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FCC ID WIFI2.4

FCC Part 15.247 Test Data

1. -6dB Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	-6dB BW(MHz)	limit(kHz)	Result
NVNT	ANT1	802.11b	2412.00	8.15	500	Pass
NVNT	ANT1	802.11b	2437.00	8.59	500	Pass
NVNT	ANT1	802.11b	2462.00	8.59	500	Pass
NVNT	ANT1	802.11g	2412.00	16.09	500	Pass
NVNT	ANT1	802.11g	2437.00	16.33	500	Pass
NVNT	ANT1	802.11g	2462.00	16.36	500	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	16.90	500	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	17.17	500	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	17.26	500	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	35.71	500	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	35.82	500	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	35.60	500	Pass

-6dB Bandwidth_NVNT_ANT1_802_11b_2412



-6dB Bandwidth_NVNT_ANT1_802_11b_2437



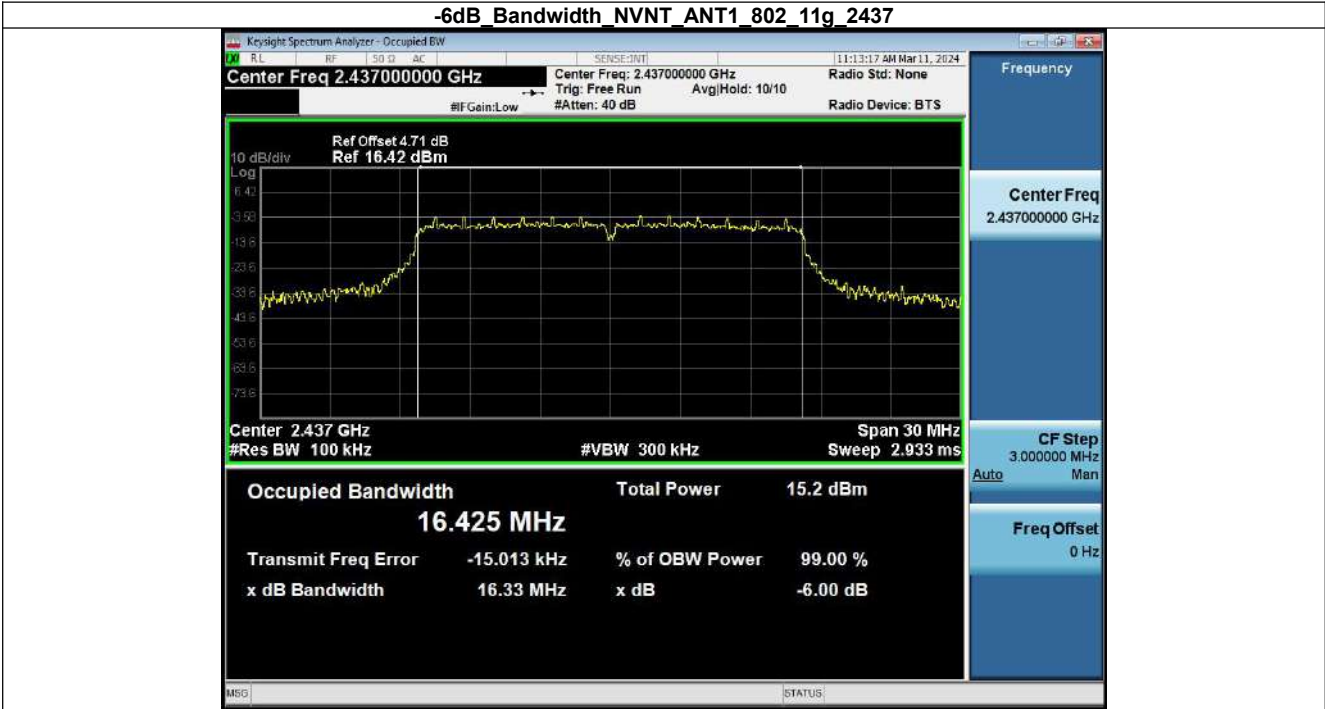
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-6dB_Bandwidth_NVNT_ANT1_802_11g_2412



-6dB_Bandwidth_NVNT_ANT1_802_11g_2437



-6dB_Bandwidth_NVNT_ANT1_802_11g_2462



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



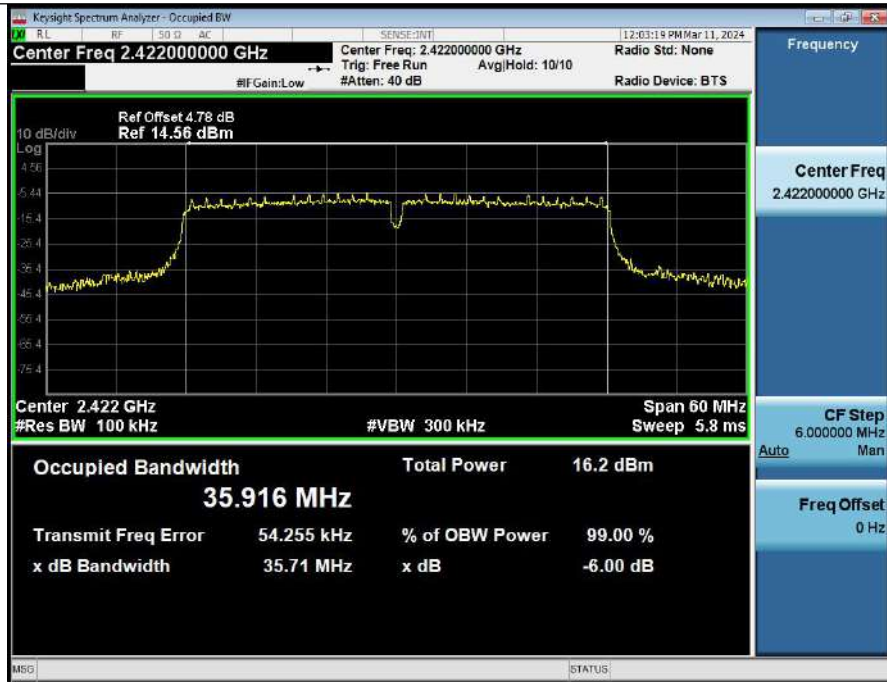
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-6dB_Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



-6dB_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452

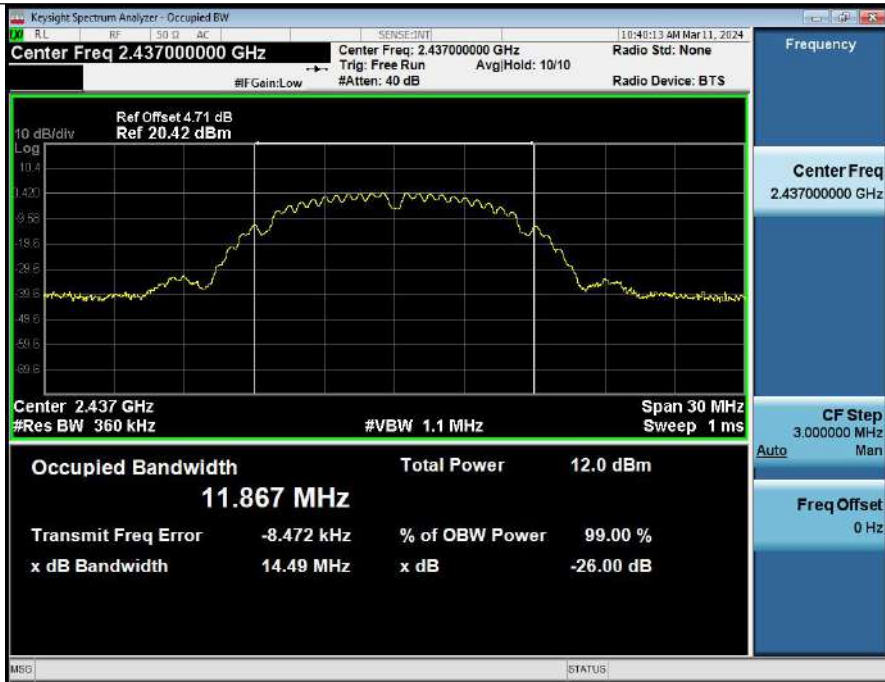


2. 99% Occupied Bandwidth

Condition	Antenna	Modulation	Frequency (MHz)	99%%BW(MHz)
NVNT	ANT1	802.11b	2412.00	11.789
NVNT	ANT1	802.11b	2437.00	11.867
NVNT	ANT1	802.11b	2462.00	11.861
NVNT	ANT1	802.11g	2412.00	17.058
NVNT	ANT1	802.11g	2437.00	17.092
NVNT	ANT1	802.11g	2462.00	17.393
NVNT	ANT1	802.11n(HT20)	2412.00	17.791
NVNT	ANT1	802.11n(HT20)	2437.00	17.820
NVNT	ANT1	802.11n(HT20)	2462.00	18.023
NVNT	ANT1	802.11n(HT40)	2422.00	36.356
NVNT	ANT1	802.11n(HT40)	2437.00	36.263
NVNT	ANT1	802.11n(HT40)	2452.00	36.440



99% Occupied Bandwidth NVNT ANT1 802_11b_2437



99% Occupied Bandwidth_NVNT_ANT1_802_11b_2462



99% Occupied Bandwidth_NVNT_ANT1_802_11g_2412



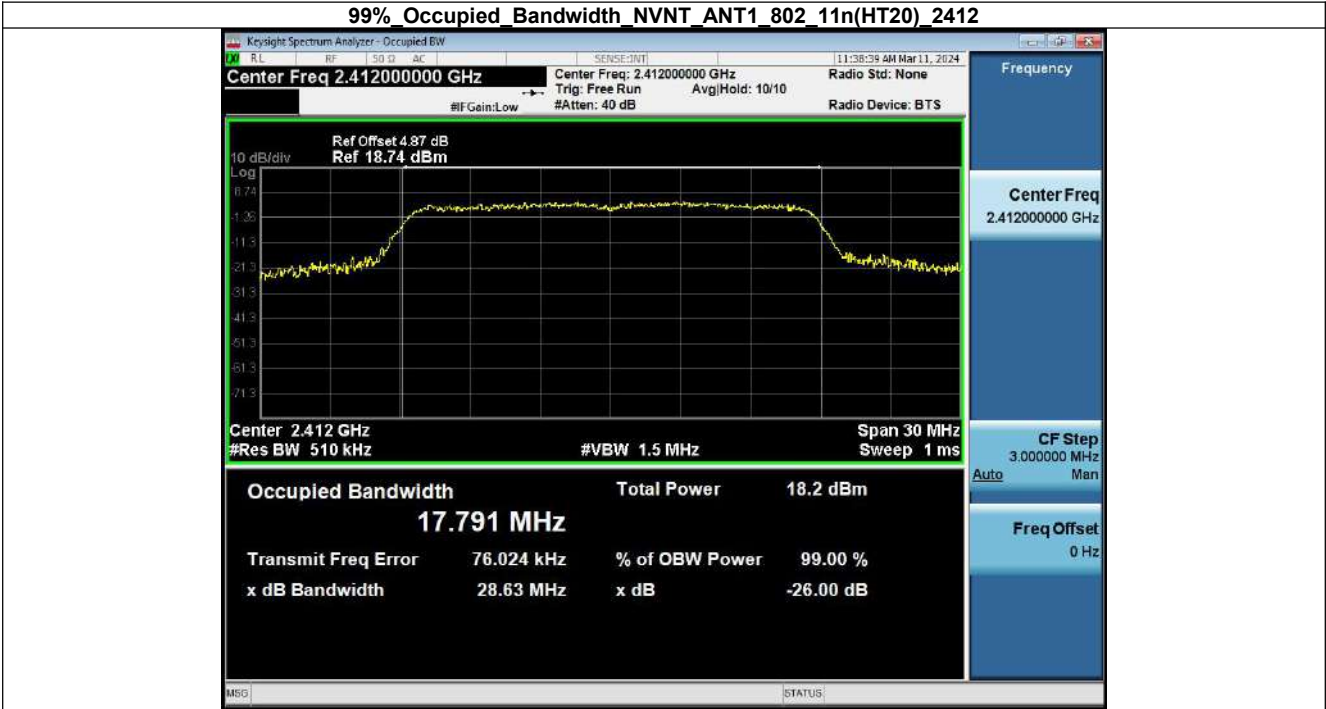
99% Occupied Bandwidth_NVNT_ANT1_802_11g_2437



