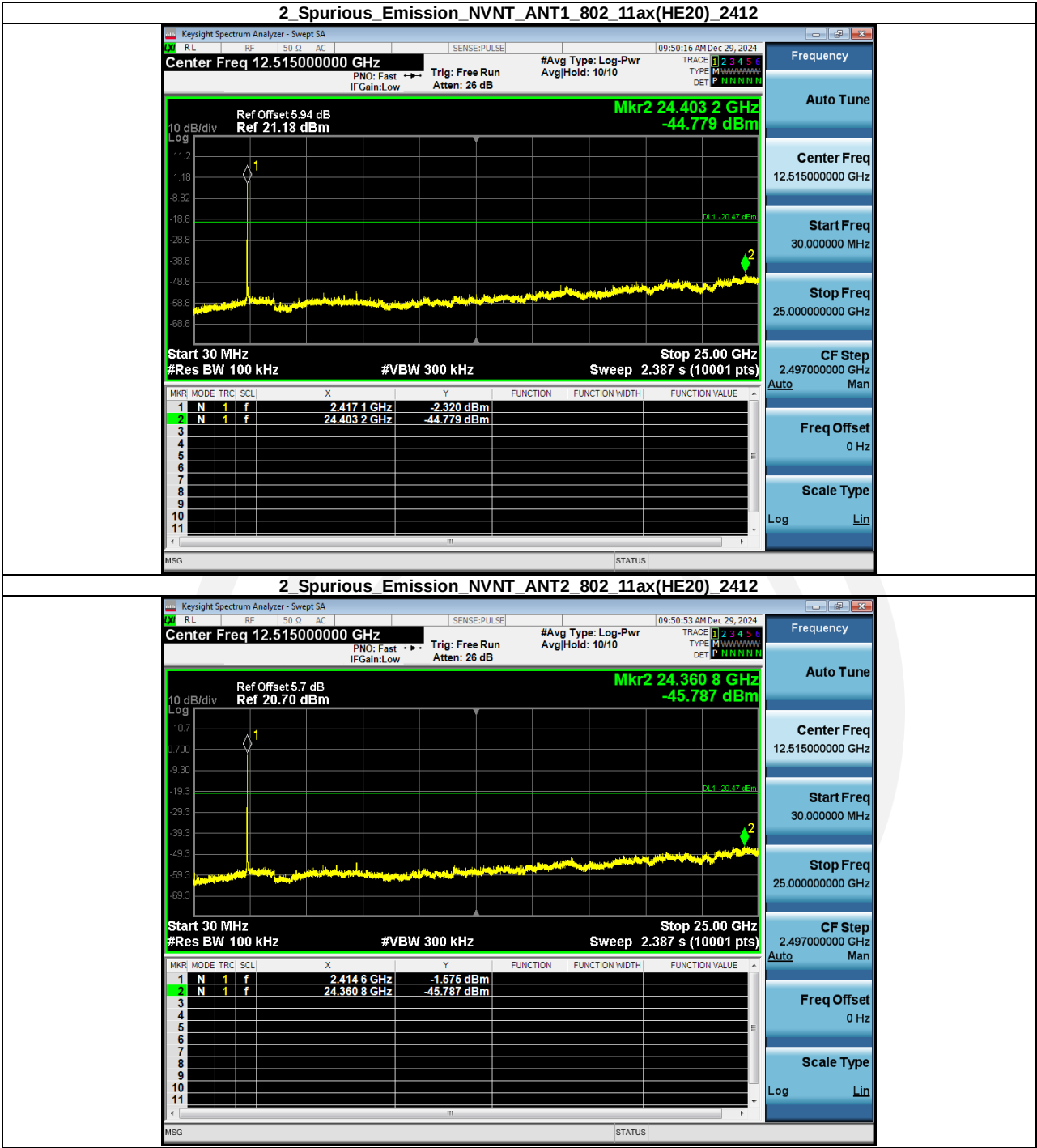


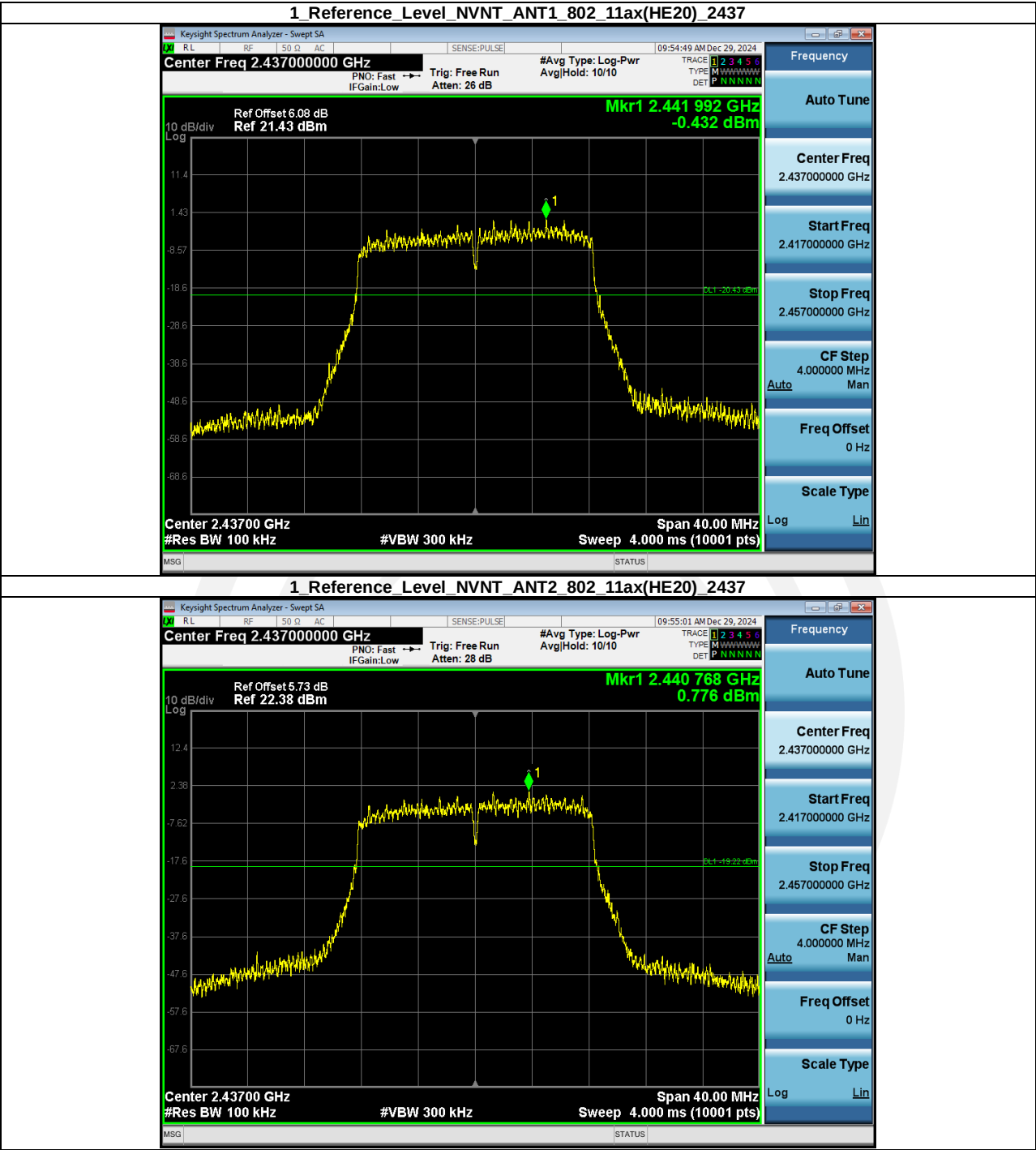


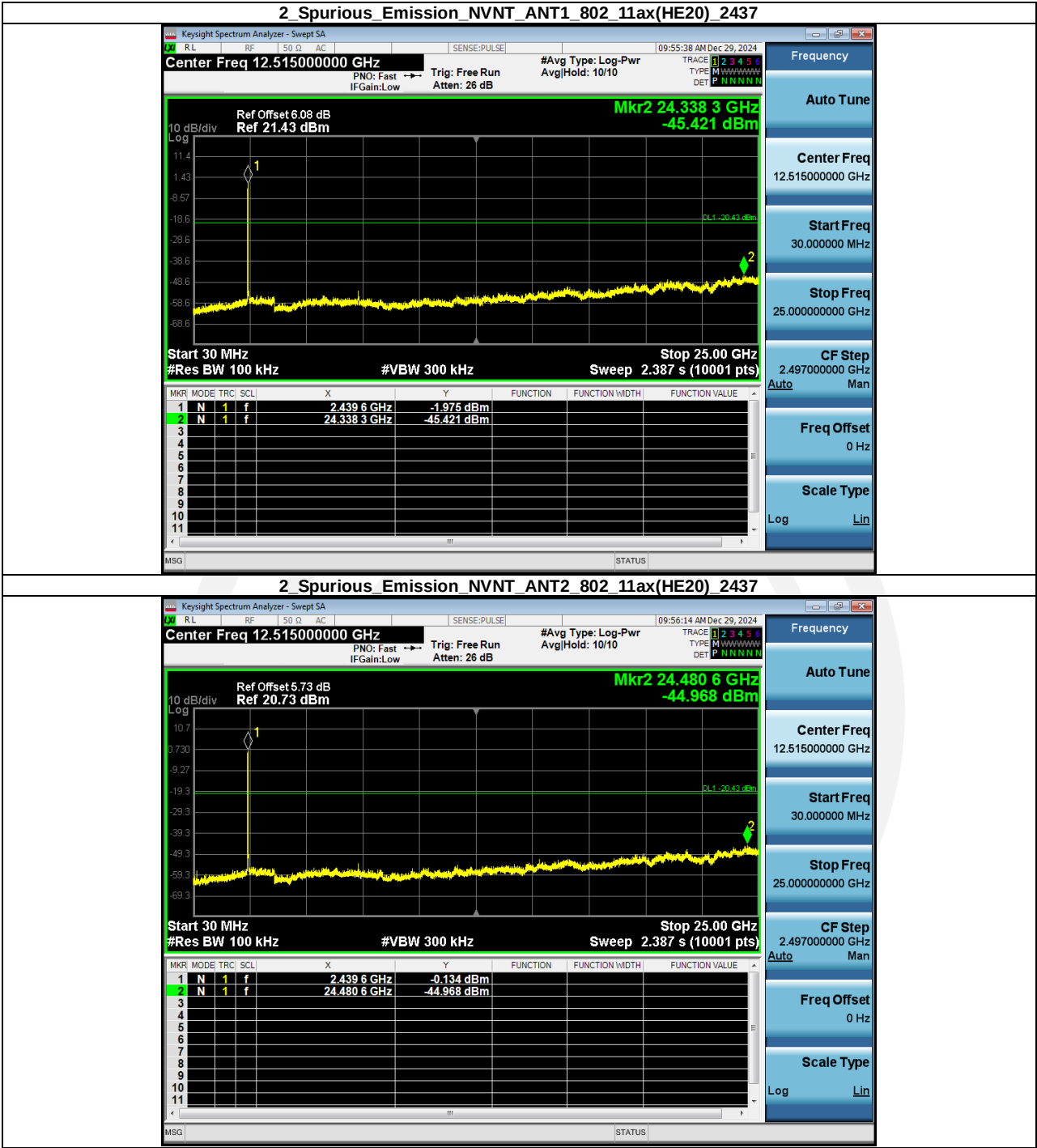


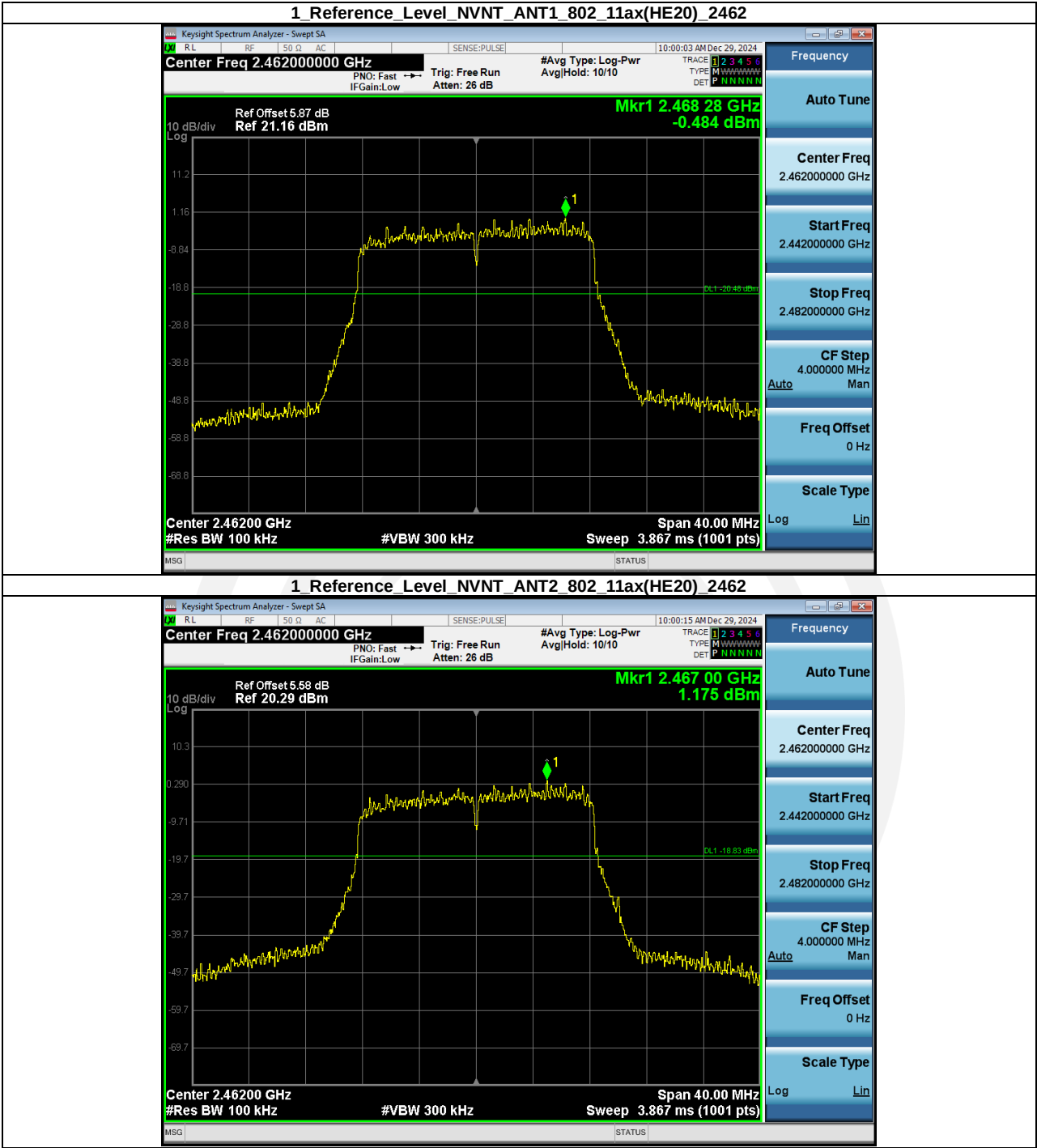


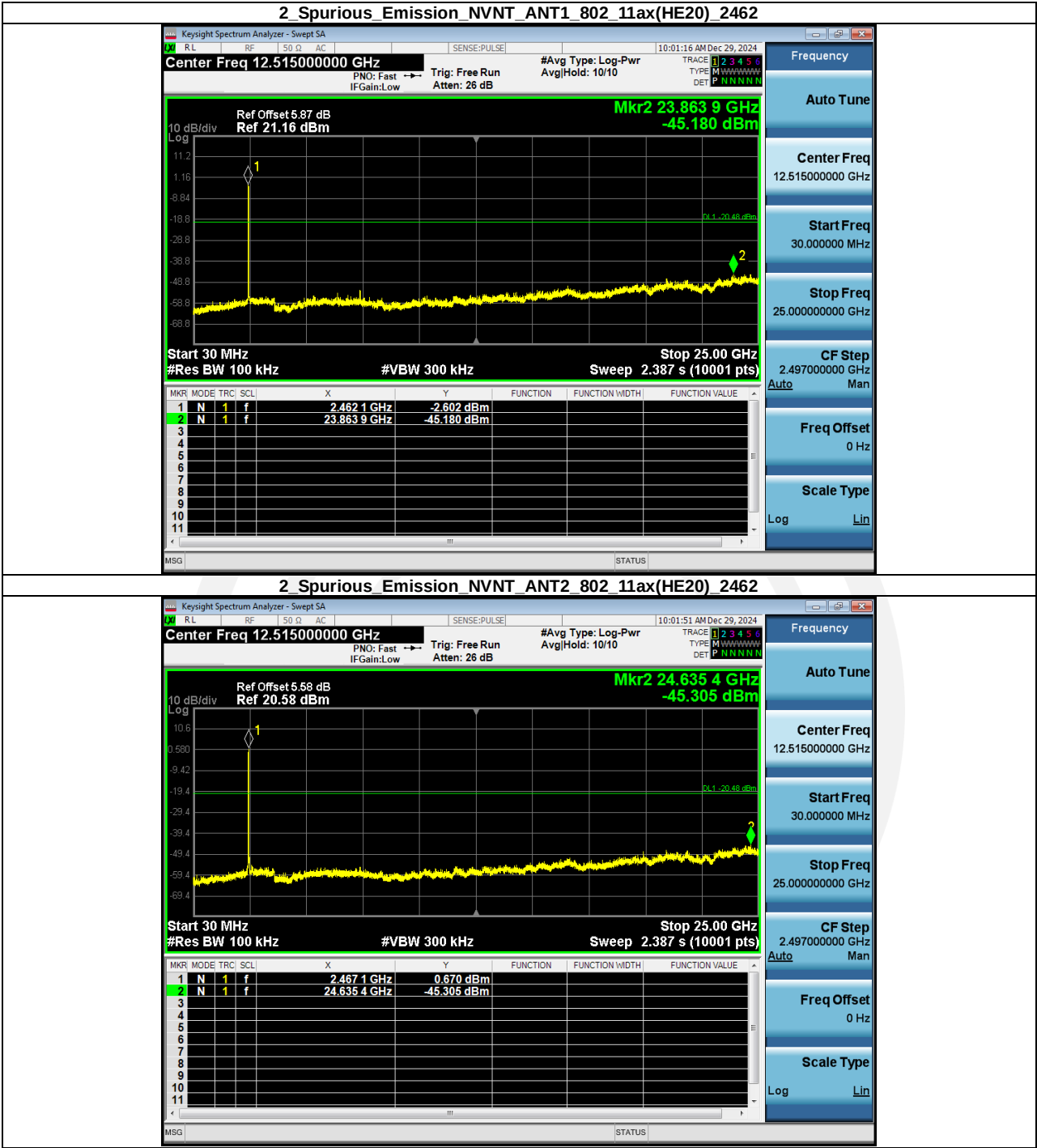


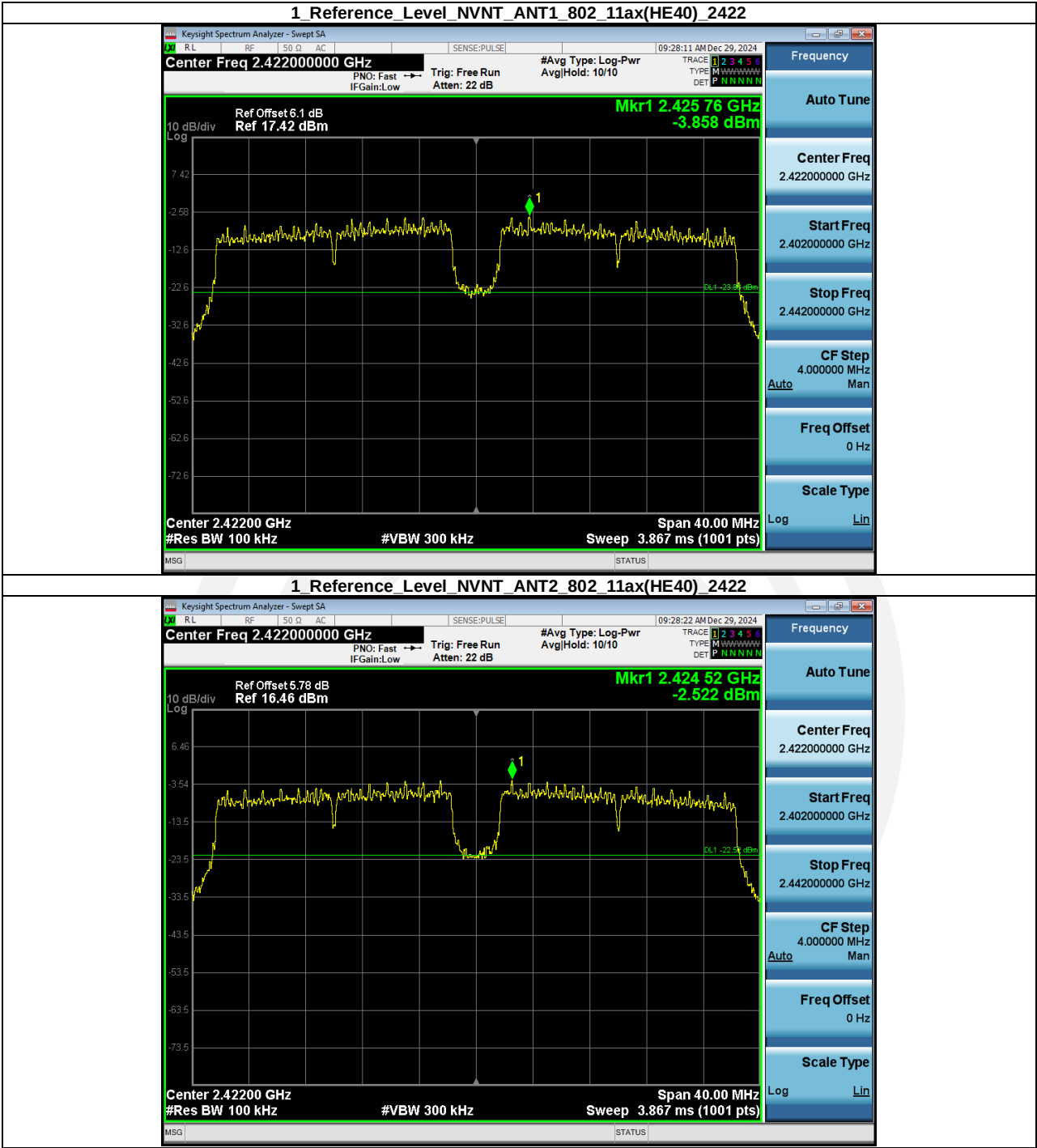


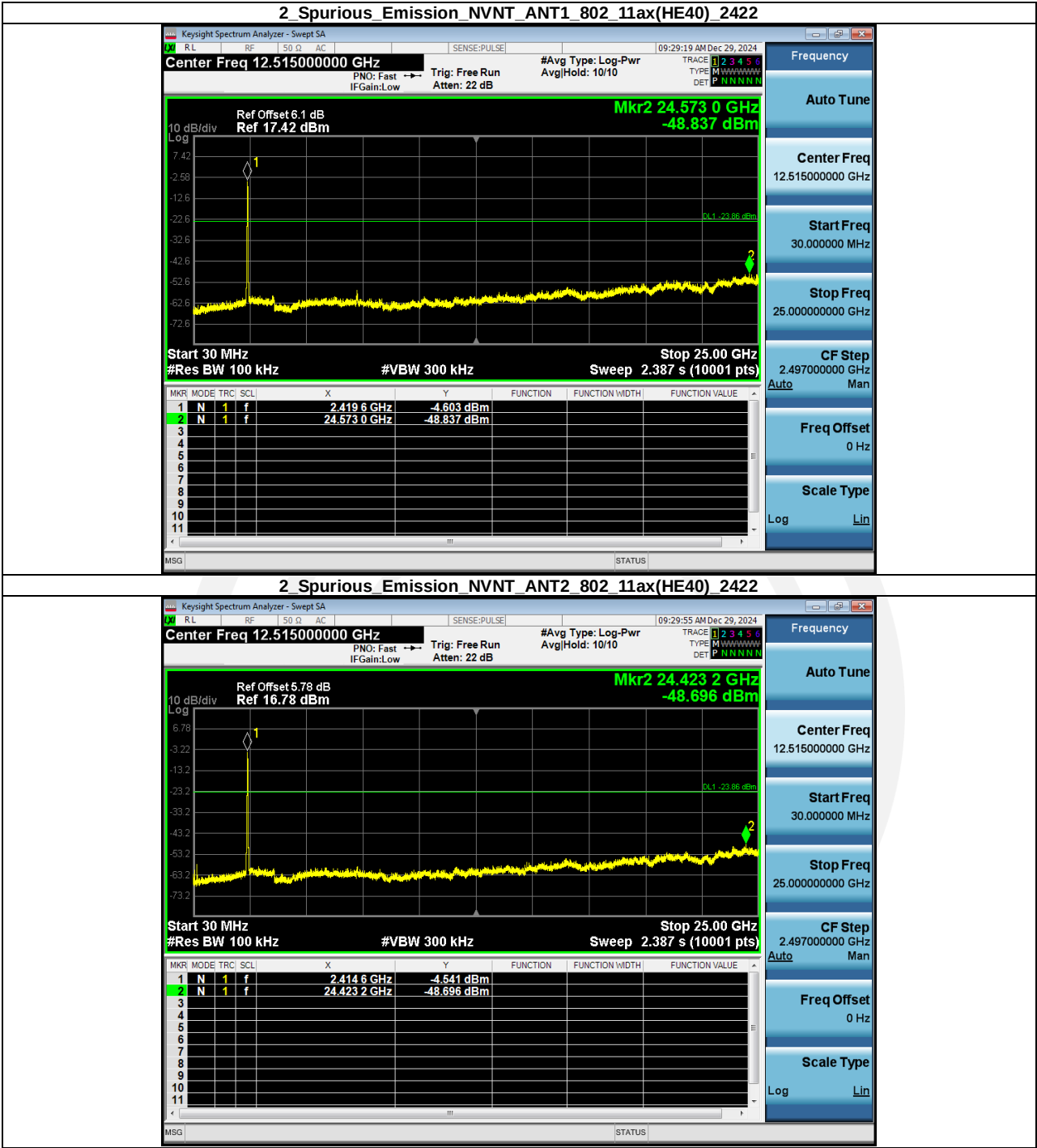




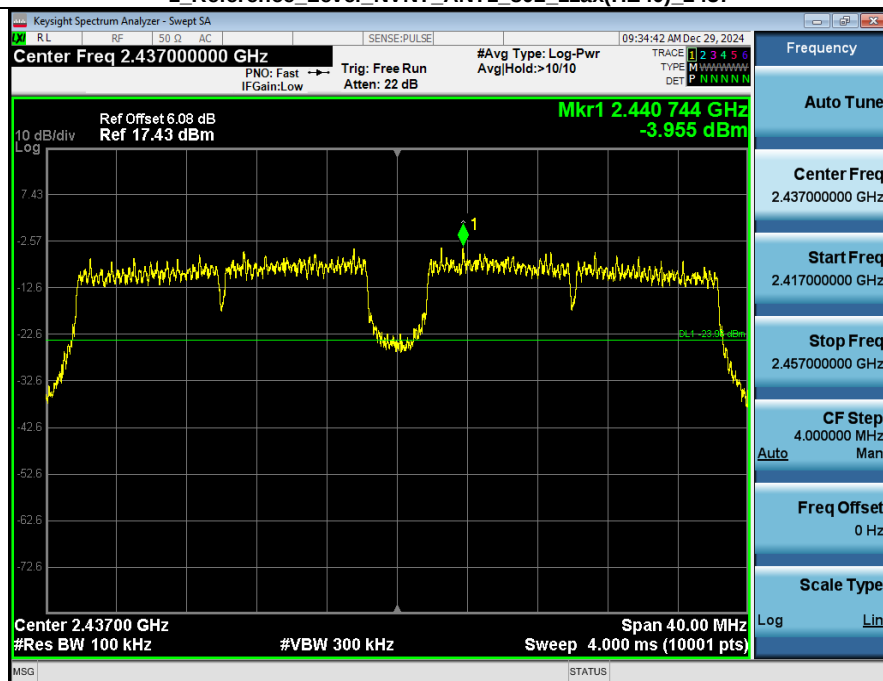




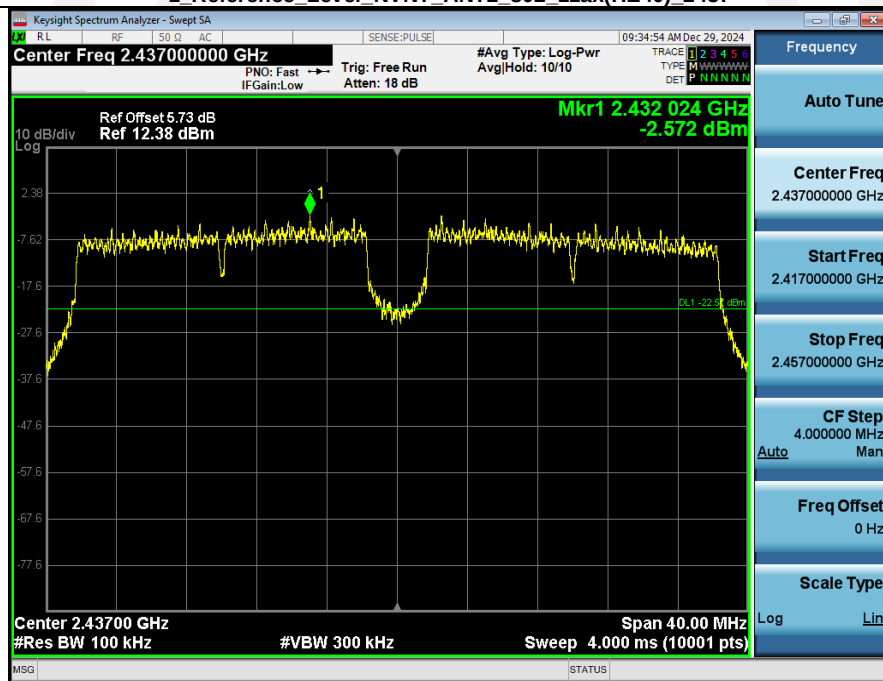