99% Occupied Bandwidth_NVNT_ANT1_802_11g_2462



99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2412



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT20)_2437



99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT20)_2462



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2422



99% Occupied Bandwidth_NVNT_ANT1_802_11n(HT40)_2437



99%_Occupied_Bandwidth_NVNT_ANT1_802_11n(HT40)_2452

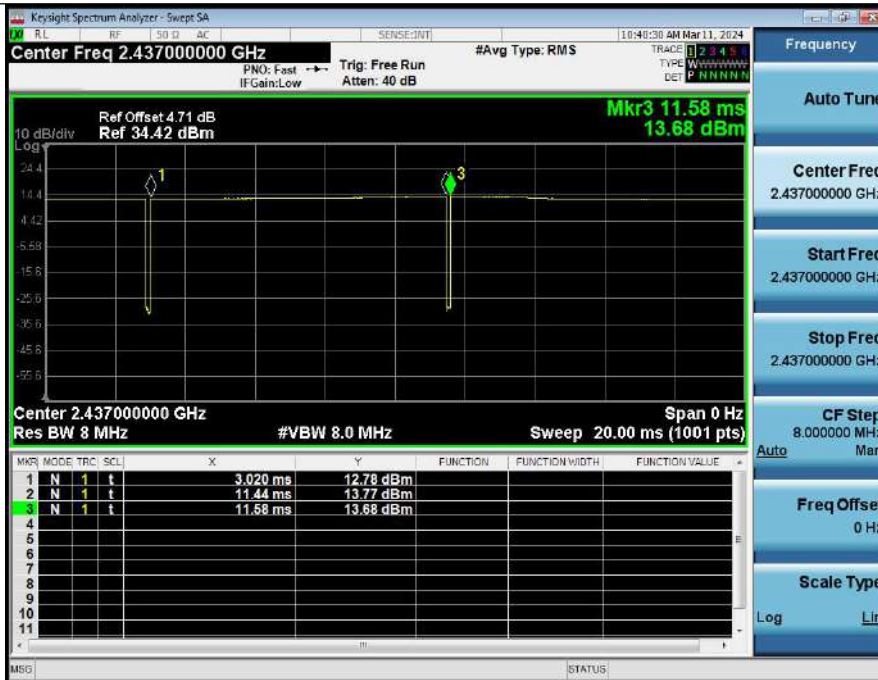


3. Duty Cycle

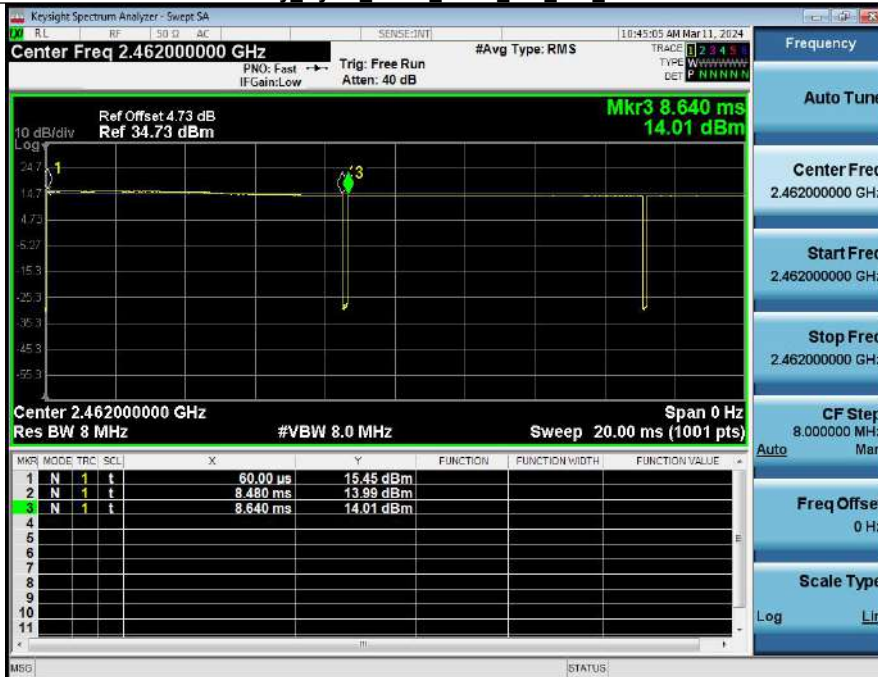
Condition	Antenna	Modulation	Frequency (MHz)	Duty cycle(%)	Duty factor(dB)
NVNT	ANT1	802.11b	2412.00	98.36	0.00
NVNT	ANT1	802.11b	2437.00	98.60	0.00
NVNT	ANT1	802.11b	2462.00	98.14	0.00
NVNT	ANT1	802.11g	2412.00	90.91	0.41
NVNT	ANT1	802.11g	2437.00	92.21	0.35
NVNT	ANT1	802.11g	2462.00	91.03	0.41
NVNT	ANT1	802.11n(HT20)	2412.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2437.00	89.55	0.48
NVNT	ANT1	802.11n(HT20)	2462.00	91.04	0.41
NVNT	ANT1	802.11n(HT40)	2422.00	83.78	0.77
NVNT	ANT1	802.11n(HT40)	2437.00	81.08	0.91
NVNT	ANT1	802.11n(HT40)	2452.00	78.38	1.06



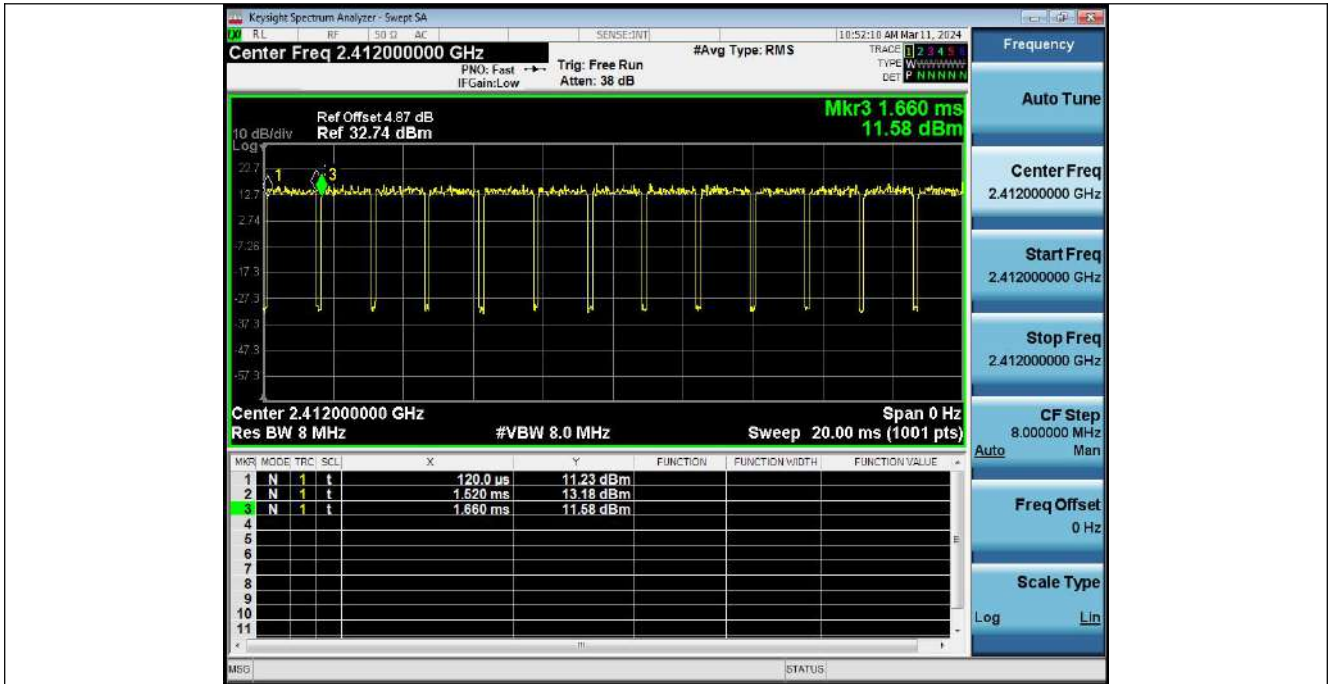
Duty Cycle NVNT ANT1 802 11b 2437



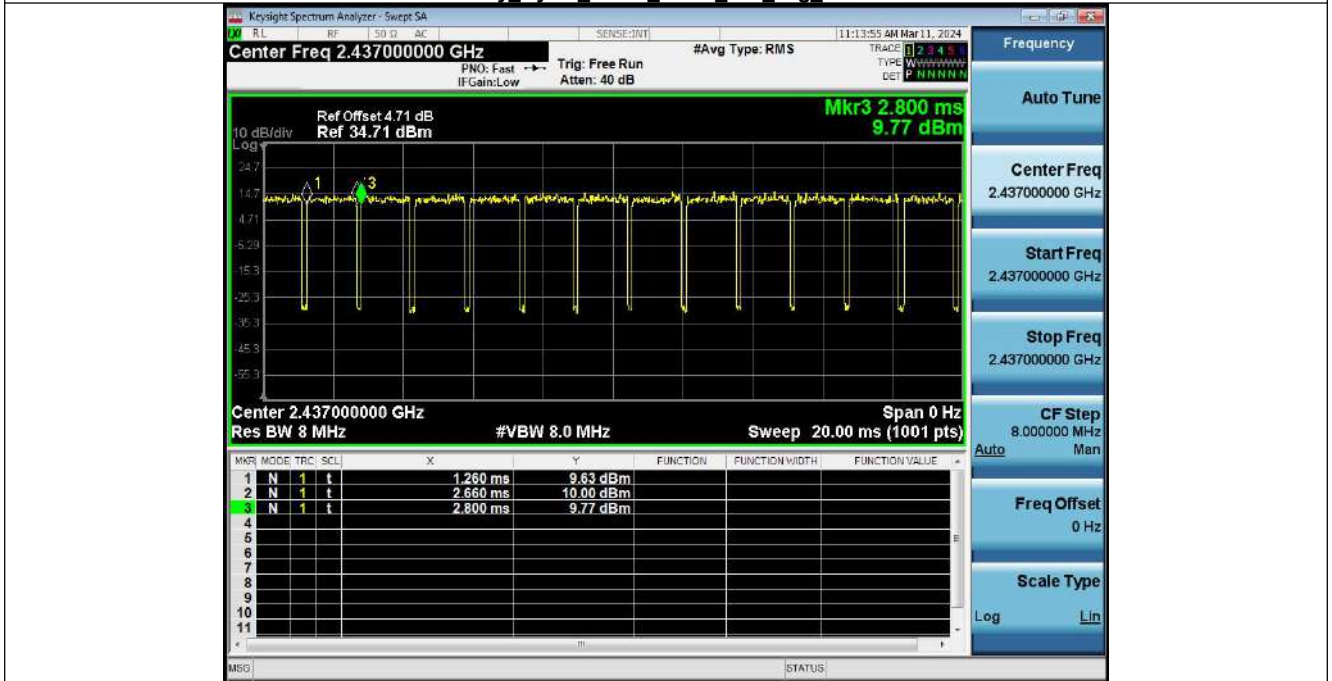
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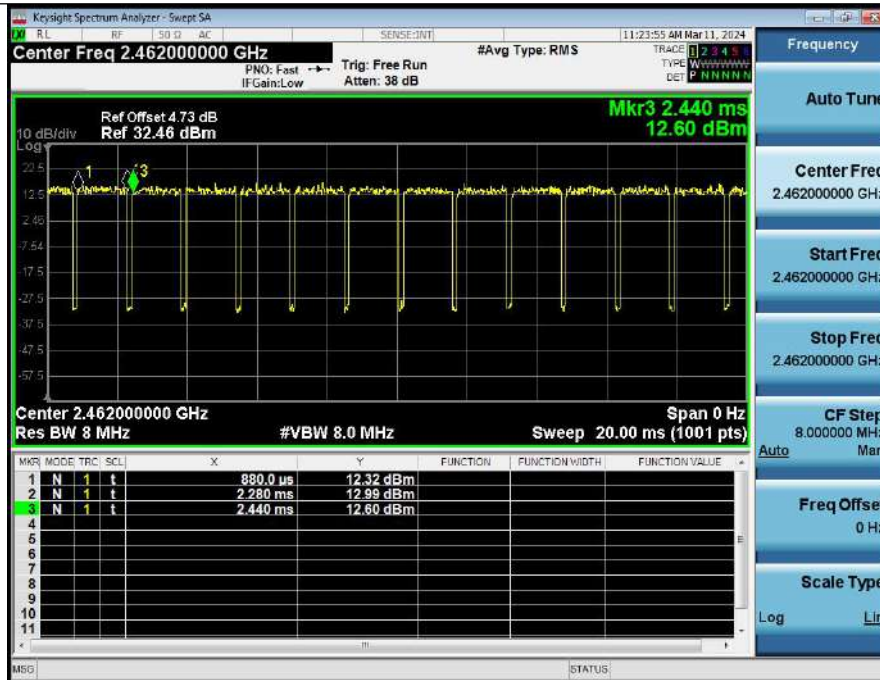
Duty_Cycle_NVNT_ANT1_802_11g_2412



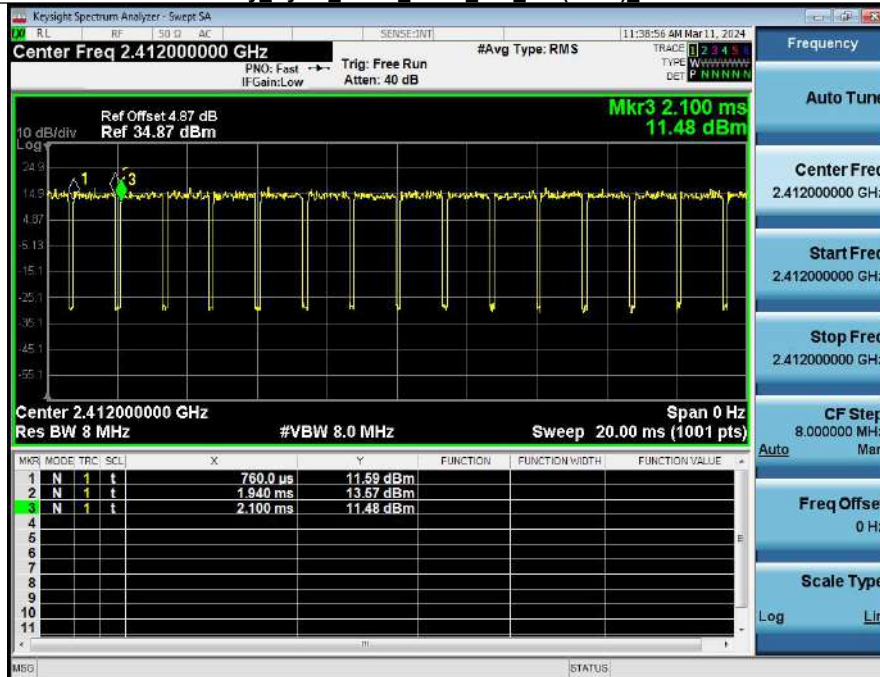
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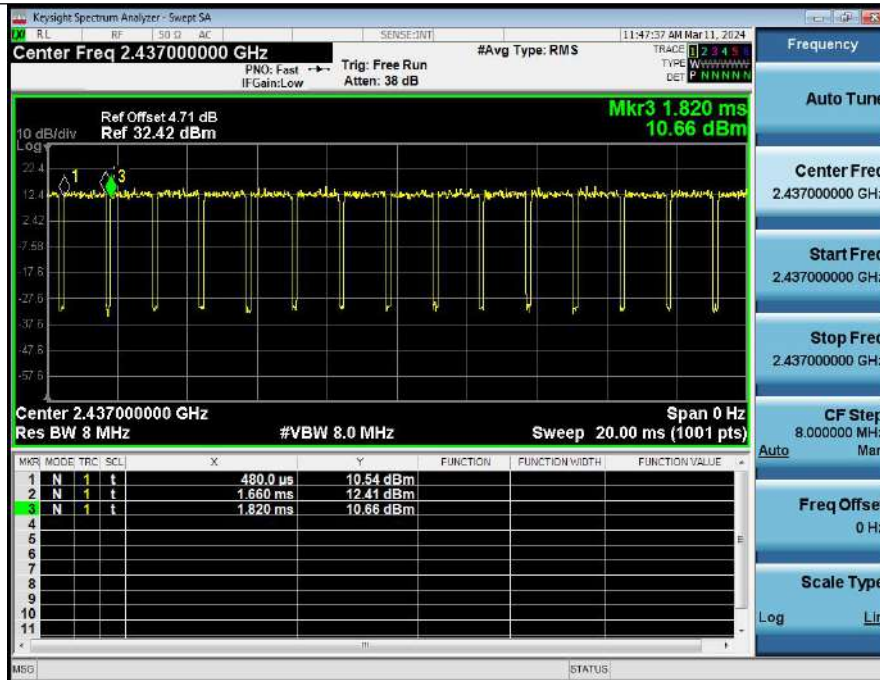
Duty_Cycle_NVNT_ANT1_802_11g_2462



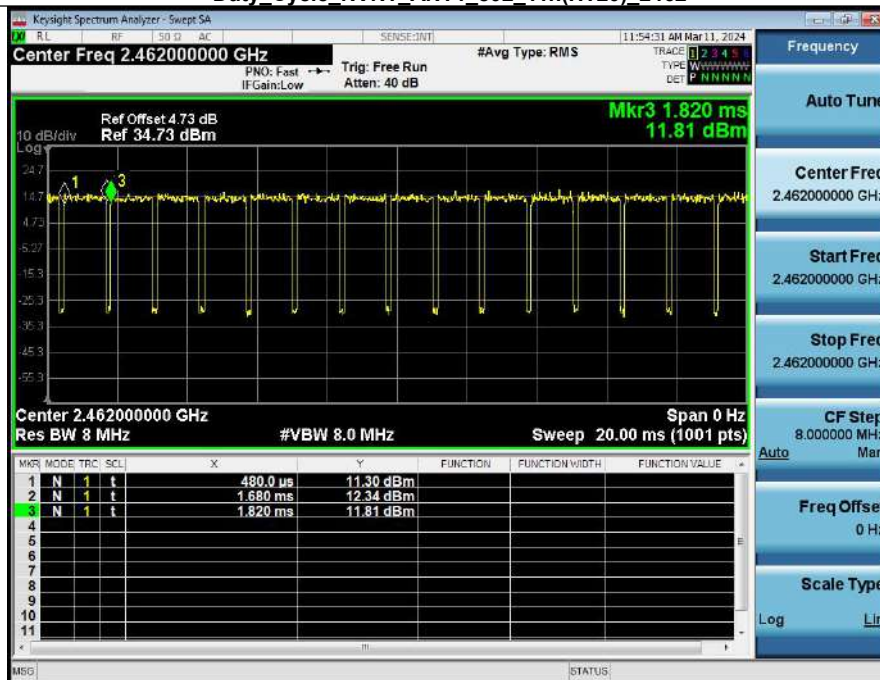
Duty_Cycle_NVNT_ANT1_802_11n(HT20)_2412



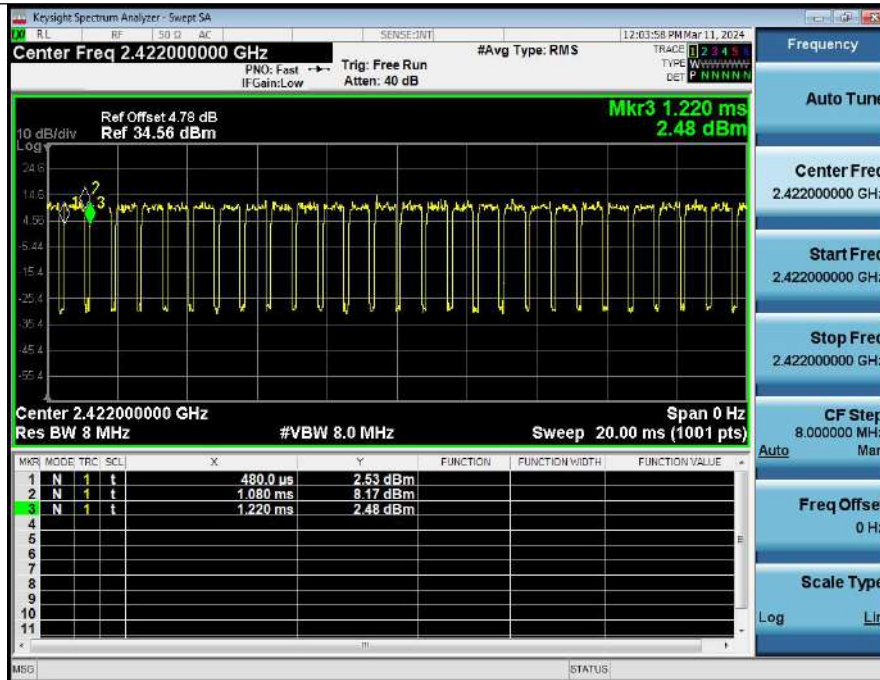
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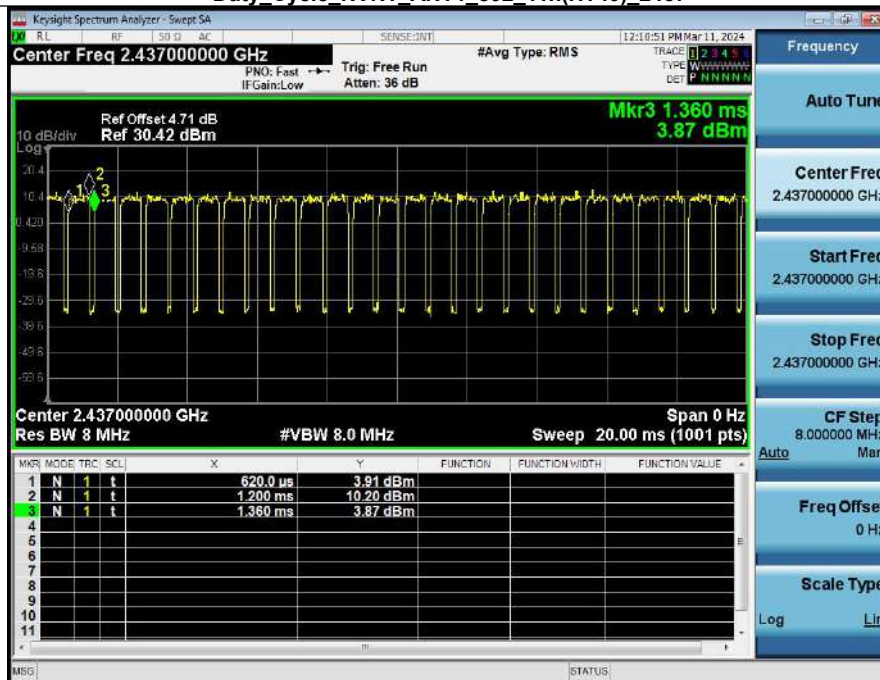
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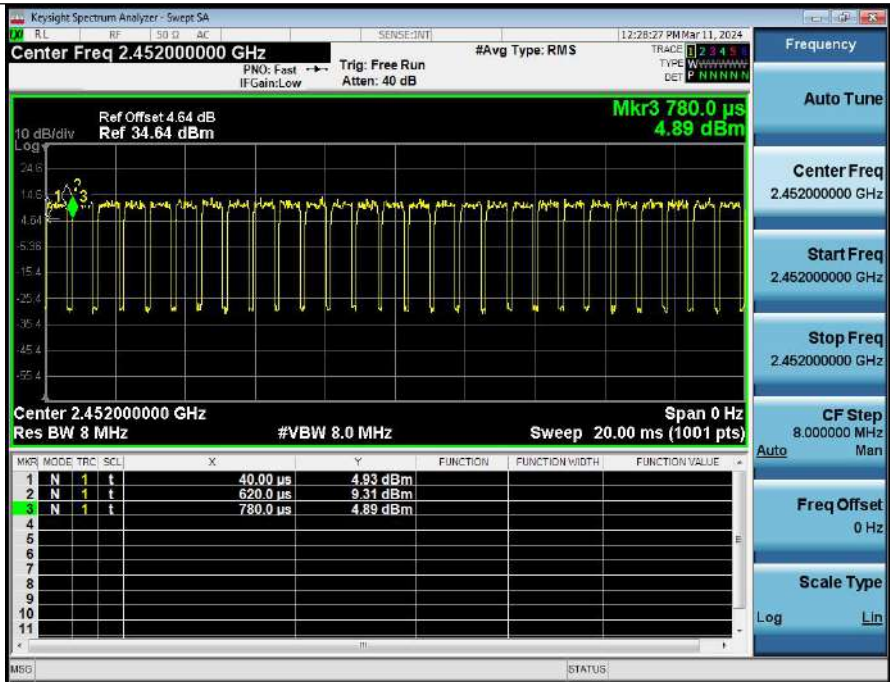
Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2422