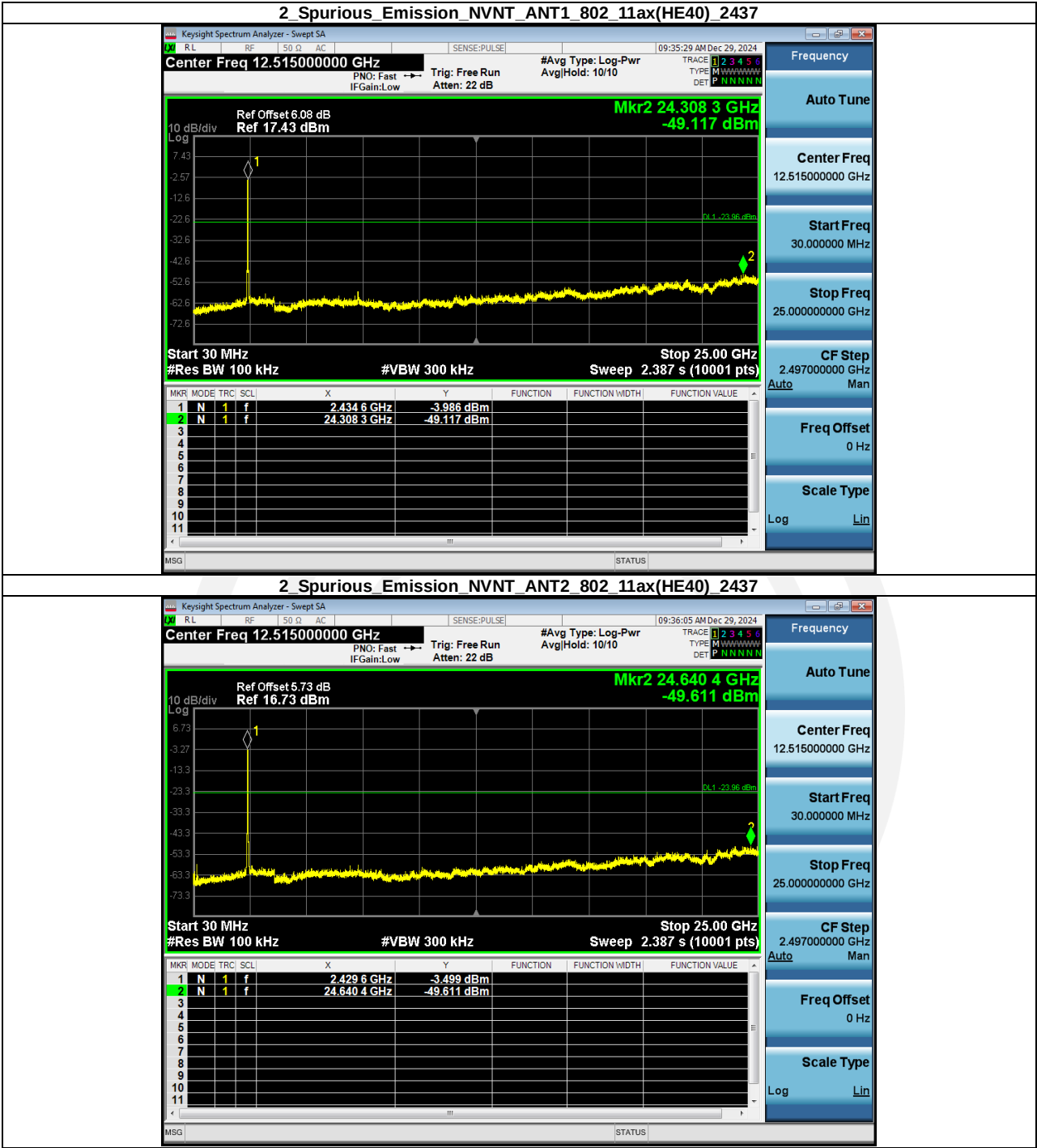


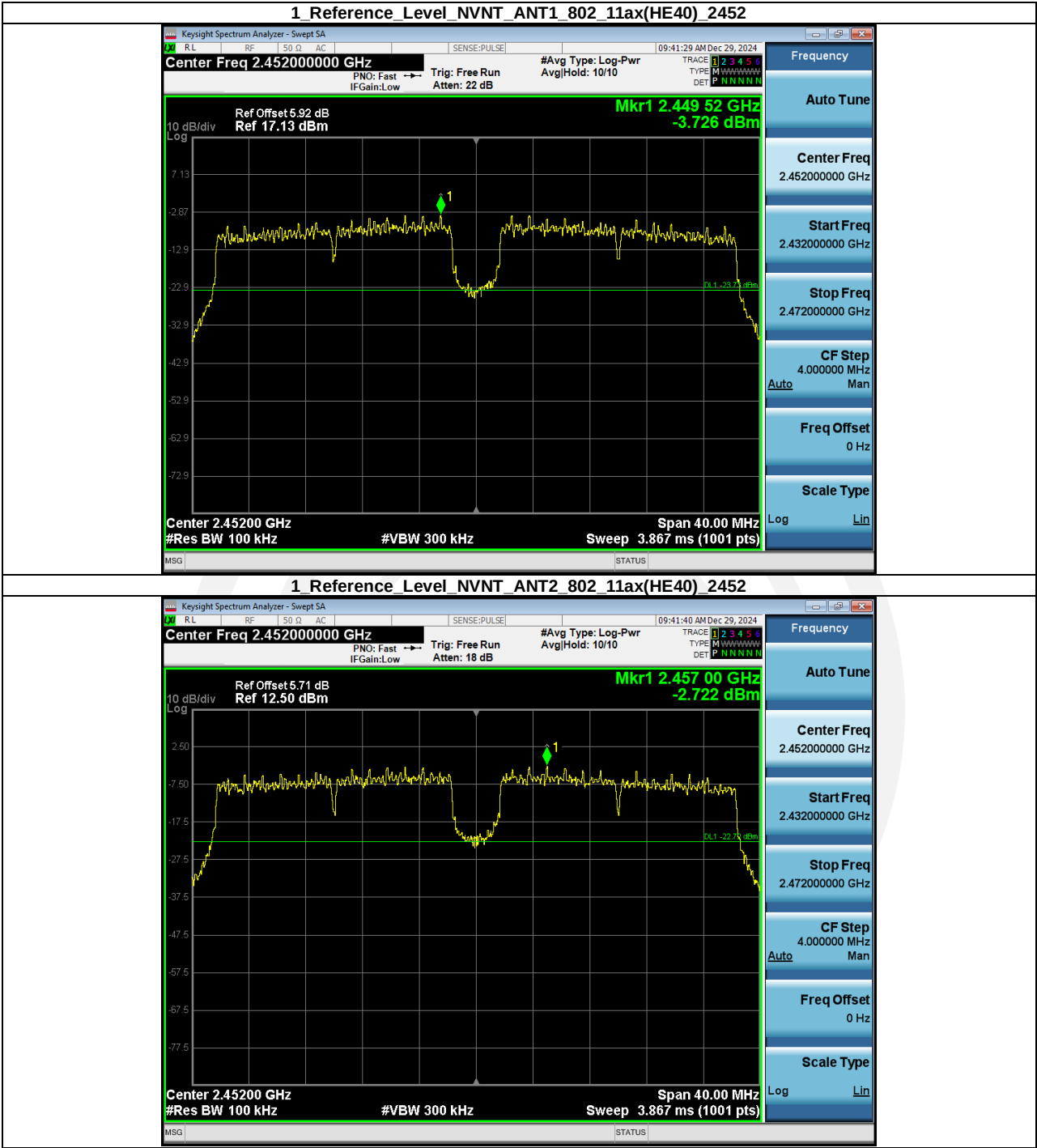
1 Reference Level NVNT ANT1 802 11ax(HE40) 2437

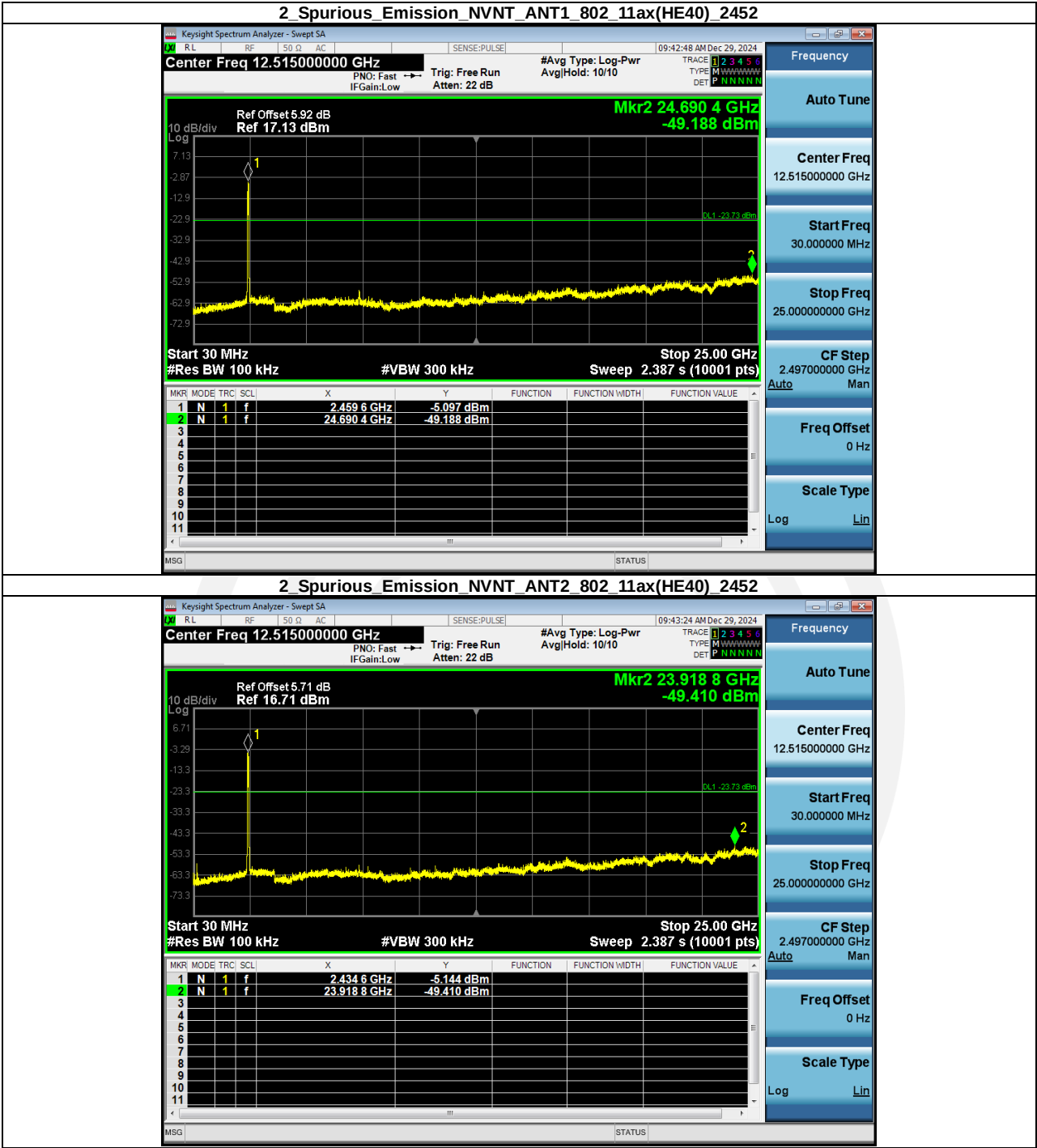


1 Reference Level NVNT ANT2 802 11ax(HE40) 2437









6. Conducted Maximum Output Power

6.1. Test limits

Please refer RSS-247 & FCC PART 15.247.

Regulation 15.247(b) The limit of Maximum Peak Output Power Measurement is 1 W(30dBm)