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2437



Duty_Cycle_NVNT_ANT1_802_11n(HT40)_2452



4. MAX. Output Power

Condition	Antenna	Modulation	Frequency (MHz)	Detector	Conducted Power(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	Peak	13.21	30	Pass
NVNT	ANT1	802.11b	2437.00	Peak	11.68	30	Pass
NVNT	ANT1	802.11b	2462.00	Peak	13.40	30	Pass
NVNT	ANT1	802.11g	2412.00	Peak	17.59	30	Pass
NVNT	ANT1	802.11g	2437.00	Peak	16.02	30	Pass
NVNT	ANT1	802.11g	2462.00	Peak	17.69	30	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	Peak	18.14	30	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	Peak	16.53	30	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	Peak	18.34	30	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	Peak	16.83	30	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	Peak	16.93	30	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	Peak	17.71	30	Pass

5. Power Spectral Density

Antenna	Modulation	Frequency (MHz)	PSD(dBm/30kHz)	RB factor(dB)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
ANT1	802.11b	2412.00	-2.32	-10.00	-12.32	8	Pass
ANT1	802.11b	2437.00	-3.93	-10.00	-13.93	8	Pass
ANT1	802.11b	2462.00	1.06	-10.00	-8.94	8	Pass
ANT1	802.11g	2412.00	-5.19	-10.00	-15.19	8	Pass
ANT1	802.11g	2437.00	-8.19	-10.00	-18.19	8	Pass
ANT1	802.11g	2462.00	-5.58	-10.00	-15.58	8	Pass
ANT1	802.11n(HT20)	2412.00	-6.03	-10.00	-16.03	8	Pass
ANT1	802.11n(HT20)	2437.00	-7.86	-10.00	-17.86	8	Pass
ANT1	802.11n(HT20)	2462.00	-5.98	-10.00	-15.98	8	Pass
ANT1	802.11n(HT40)	2422.00	-10.50	-10.00	-20.50	8	Pass
ANT1	802.11n(HT40)	2437.00	-10.55	-10.00	-20.55	8	Pass
ANT1	802.11n(HT40)	2452.00	-9.33	-10.00	-19.33	8	Pass



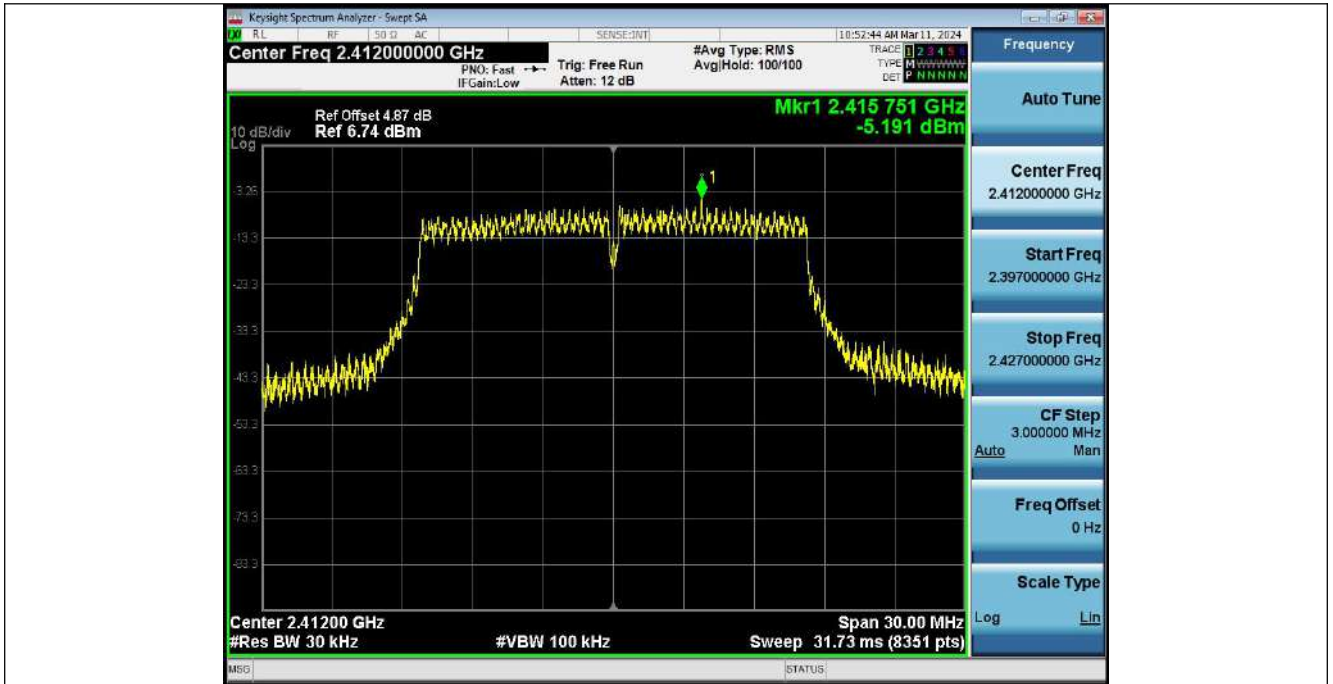
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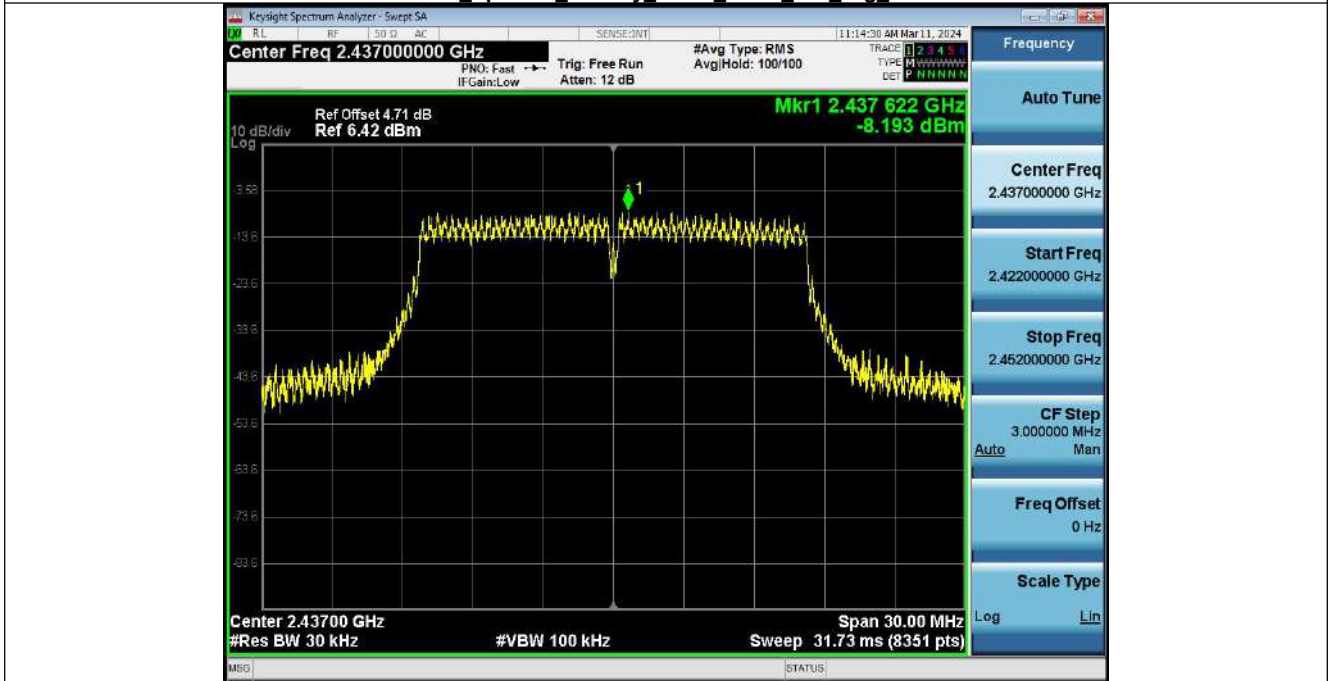
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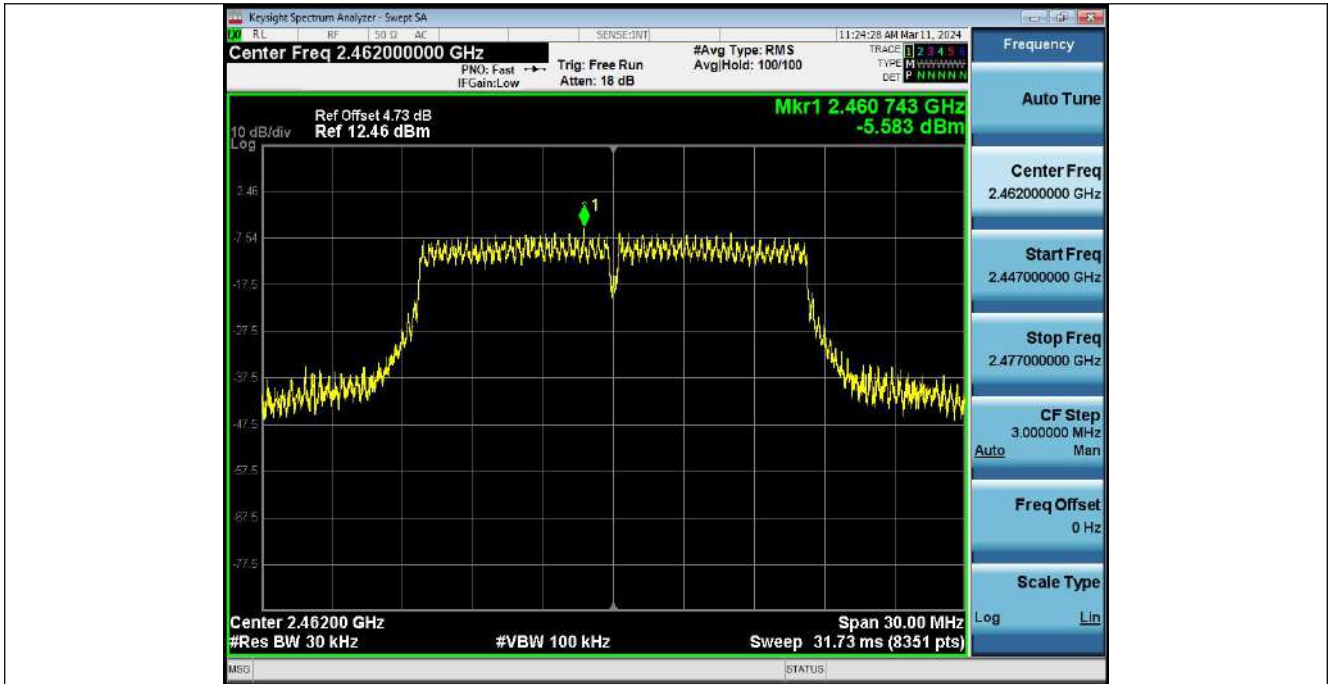
Power_Spectral_Density_NVNT_ANT1_802_11g_2412



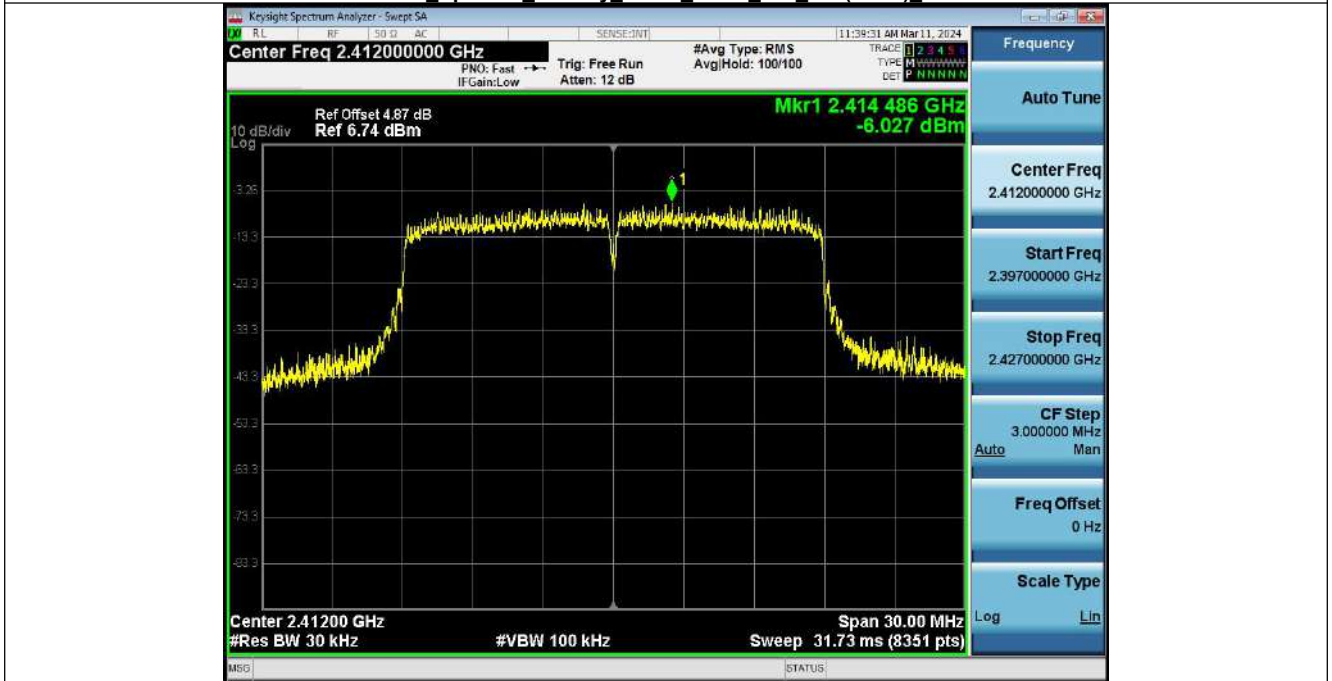
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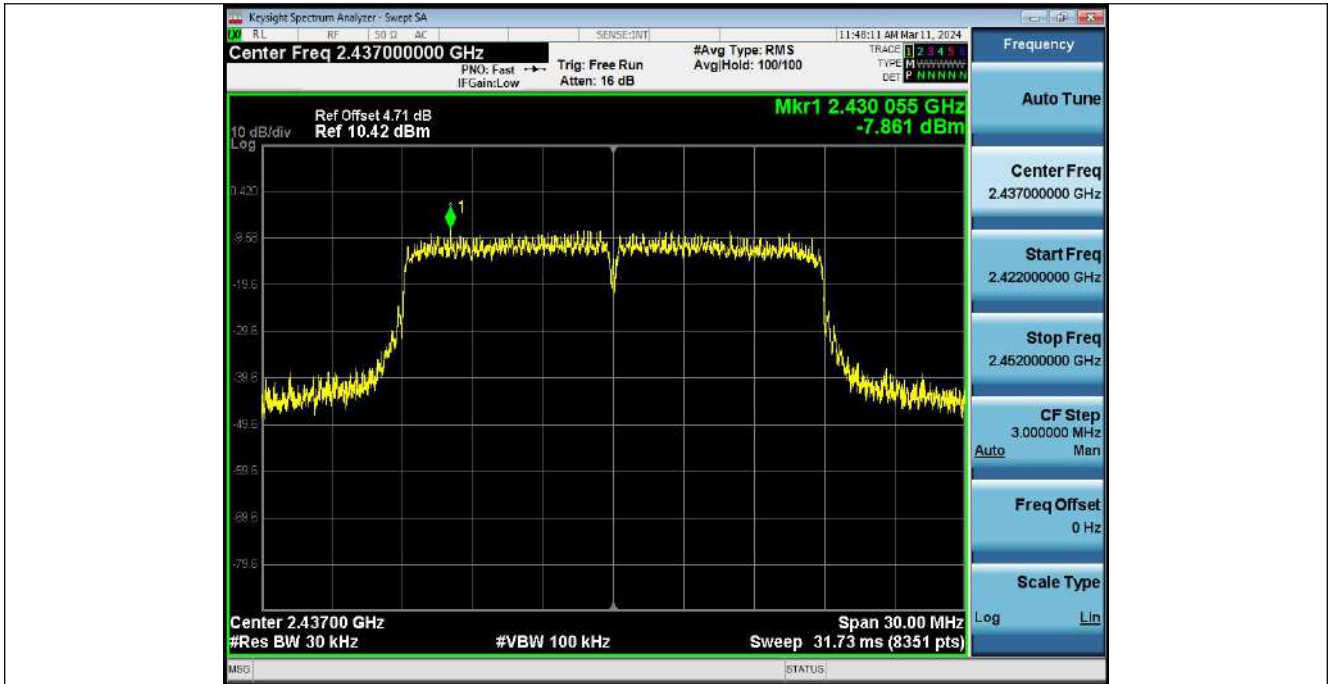
Power_Spectral_Density_NVNT_ANT1_802_11g_2462



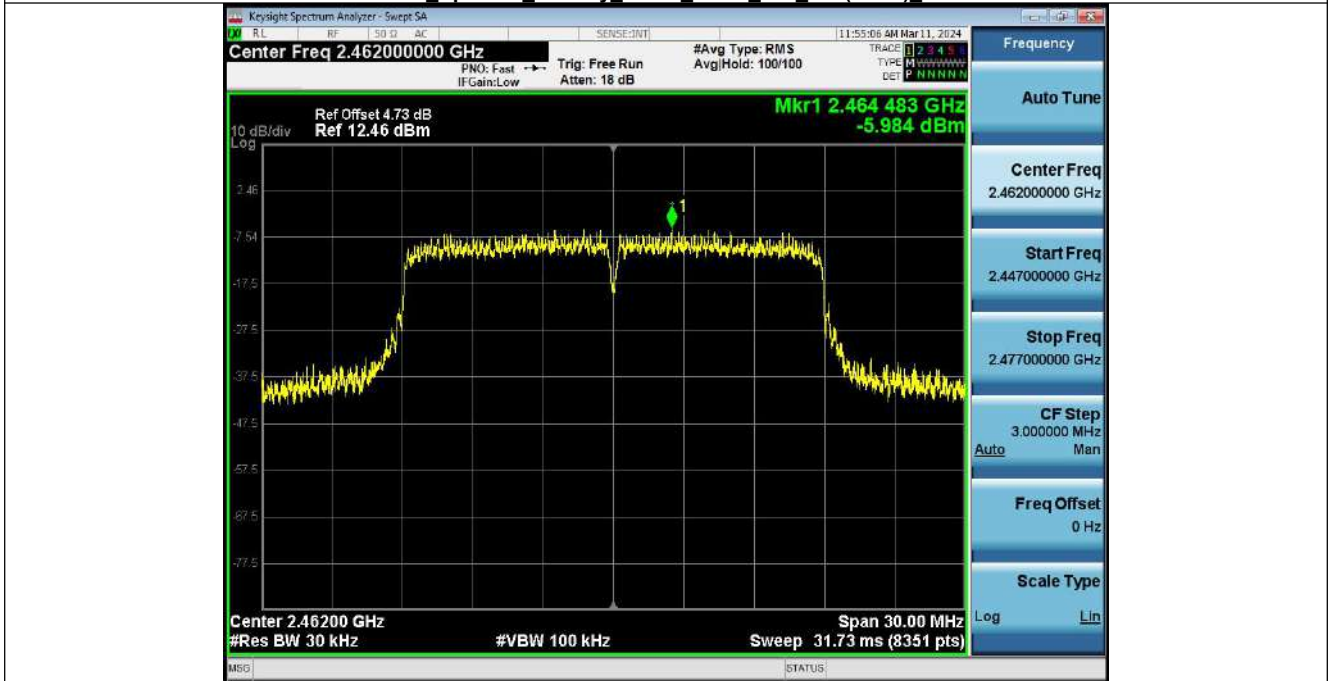
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2412