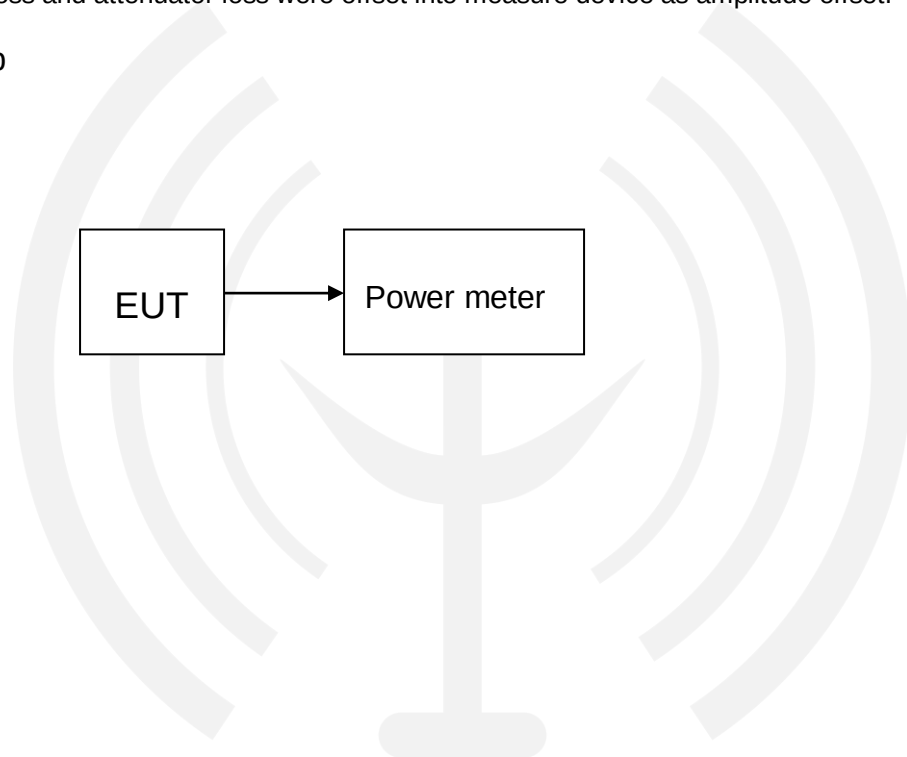
6.2. Test Procedure

Details see the KDB558074 D01 Meas Guidance v05r02

- 1 Place the EUT on the table and set it in transmitting mode.
- 2 Connected the EUT's antenna port to peak power meter by 20dB attenuator.
- 3 Measure out each mode and each bands peak output power of EUT.

Note: The cable loss and attenuator loss were offset into measure device as amplitude offset.