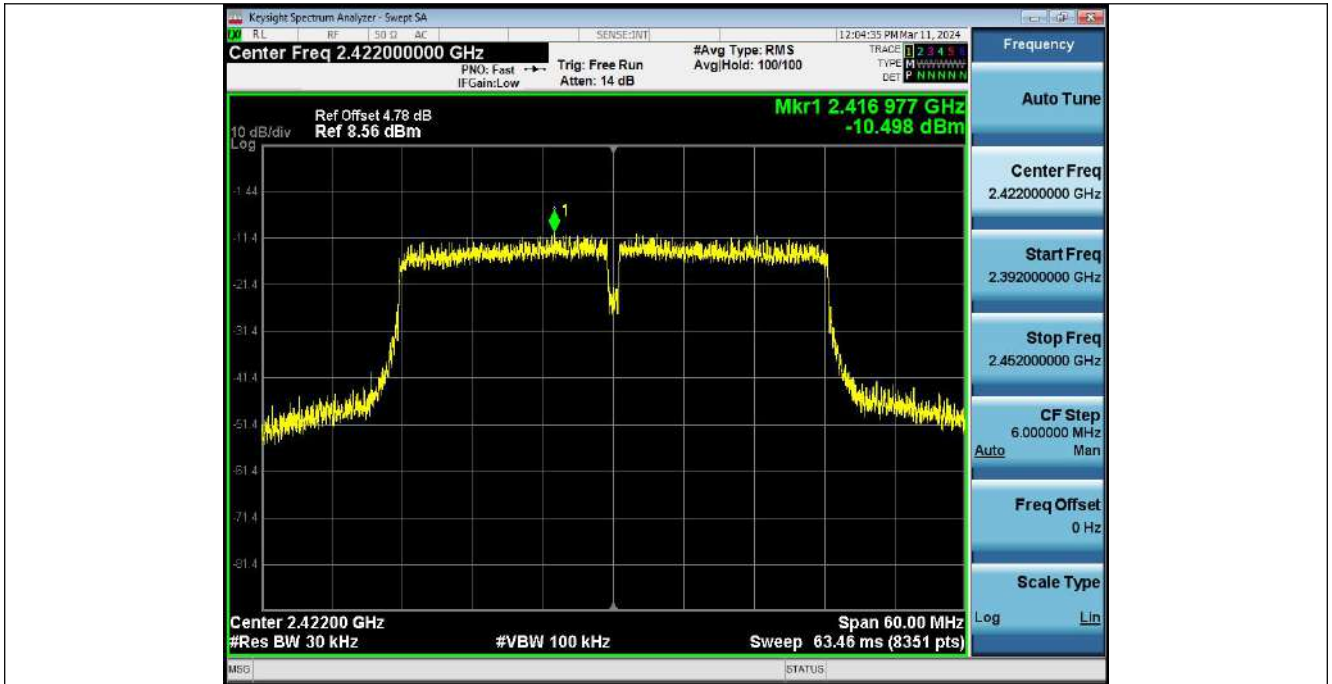
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2437



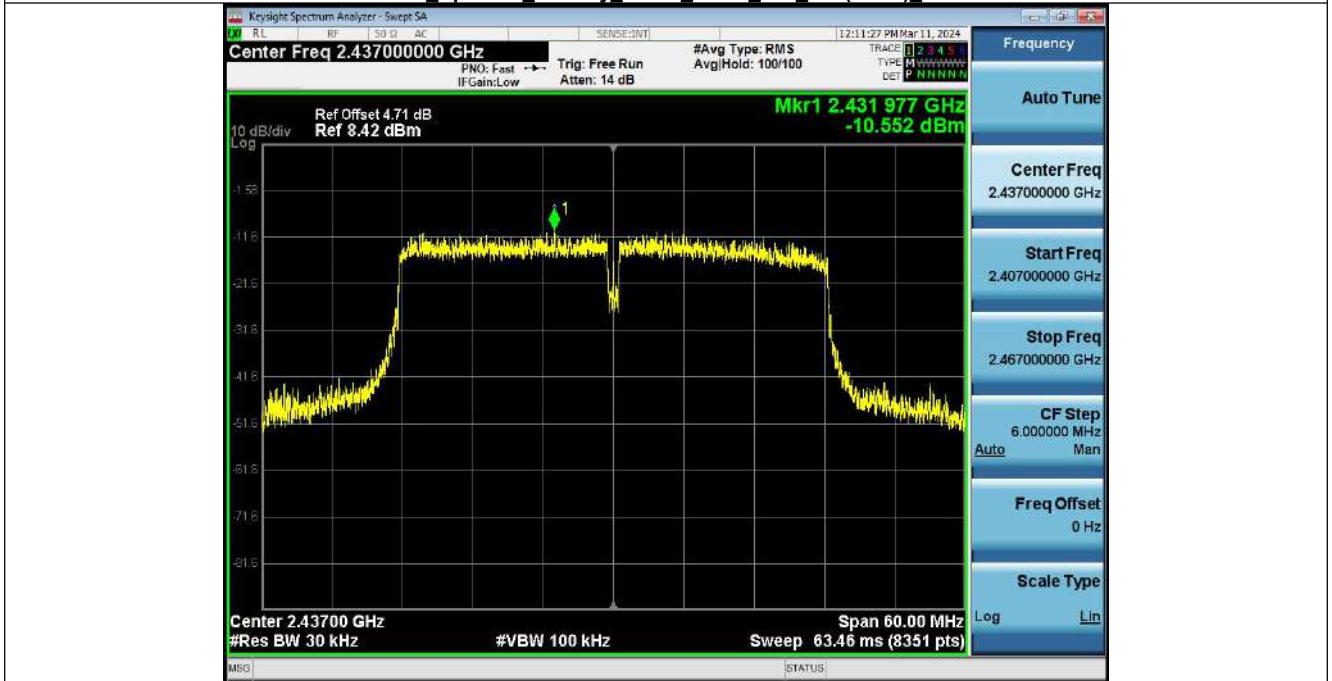
Power_Spectral_Density_NVNT_ANT1_802_11n(HT20)_2462



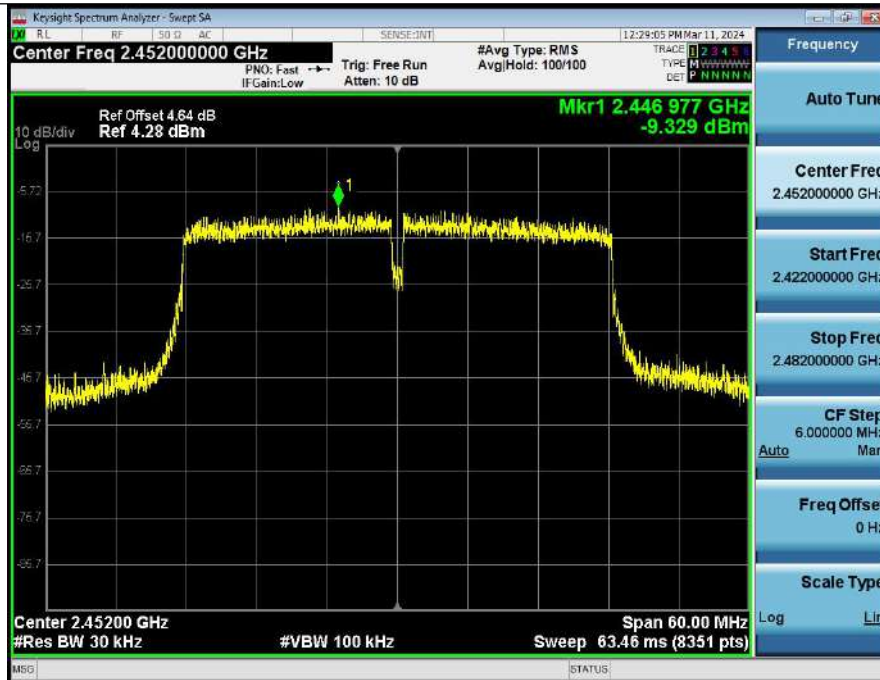
Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2422



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2437



Power_Spectral_Density_NVNT_ANT1_802_11n(HT40)_2452

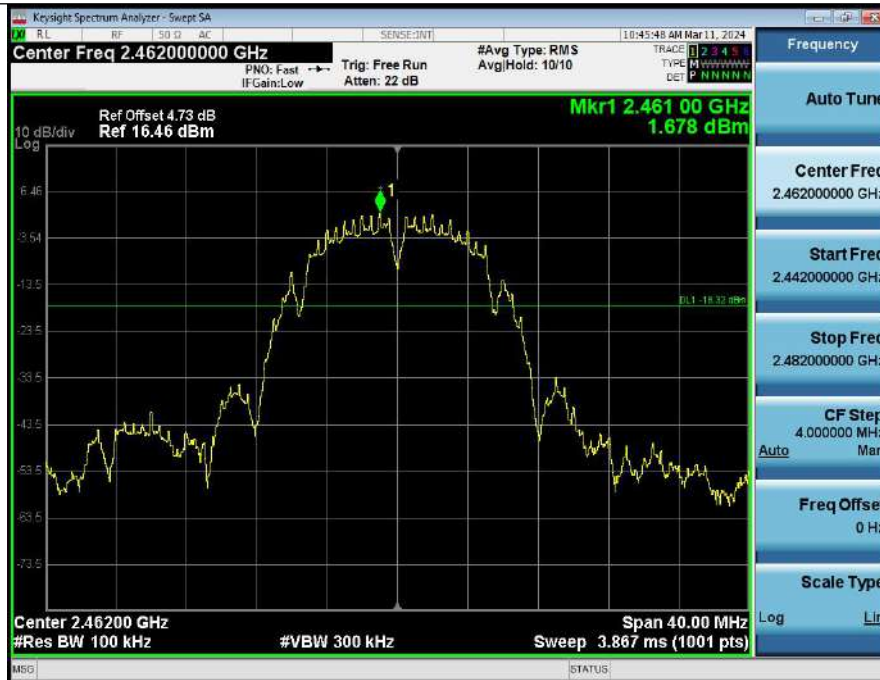


6. Bandedge

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	2399.936	-47.829	-18.264	Pass
NVNT	ANT1	802.11b	2462.00	2483.536	-56.811	-18.322	Pass
NVNT	ANT1	802.11g	2412.00	2399.936	-33.109	-21.305	Pass
NVNT	ANT1	802.11g	2462.00	2483.536	-42.673	-21.207	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	2399.824	-32.096	-21.334	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	2483.536	-39.349	-21.821	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2399.760	-37.288	-25.488	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	2484.428	-41.149	-24.298	Pass



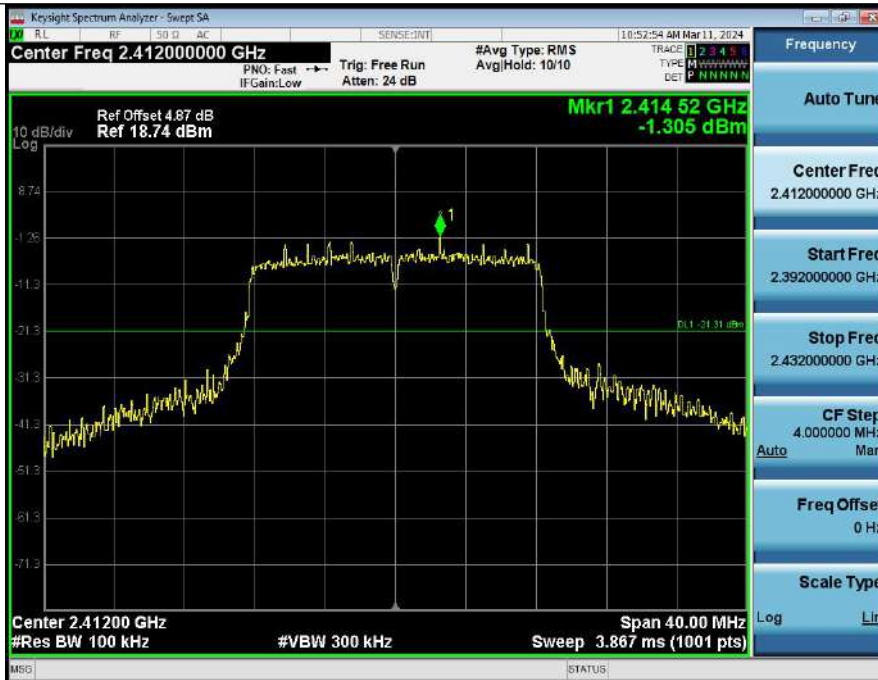
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2_Bandedge_NVNT_ANT1_802_11b_2462



1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



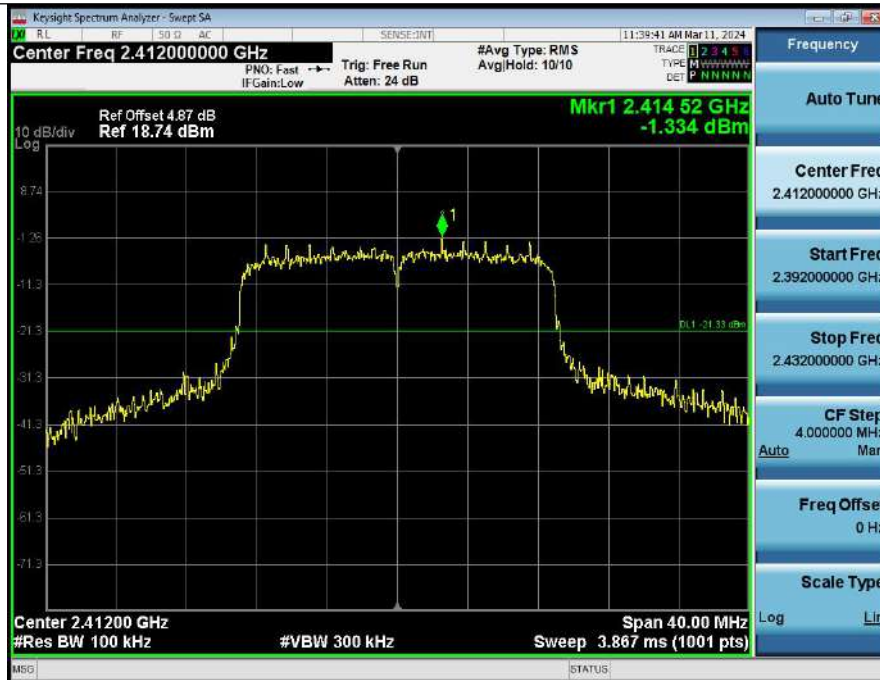
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2_Bandedge_NVNT_ANT1_802_11g_2462



1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412



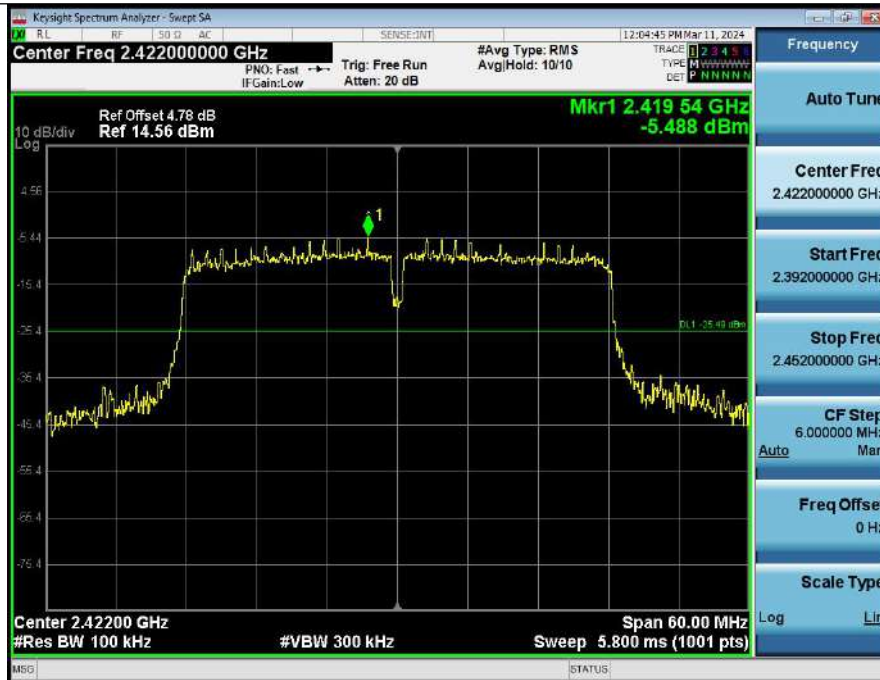
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



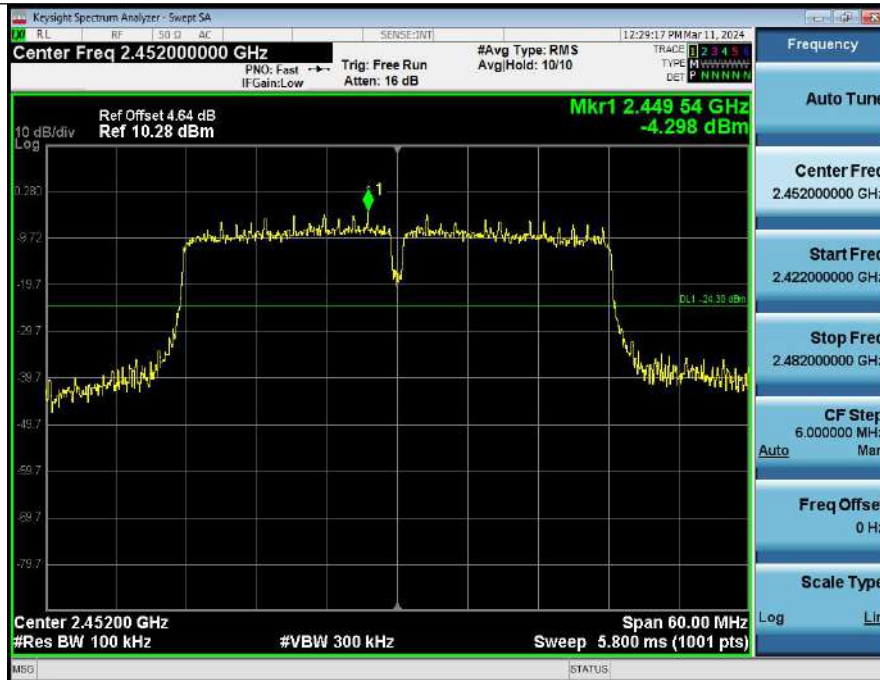
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2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452



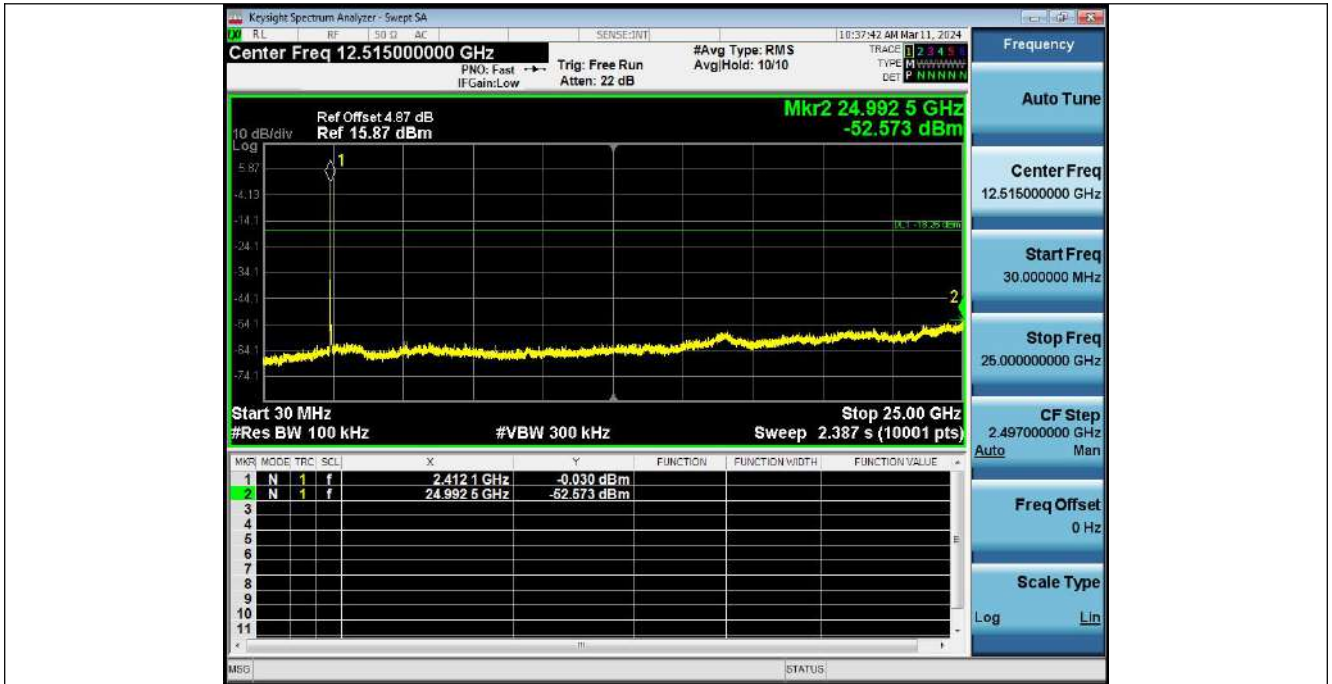
7. Spurious Emission

Condition	Antenna	Modulation	TX_Frequency (MHz)	Max. Mark_frequency(MHz)	Spurious level(dBm)	limit(dBm)	Result
NVNT	ANT1	802.11b	2412.00	24992.509	-52.573	-18.264	Pass
NVNT	ANT1	802.11b	2437.00	24965.042	-52.793	-19.865	Pass
NVNT	ANT1	802.11b	2462.00	24945.066	-56.800	-18.322	Pass
NVNT	ANT1	802.11g	2412.00	24982.521	-54.428	-21.305	Pass
NVNT	ANT1	802.11g	2437.00	24952.557	-56.237	-23.466	Pass
NVNT	ANT1	802.11g	2462.00	24940.072	-53.151	-21.207	Pass
NVNT	ANT1	802.11n(HT20)	2412.00	24485.618	-54.652	-21.334	Pass
NVNT	ANT1	802.11n(HT20)	2437.00	719.172	-39.505	-23.088	Pass
NVNT	ANT1	802.11n(HT20)	2462.00	24892.629	-54.517	-21.821	Pass
NVNT	ANT1	802.11n(HT40)	2422.00	2659.341	-57.361	-25.488	Pass
NVNT	ANT1	802.11n(HT40)	2437.00	24982.521	-58.087	-25.791	Pass
NVNT	ANT1	802.11n(HT40)	2452.00	24945.066	-62.965	-24.298	Pass