6.3. Test Setup



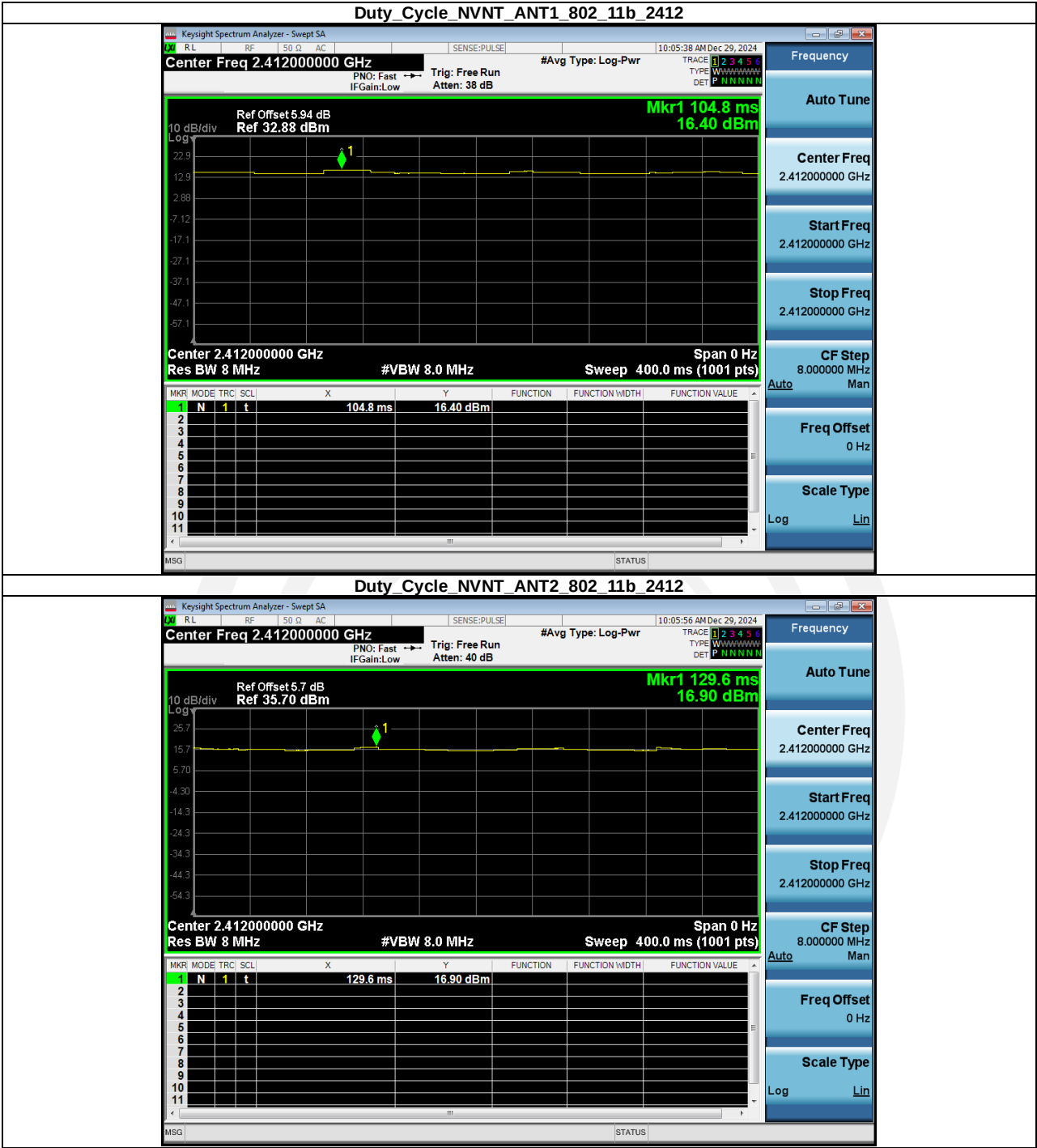
6.4. Test Results

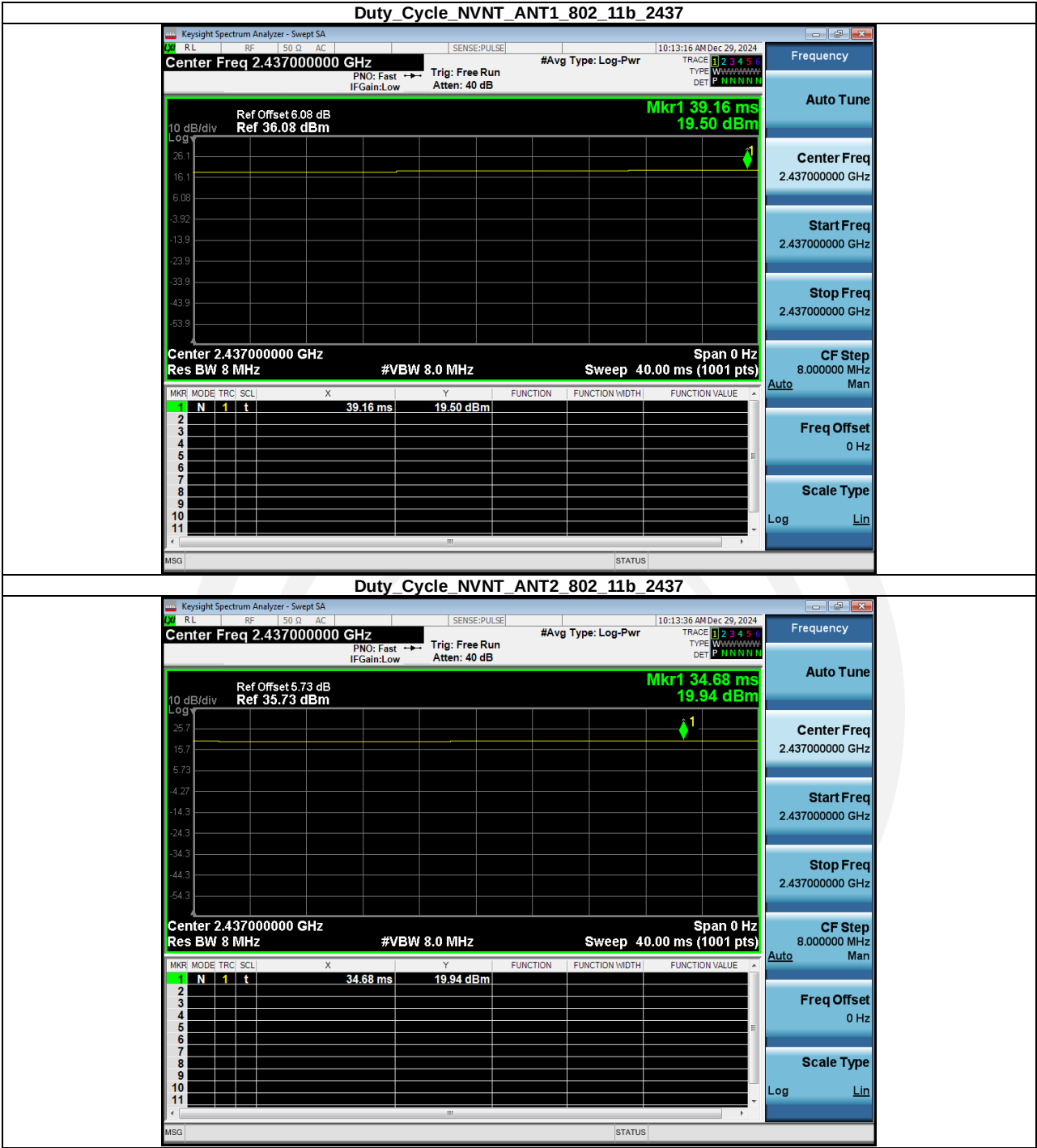
Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	Total Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	17.82	17.82	30	Pass
NVNT	ANT2	802.11b	2412.00	Peak	18.82	18.82	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	17.89	17.89	30	Pass
NVNT	ANT2	802.11b	2437.00	Peak	18.66	18.66	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	17.74	17.74	30	Pass
NVNT	ANT2	802.11b	2462.00	Peak	18.49	18.49	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	18.42	18.42	30	Pass
NVNT	ANT2	802.11g	2412.00	Peak	19.78	19.78	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	18.50	18.50	30	Pass
NVNT	ANT2	802.11g	2437.00	Peak	19.62	19.62	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	18.59	18.59	30	Pass
NVNT	ANT2	802.11g	2462.00	Peak	19.53	19.53	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	18.45	18.45	30	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	Peak	19.78	19.78	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	18.54	18.54	30	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	Peak	19.76	19.76	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	18.64	18.64	30	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	Peak	19.61	19.61	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	17.94	17.94	30	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	Peak	19.07	19.07	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	18.28	18.28	30	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	Peak	19.22	19.22	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	17.70	17.70	30	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	Peak	18.72	18.72	30	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	Peak	18.34	18.34	30	Pass
NVNT	ANT2	802.11ax(HE20)	2412.00	Peak	19.63	19.63	30	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	Peak	18.42	18.42	30	Pass
NVNT	ANT2	802.11ax(HE20)	2437.00	Peak	19.61	19.61	30	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	Peak	18.30	18.30	30	Pass
NVNT	ANT2	802.11ax(HE20)	2462.00	Peak	19.49	19.49	30	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	Peak	17.83	17.83	30	Pass
NVNT	ANT2	802.11ax(HE40)	2422.00	Peak	19.02	19.02	30	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	Peak	17.89	17.89	30	Pass
NVNT	ANT2	802.11ax(HE40)	2437.00	Peak	18.92	18.92	30	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	Peak	17.85	17.85	30	Pass
NVNT	ANT2	802.11ax(HE40)	2452.00	Peak	18.89	18.89	30	Pass

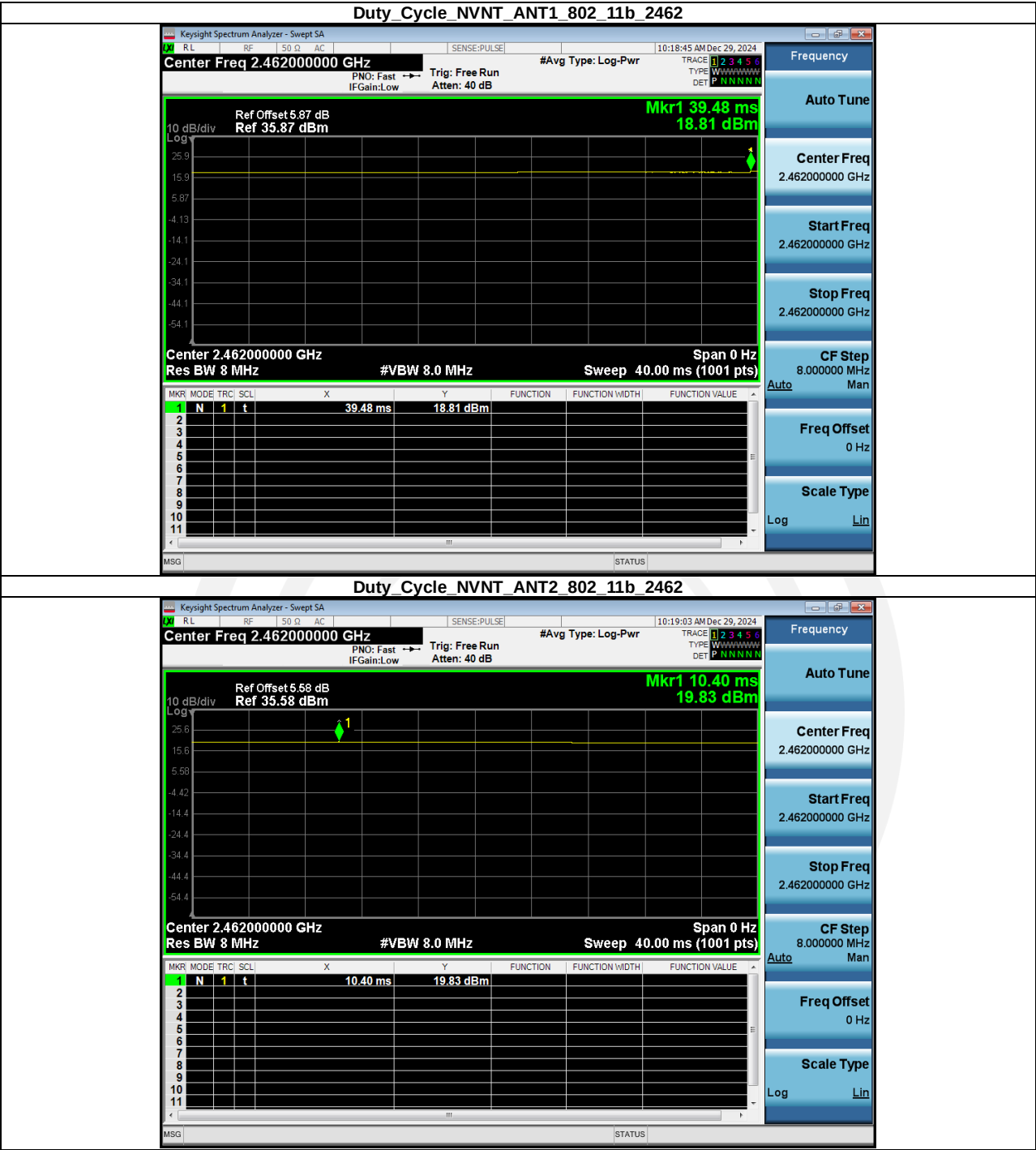
Note: Maximum Gain is 3.31dBi.

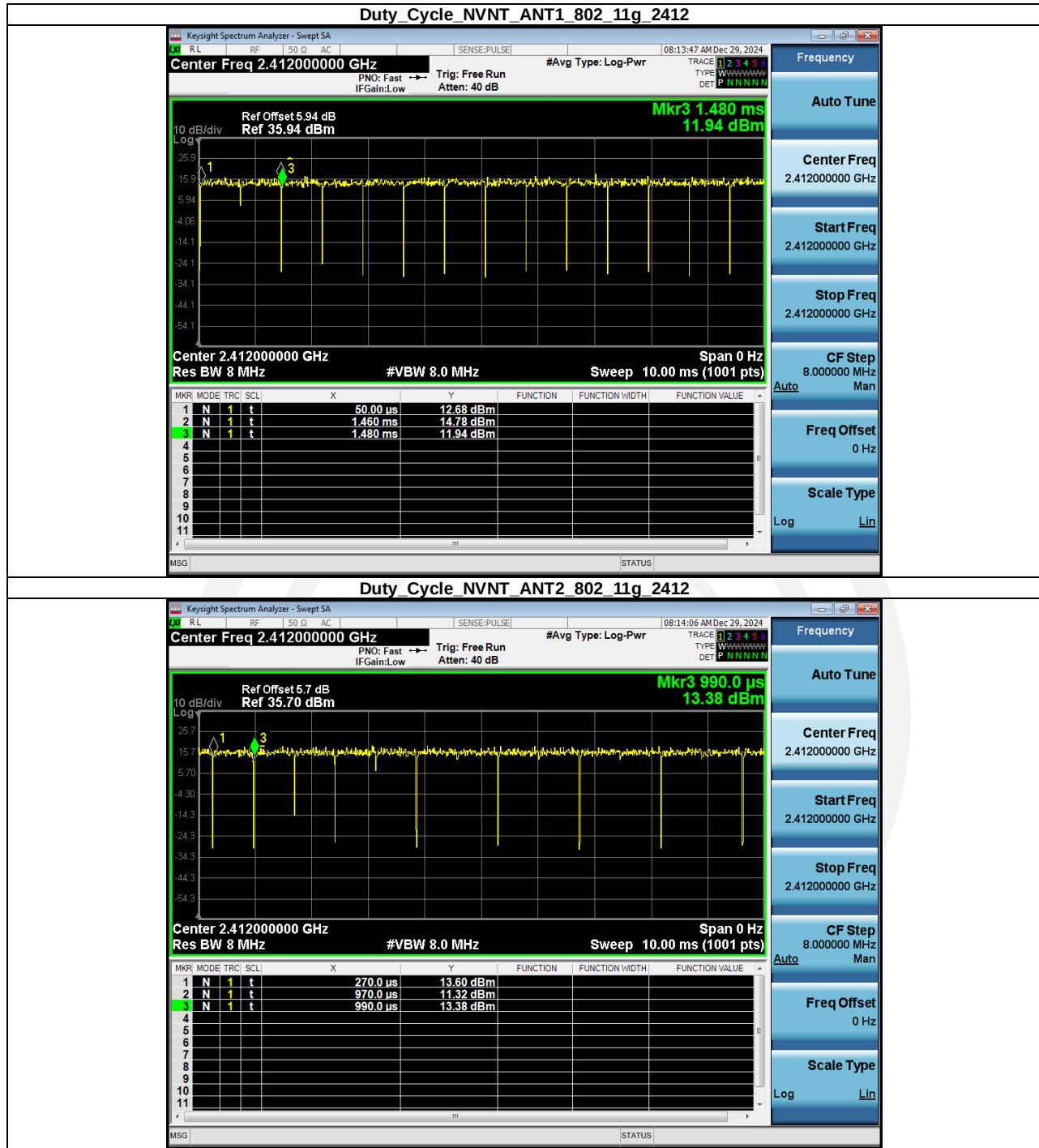
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	100	0.00
NVNT	ANT2	802.11b	2412.00	100	0.00
NVNT	ANT1	802.11b	2437.00	100	0.00
NVNT	ANT2	802.11b	2437.00	100	0.00
NVNT	ANT1	802.11b	2462.00	100	0.00
NVNT	ANT2	802.11b	2462.00	100	0.00
NVNT	ANT1	802.11g	2412.00	99.30	0.00
NVNT	ANT2	802.11g	2412.00	98.61	0.00
NVNT	ANT1	802.11g	2437.00	98.61	0.00
NVNT	ANT2	802.11g	2437.00	98.61	0.00
NVNT	ANT1	802.11g	2462.00	98.61	0.00
NVNT	ANT2	802.11g	2462.00	98.61	0.00
NVNT	ANT1	802.11n(HT20)	2412.00	98.61	0.00
NVNT	ANT2	802.11n(HT20)	2412.00	98.61	0.00
NVNT	ANT1	802.11n(HT20)	2437.00	98.61	0.00
NVNT	ANT2	802.11n(HT20)	2437.00	98.61	0.00
NVNT	ANT1	802.11n(HT20)	2462.00	98.61	0.00
NVNT	ANT2	802.11n(HT20)	2462.00	98.61	0.00
NVNT	ANT1	802.11n(HT40)	2422.00	97.26	0.12
NVNT	ANT2	802.11n(HT40)	2422.00	98.61	0.00
NVNT	ANT1	802.11n(HT40)	2437.00	98.61	0.00
NVNT	ANT2	802.11n(HT40)	2437.00	95.95	0.18
NVNT	ANT1	802.11n(HT40)	2452.00	98.61	0.00
NVNT	ANT2	802.11n(HT40)	2452.00	97.93	0.09
NVNT	ANT1	802.11ax(HE20)	2412.00	98.61	0.00
NVNT	ANT2	802.11ax(HE20)	2412.00	98.61	0.00
NVNT	ANT1	802.11ax(HE20)	2437.00	98.61	0.00
NVNT	ANT2	802.11ax(HE20)	2437.00	99.30	0.00
NVNT	ANT1	802.11ax(HE20)	2462.00	98.61	0.00
NVNT	ANT2	802.11ax(HE20)	2462.00	98.61	0.00
NVNT	ANT1	802.11ax(HE40)	2422.00	98.61	0.00
NVNT	ANT2	802.11ax(HE40)	2422.00	98.61	0.00
NVNT	ANT1	802.11ax(HE40)	2437.00	97.26	0.12
NVNT	ANT2	802.11ax(HE40)	2437.00	95.95	0.18
NVNT	ANT1	802.11ax(HE40)	2452.00	98.61	0.00
NVNT	ANT2	802.11ax(HE40)	2452.00	97.26	0.12

Condition	Antenna	Mode	Frequency(MHz)	MIMO_Conducted_Power(dBm)	Limit(dBm)	Result
NVNT	MIMO_TX	802.11n(HT20)	2412.00	22.17	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2437.00	22.20	30	Pass
NVNT	MIMO_TX	802.11n(HT20)	2462.00	22.16	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2422.00	21.55	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2437.00	21.78	30	Pass
NVNT	MIMO_TX	802.11n(HT40)	2452.00	21.25	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	2412.00	22.04	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	2437.00	22.07	30	Pass
NVNT	MIMO_TX	802.11ax(HE20)	2462.00	21.94	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	2422.00	21.47	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	2437.00	21.44	30	Pass
NVNT	MIMO_TX	802.11ax(HE40)	2452.00	21.41	30	Pass

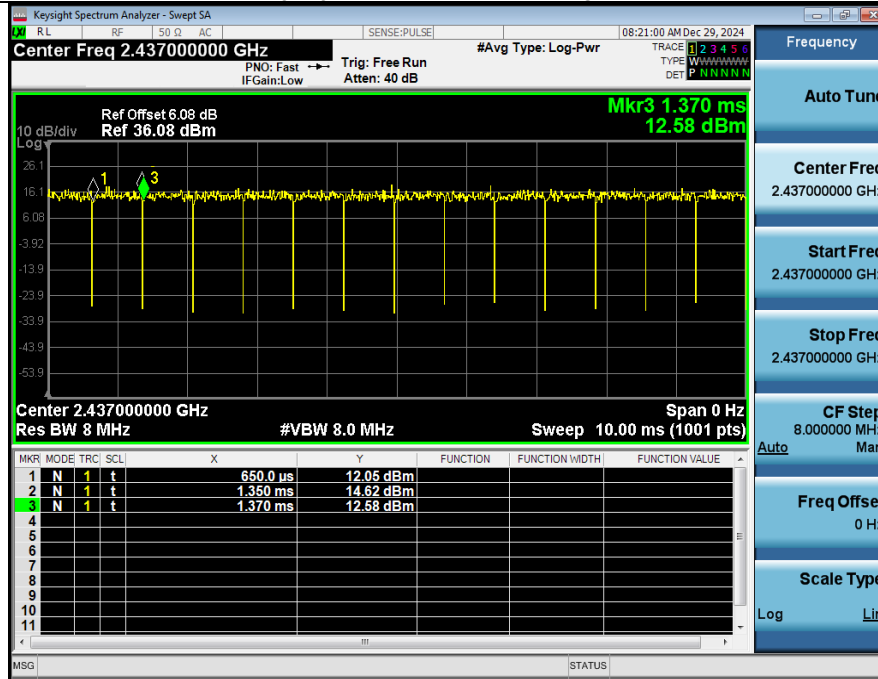




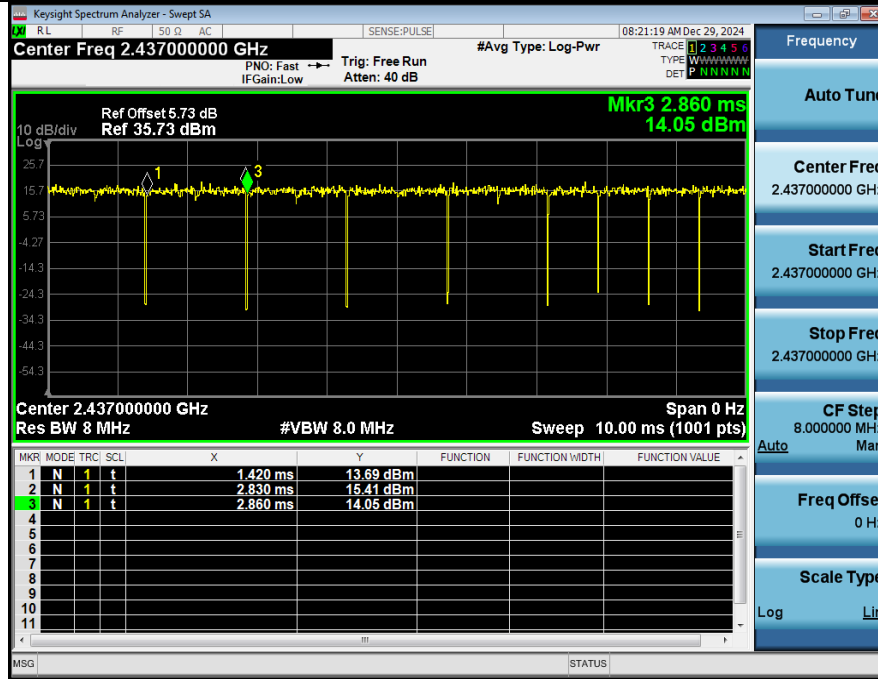


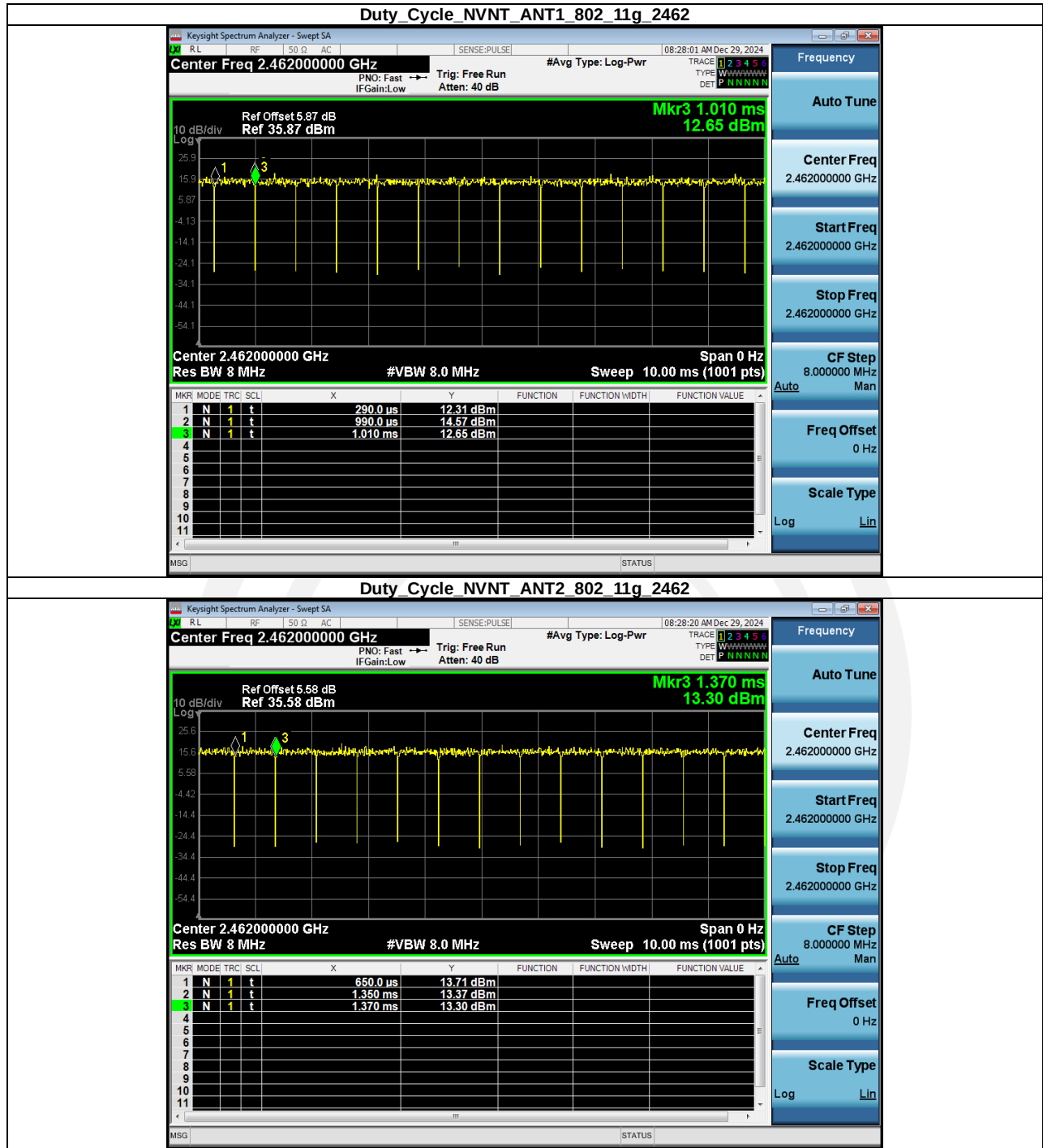


Duty Cycle NVNT ANT1 802 11g 2437

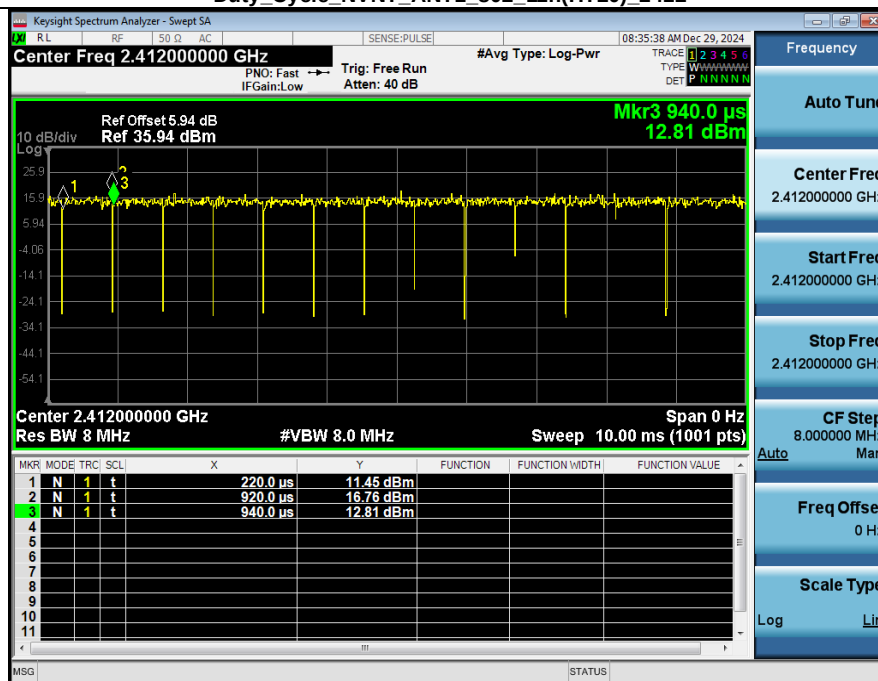


Duty Cycle NVNT ANT2 802 11g 2437

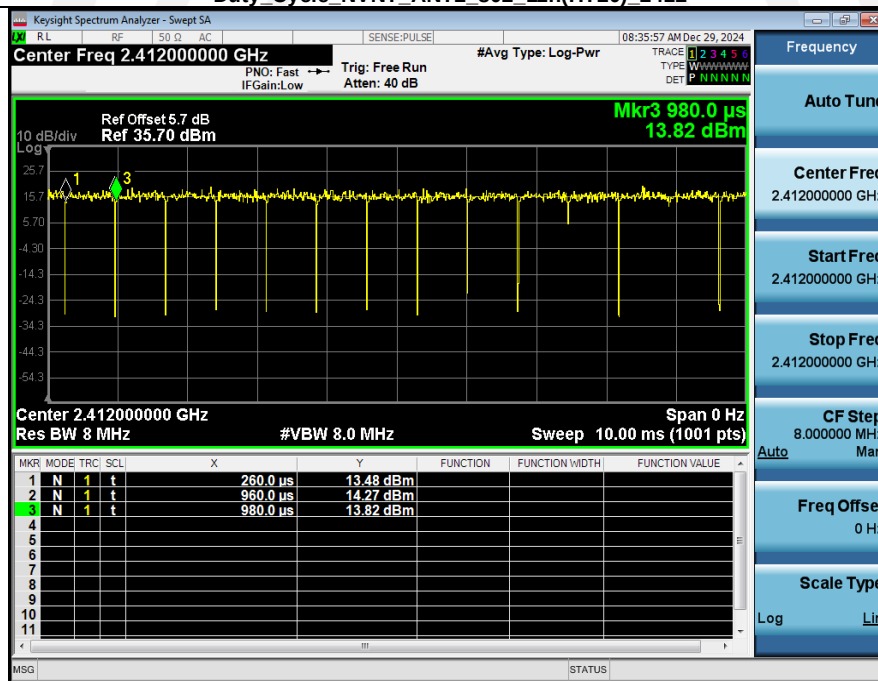




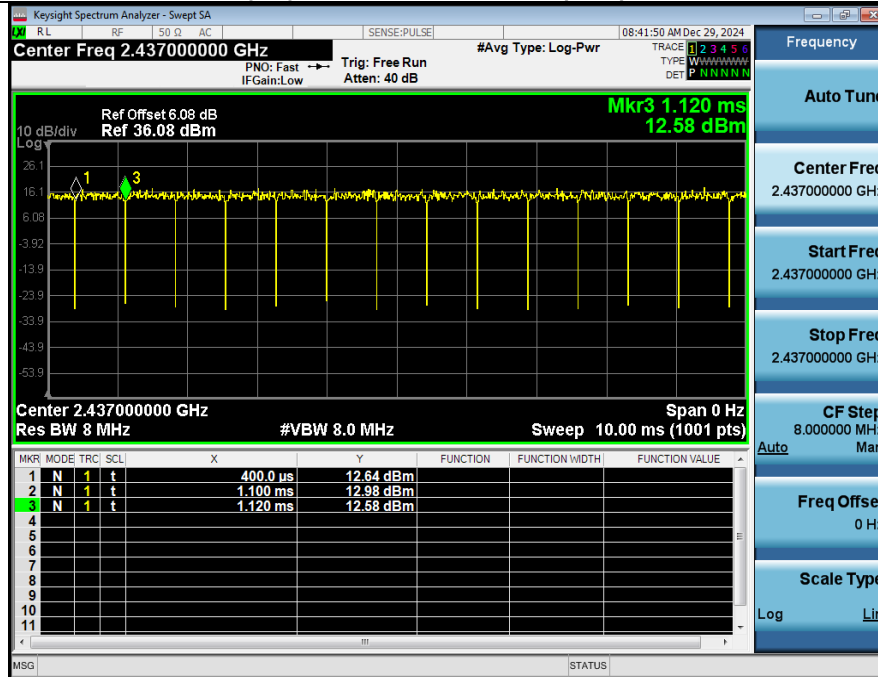
Duty Cycle NVNT ANT1 802_11n(HT20) 2412



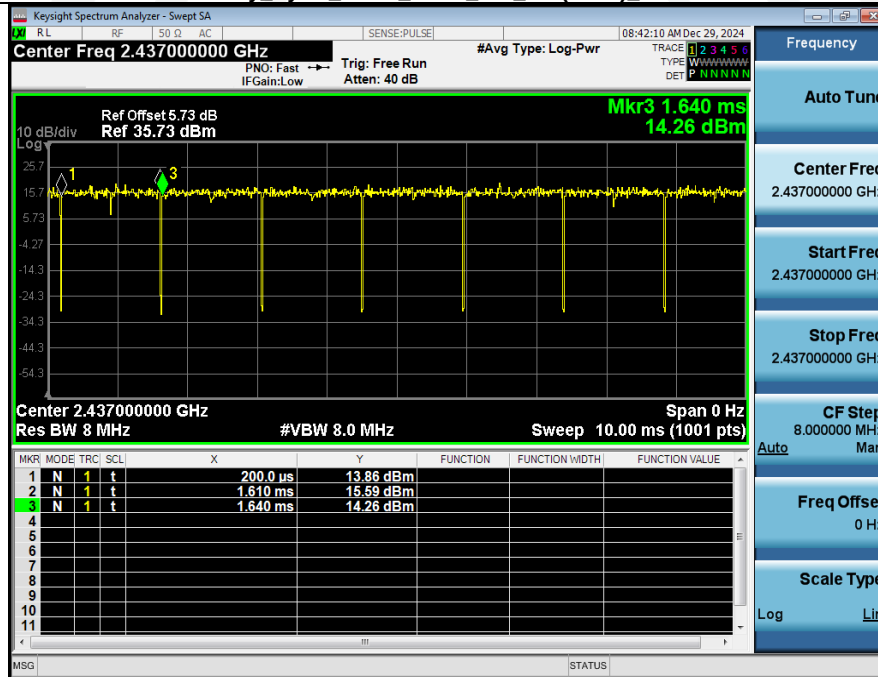
Duty Cycle NVNT ANT2 802_11n(HT20) 2412

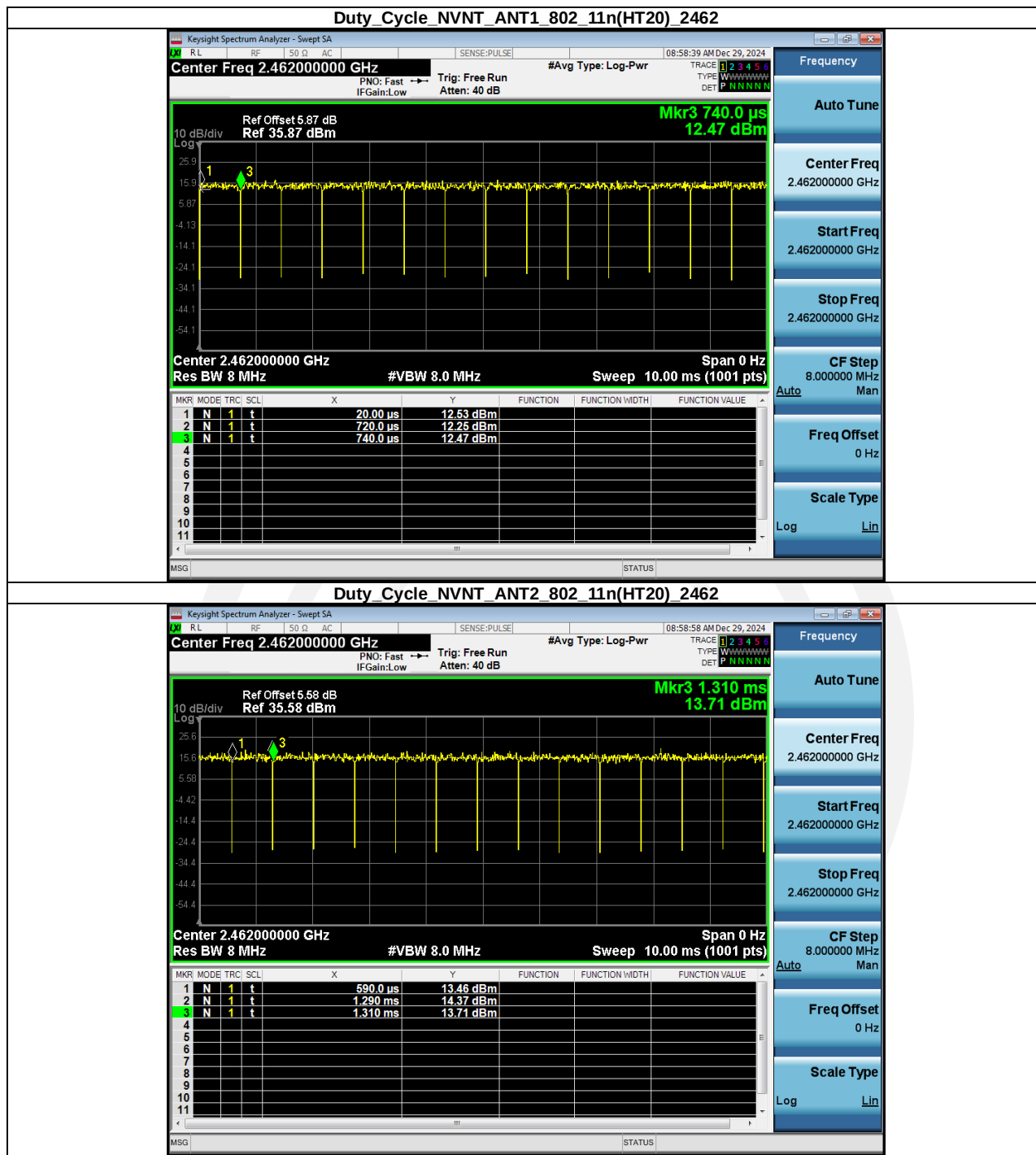


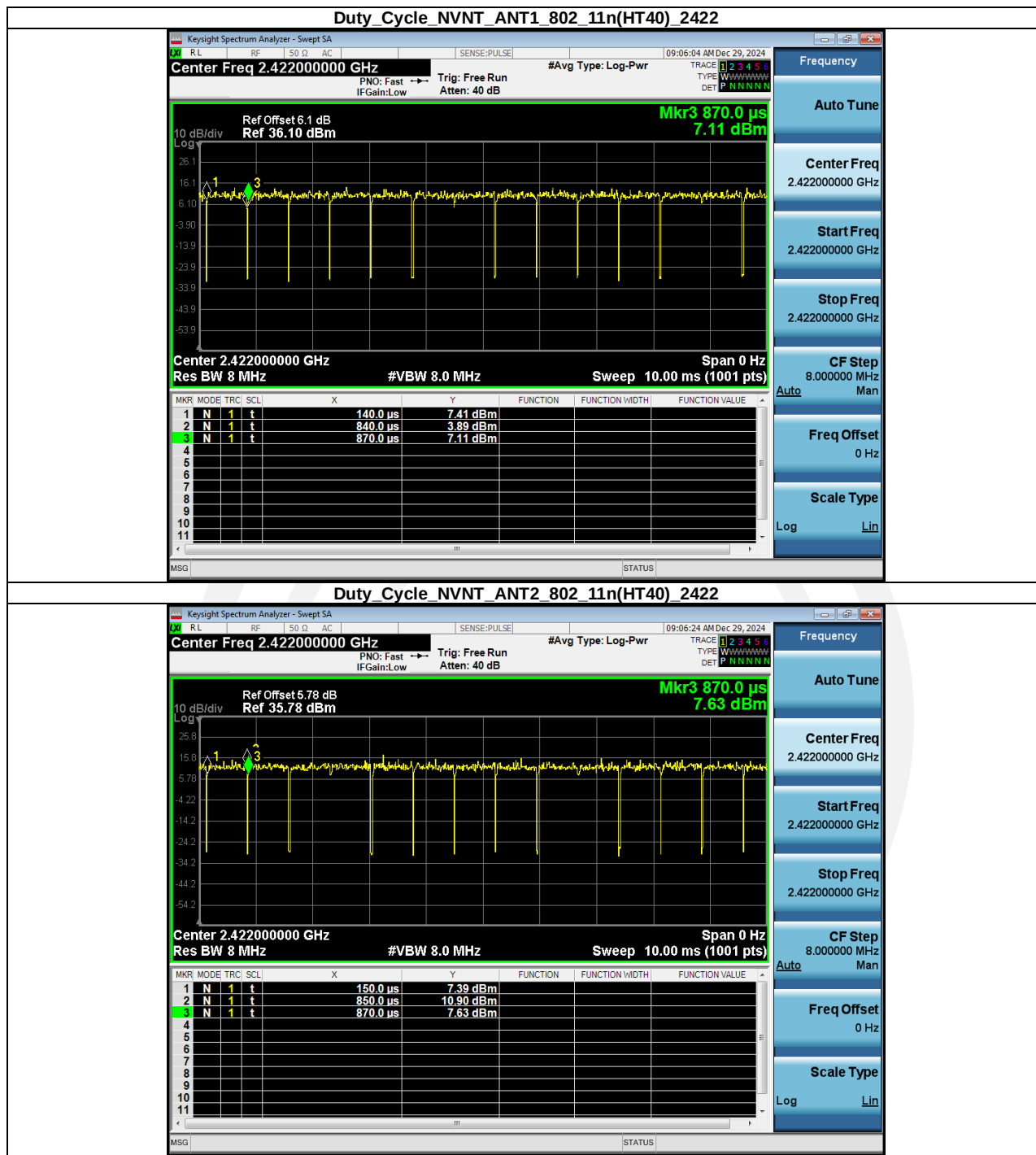
Duty Cycle NVNT ANT1 802_11n(HT20)_2437

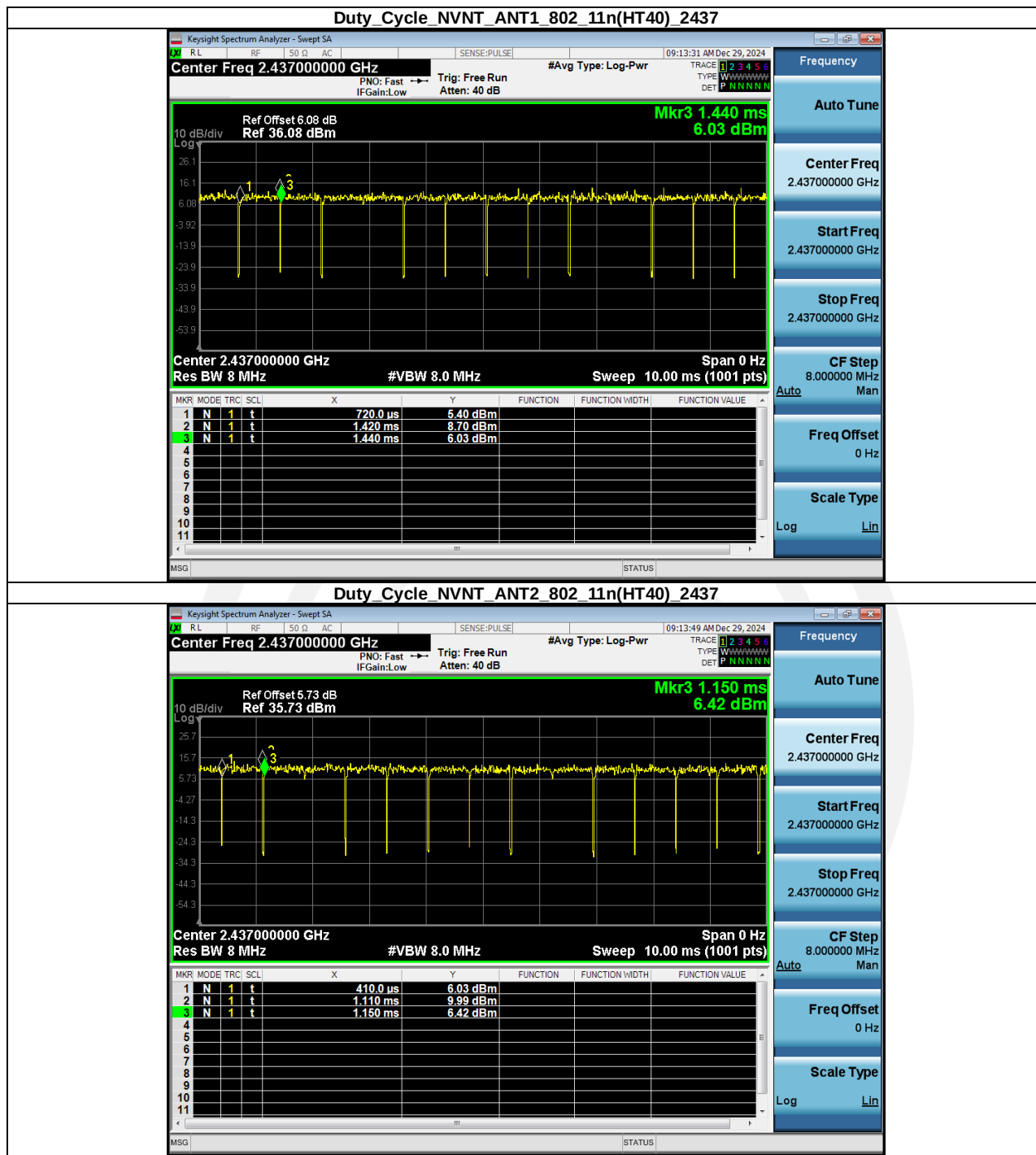


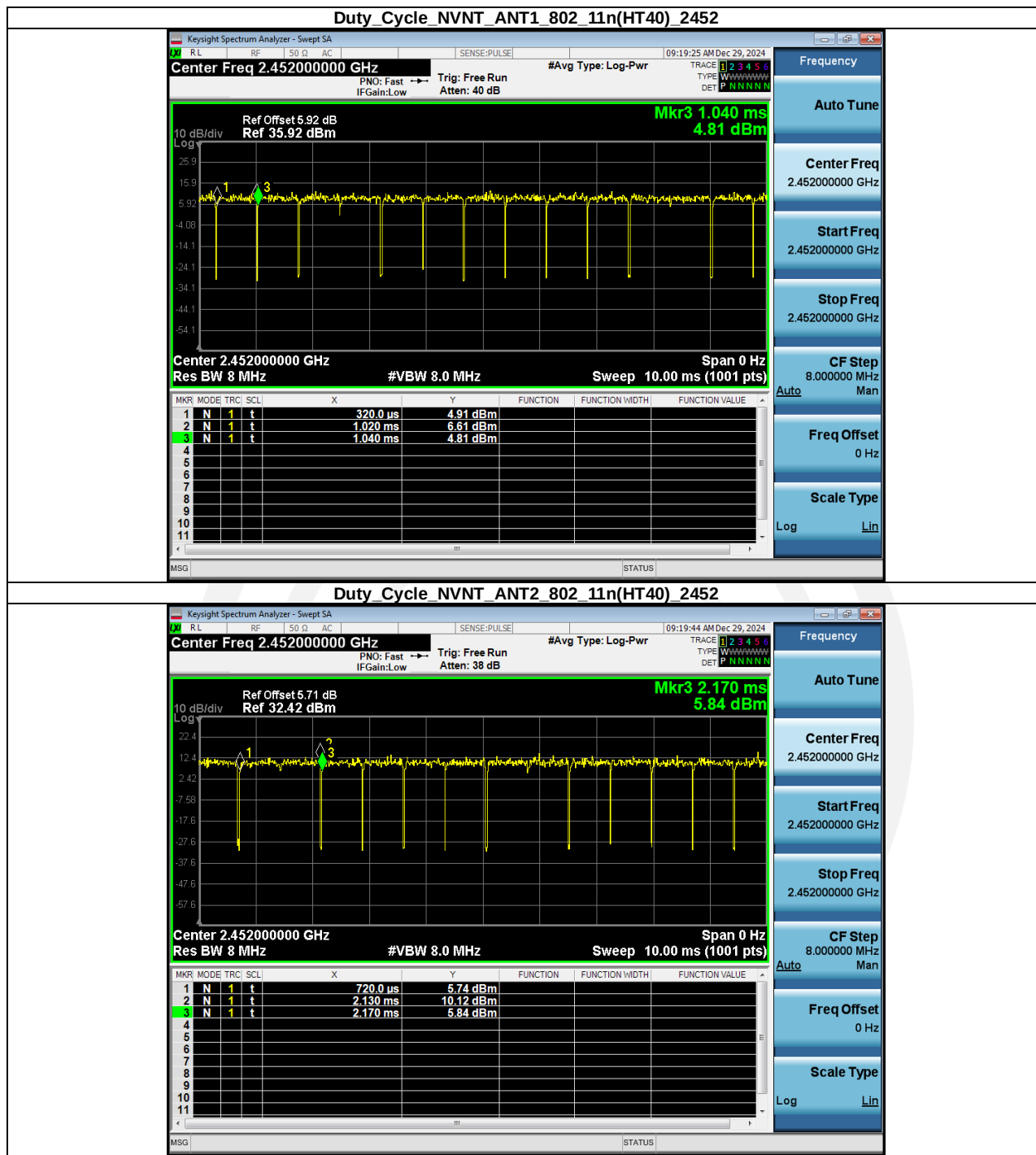
Duty Cycle NVNT ANT2 802_11n(HT20)_2437



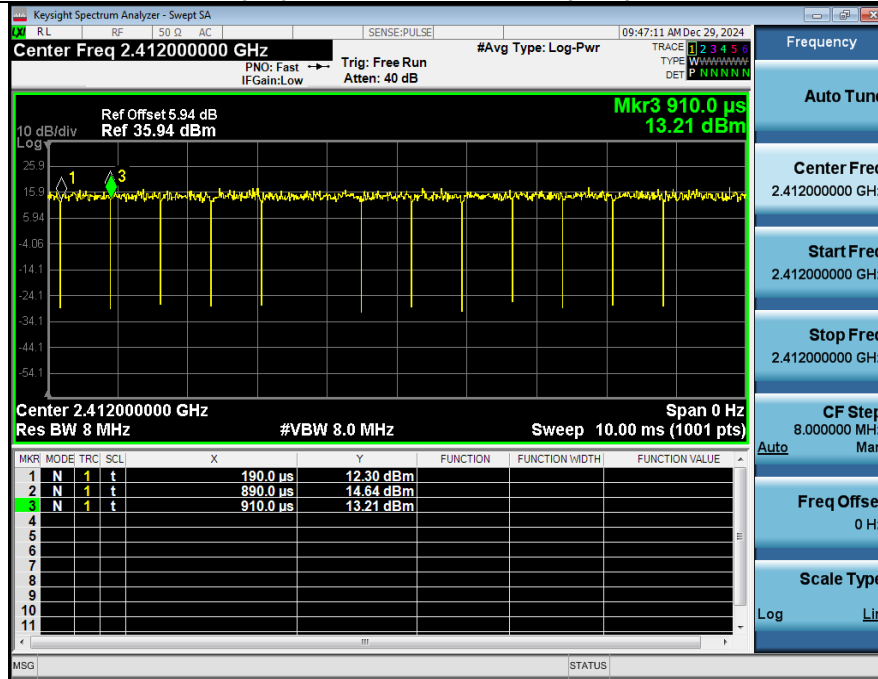




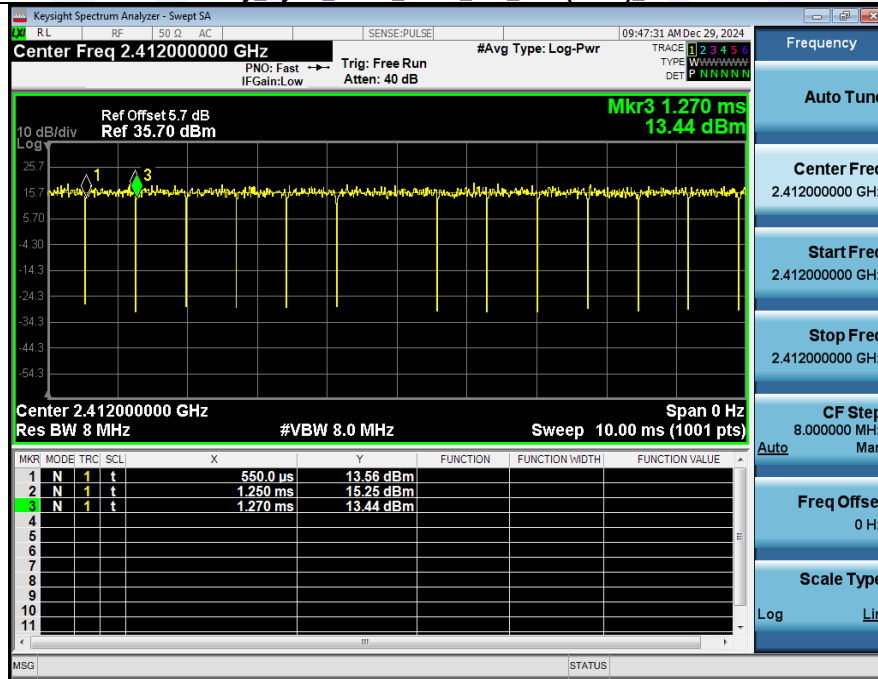


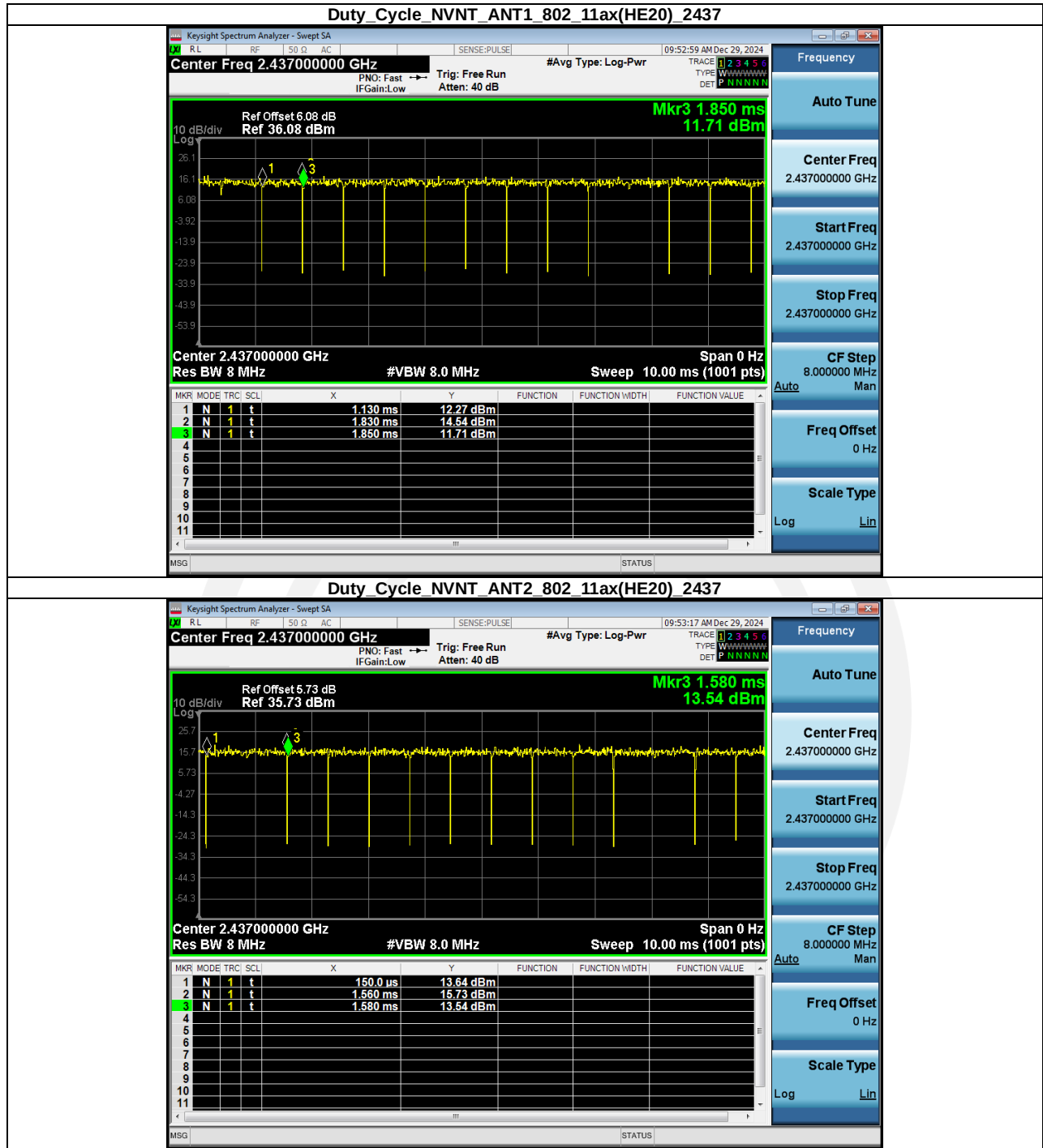


Duty Cycle NVNT_ANT1_802_11ax(HE20)_2412

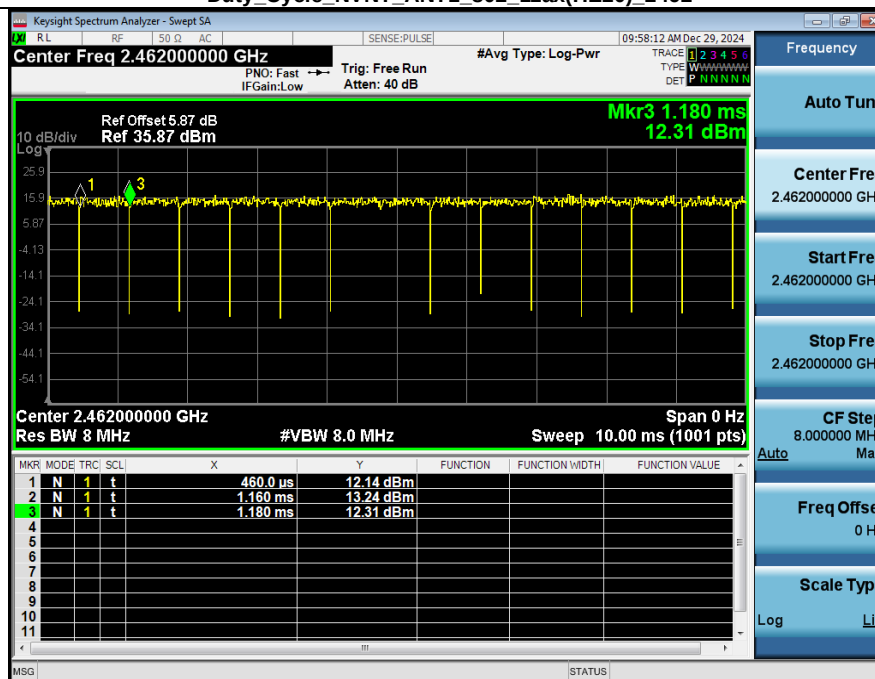


Duty Cycle NVNT_ANT2_802_11ax(HE20)_2412

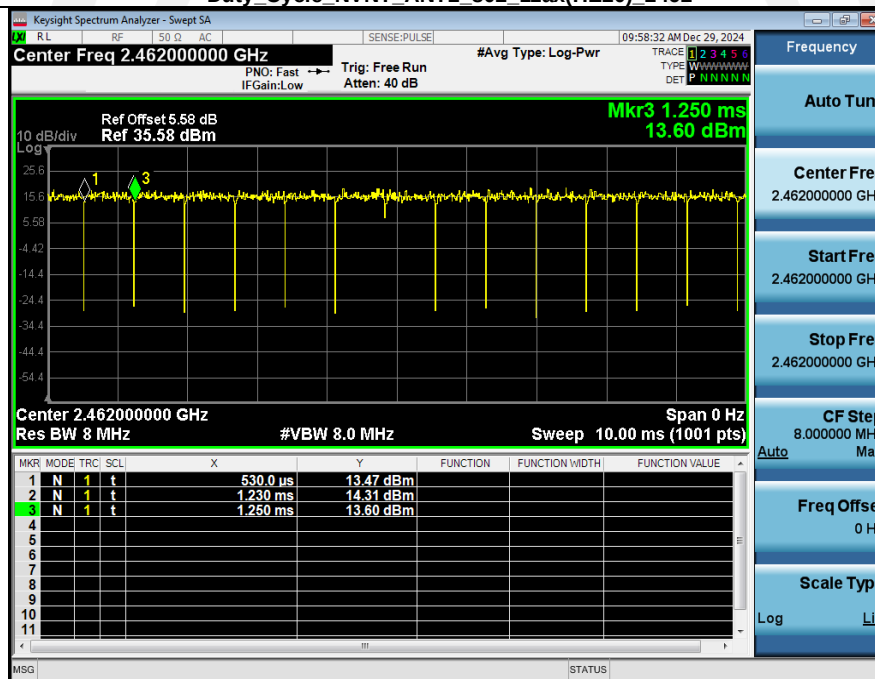


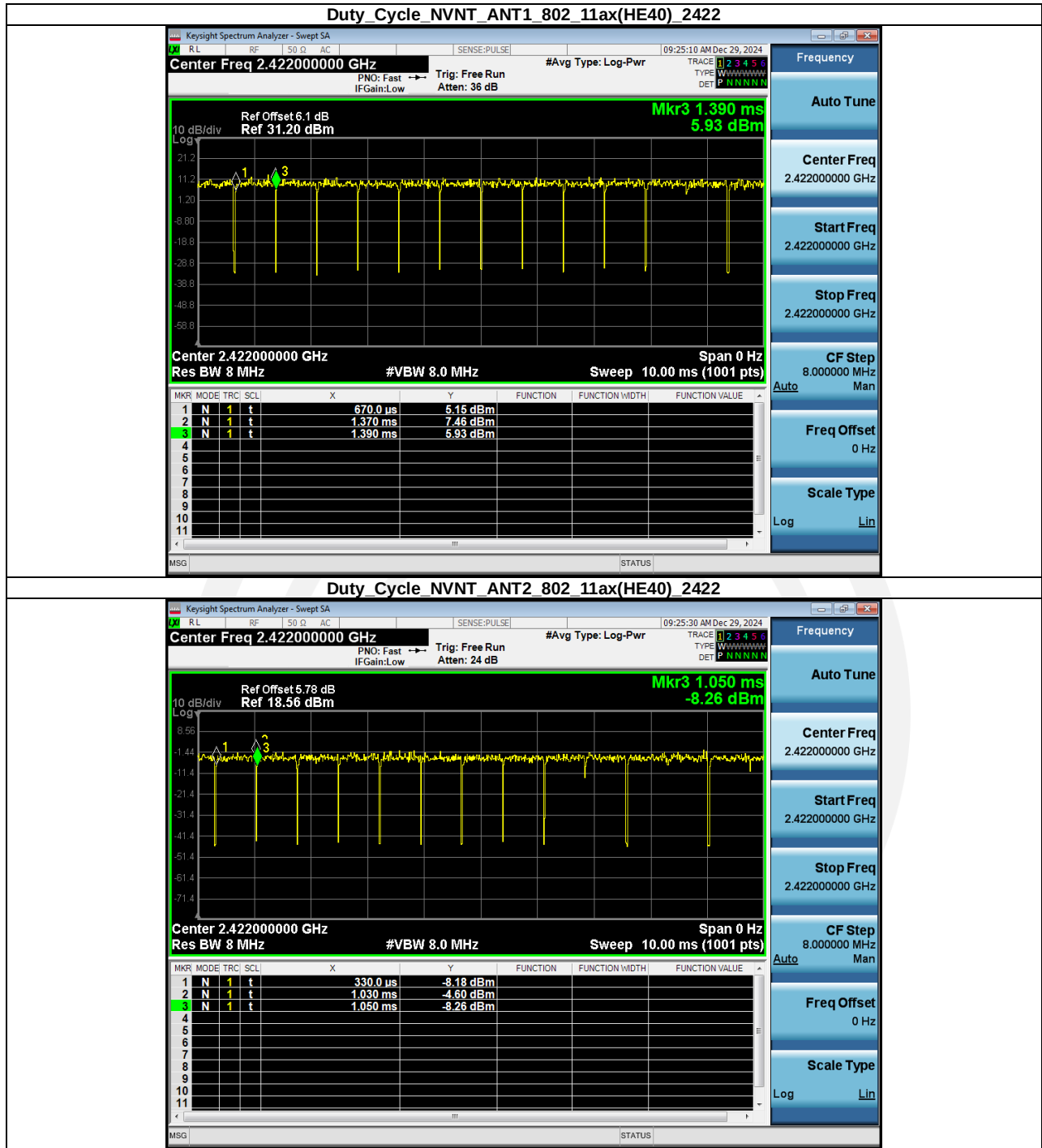


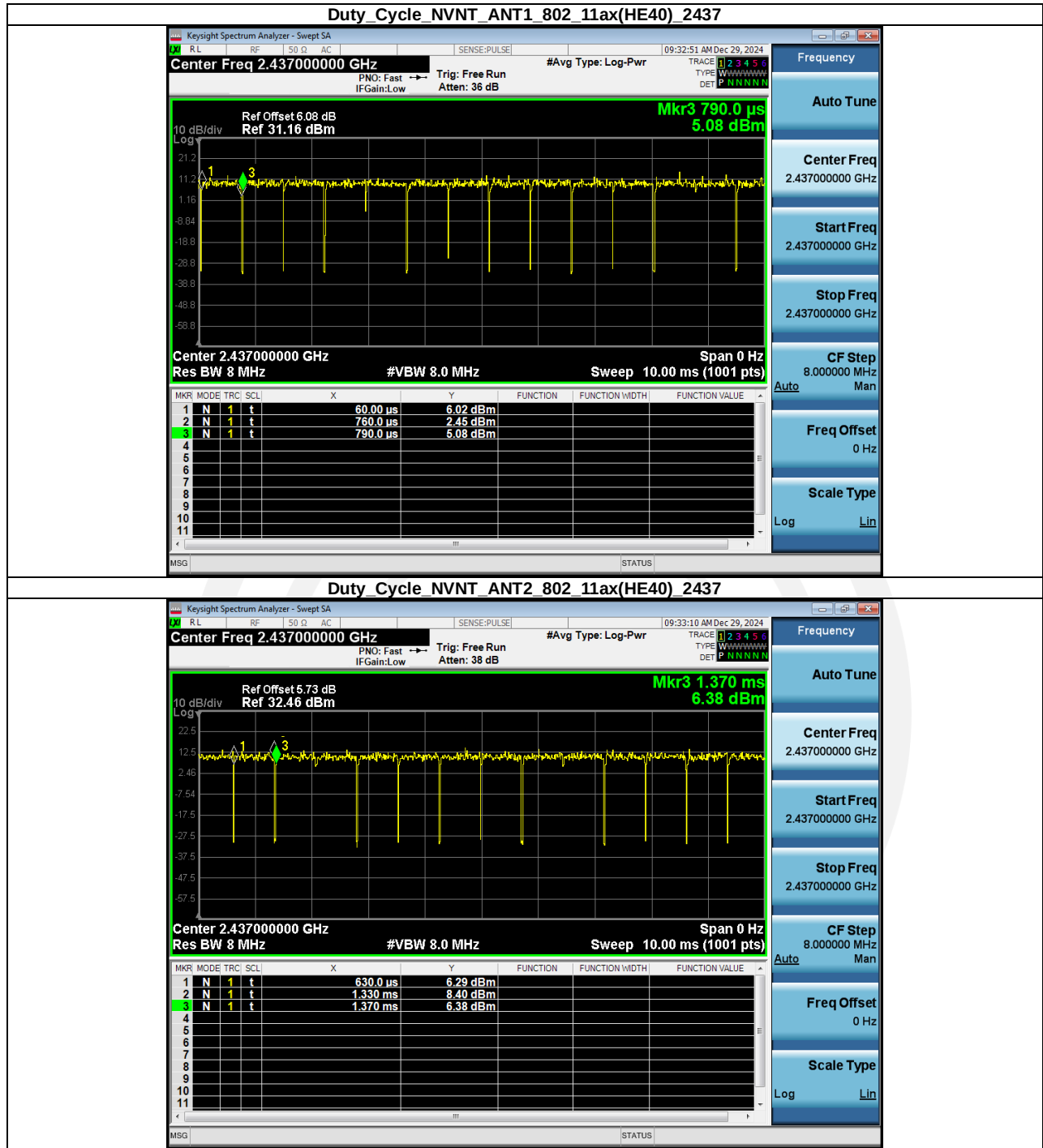
Duty Cycle NVNT_ANT1_802_11ax(HE20)_2462



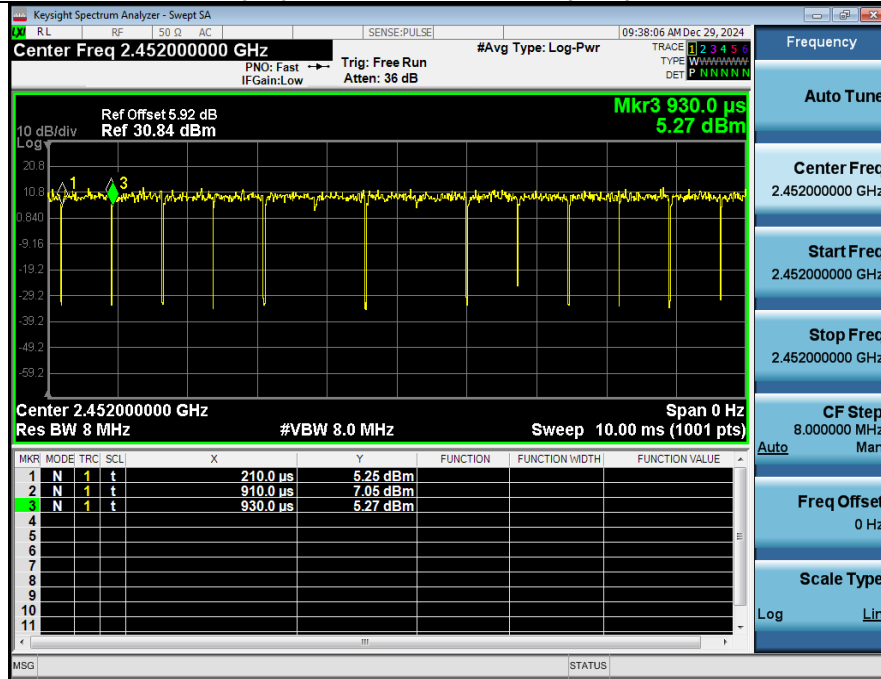
Duty Cycle NVNT_ANT2_802_11ax(HE20)_2462



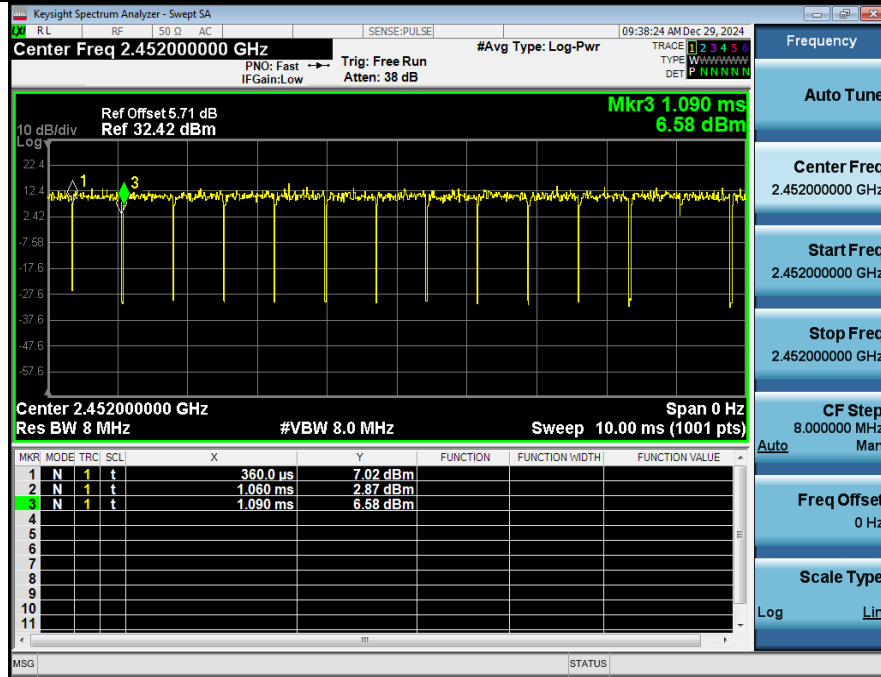




Duty Cycle NVNT_ANT1_802_11ax(HE40)_2452



Duty Cycle NVNT_ANT2_802_11ax(HE40)_2452



7. Peak Power Spectral Density

7.1. Test limits

6.1.1 Please refer RSS-247 & FCC PART 15.247.

6.1.2 For direct sequence systems, the peak power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

6.1.3 The direct sequence operating of the hybrid system, with the frequency hopping operation turned off, shall comply with the power density requirements of paragraph (d) of this section.

7.2. Test Procedure

Details see the KDB558074 D01 Meas Guidance v05r02

6.2.1 Place the EUT on the table and set it in transmitting mode.

6.2.2 Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

6.2.3 Set the spectrum analyzer as $RBW = 30\text{kHz}$ (Set the RBW to: $3\text{ kHz} \leq RBW \leq 100\text{ kHz}$), $VBW = 300\text{kHz}$ (Set the $VBW \geq 3 \times RBW$), $\text{span} \geq 1.5 \times \text{DTS bandwidth}$., detail see the test plot.

6.2.4 Record the max reading.

6.2.5 Repeat the above procedure until the measurements for all frequencies are completed.

7.3. Test Setup



7.4. Test Results

Condition	Antenna	Modulation	Frequency (MHz)	SA_PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
NVNT	ANT1	802.11b	2412.00	2.52	-10.00	-7.48	8	Pass
NVNT	ANT2	802.11b	2412.00	3.75	-10.00	-6.25	8	Pass
NVNT	ANT1	802.11b	2437.00	1.64	-10.00	-8.36	8	Pass
NVNT	ANT2	802.11b	2437.00	3.62	-10.00	-6.38	8	Pass
NVNT	ANT1	802.11b	2462.00	2.68	-10.00	-7.32	8	Pass
NVNT	ANT2	802.11b	2462.00	3.35	-10.00	-6.65	8	Pass
NVNT	ANT1	802.11g	2412.00	-4.83	-10.00	-14.84	8	Pass
NVNT	ANT2	802.11g	2412.00	-2.58	-10.00	-12.58	8	Pass
NVNT	ANT1	802.11g	2437.00	-4.55	-10.00	-14.55	8	Pass
NVNT	ANT2	802.11g	2437.00	-3.85	-10.00	-13.85	8	Pass
NVNT	ANT1	802.11g	2462.00	-4.84	-10.00	-14.84	8	Pass
NVNT	ANT2	802.11g	2462.00	-3.81	-10.00	-13.81	8	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	-4.52	-10.00	-14.52	8	Pass
NVNT	ANT2	802.11n(HT20)	2412.00	-3.38	-10.00	-13.38	8	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	-5.17	-10.00	-15.17	8	Pass
NVNT	ANT2	802.11n(HT20)	2437.00	-3.55	-10.00	-13.55	8	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	-5.00	-10.00	-15.00	8	Pass
NVNT	ANT2	802.11n(HT20)	2462.00	-3.85	-10.00	-13.85	8	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	-7.21	-10.00	-17.21	8	Pass
NVNT	ANT2	802.11n(HT40)	2422.00	-6.86	-10.00	-16.86	8	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	-7.92	-10.00	-17.93	8	Pass
NVNT	ANT2	802.11n(HT40)	2437.00	-6.47	-10.00	-16.47	8	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	-7.51	-10.00	-17.51	8	Pass
NVNT	ANT2	802.11n(HT40)	2452.00	-8.99	-10.00	-18.99	8	Pass
NVNT	ANT1	802.11ax(HE20)	2412.00	-4.21	-10.00	-14.21	8	Pass
NVNT	ANT2	802.11ax(HE20)	2412.00	-2.94	-10.00	-12.94	8	Pass
NVNT	ANT1	802.11ax(HE20)	2437.00	-3.83	-10.00	-13.83	8	Pass
NVNT	ANT2	802.11ax(HE20)	2437.00	-3.50	-10.00	-13.50	8	Pass
NVNT	ANT1	802.11ax(HE20)	2462.00	-4.35	-10.00	-14.35	8	Pass
NVNT	ANT2	802.11ax(HE20)	2462.00	-3.53	-10.00	-13.53	8	Pass
NVNT	ANT1	802.11ax(HE40)	2422.00	-7.47	-10.00	-17.47	8	Pass
NVNT	ANT2	802.11ax(HE40)	2422.00	-6.59	-10.00	-16.59	8	Pass
NVNT	ANT1	802.11ax(HE40)	2437.00	-7.51	-10.00	-17.51	8	Pass
NVNT	ANT2	802.11ax(HE40)	2437.00	-6.62	-10.00	-16.62	8	Pass
NVNT	ANT1	802.11ax(HE40)	2452.00	-7.94	-10.00	-17.94	8	Pass
NVNT	ANT2	802.11ax(HE40)	2452.00	-6.92	-10.00	-16.92	8	Pass