1 Reference_Level_NVNT_ANT1_802_11b_2412



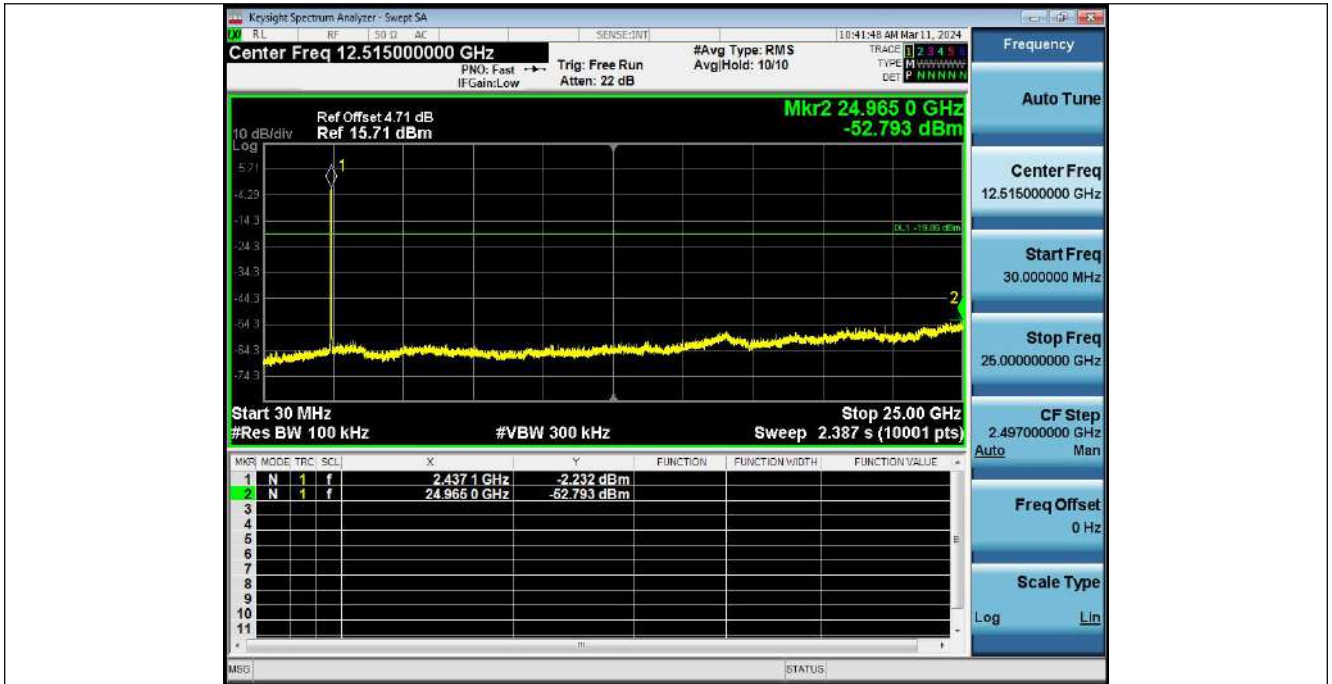
2 Spurious Emission_NVNT_ANT1_802_11b_2412



1 Reference Level NVNT ANT1 802 11b 2437



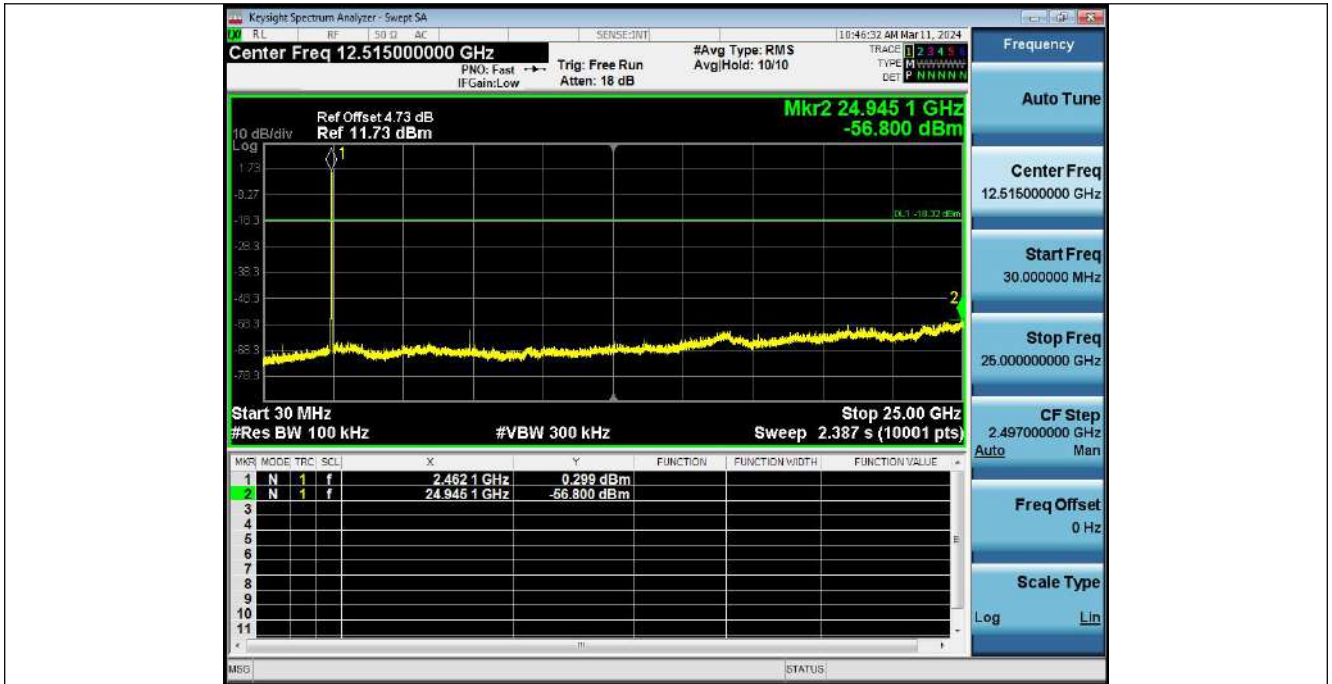
2 Spurious Emission NVNT ANT1 802 11b 2437



1 Reference Level NVNT_ANT1_802_11b_2462



2 Spurious Emission NVNT_ANT1_802_11b_2462



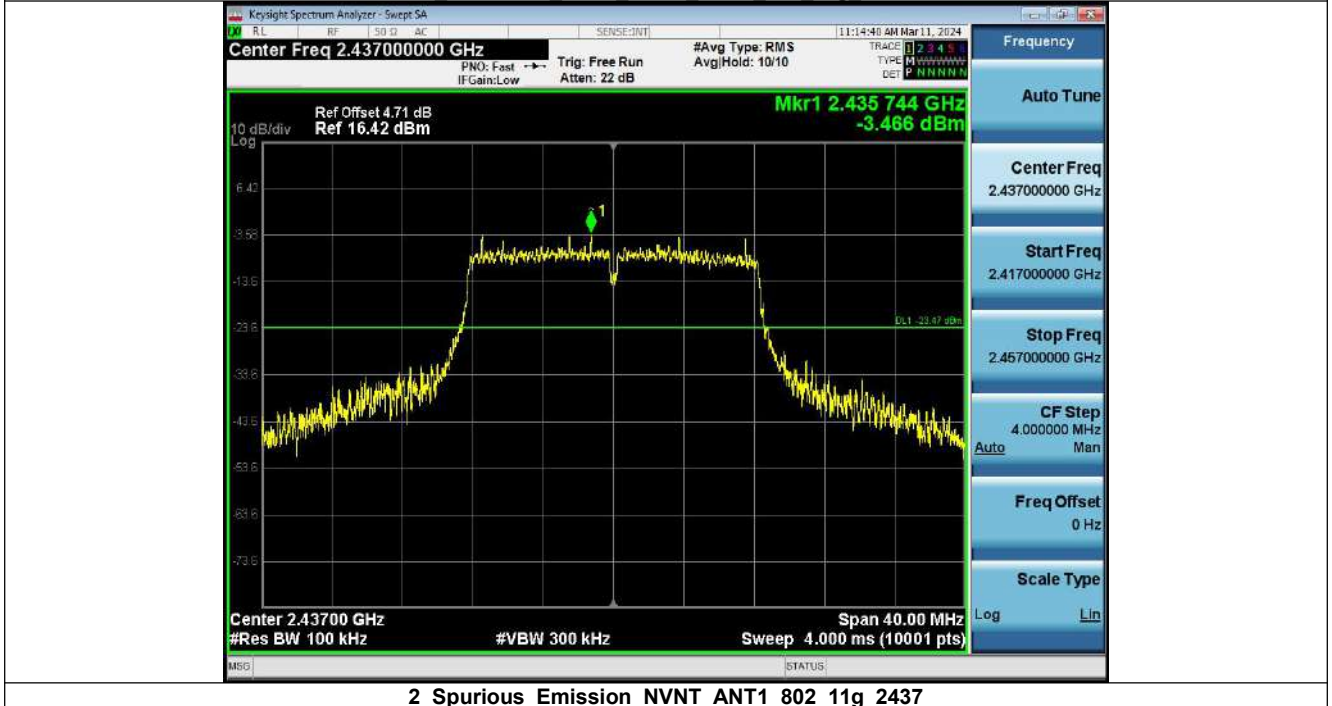
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2 Spurious Emission NVNT_ANT1_802_11g_2412



1 Reference Level NVNT_ANT1_802_11g_2437



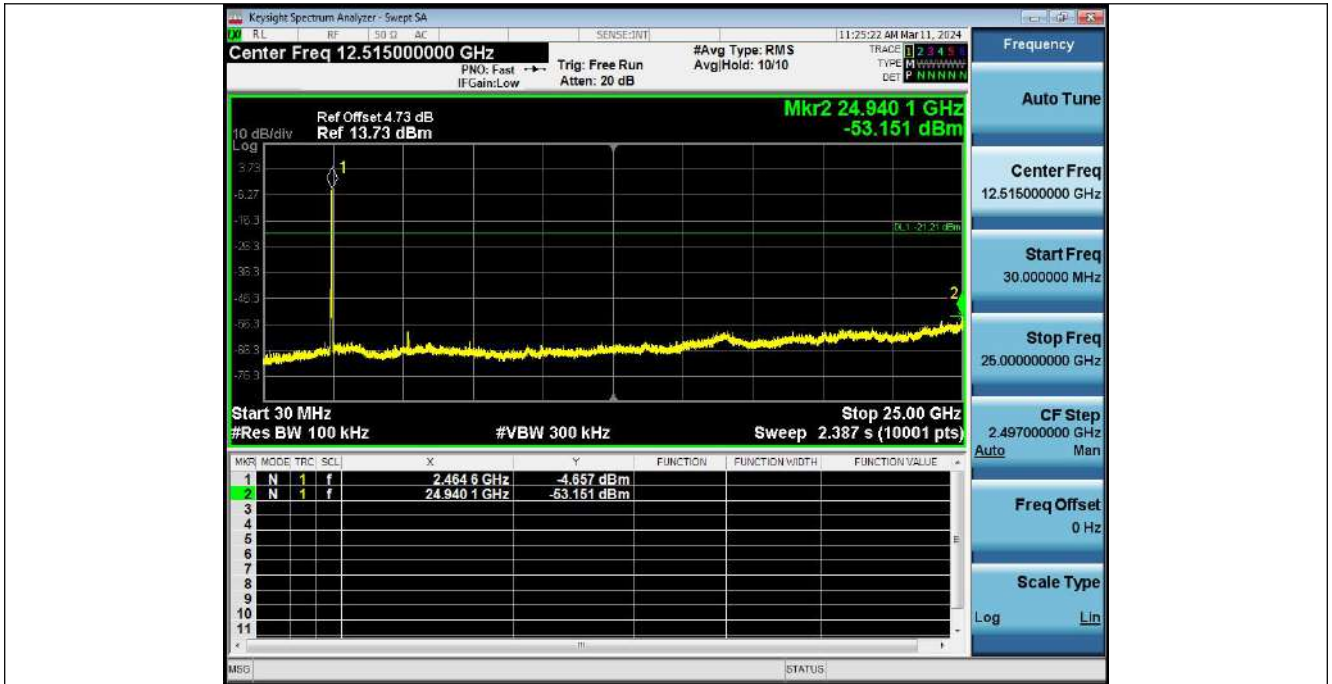
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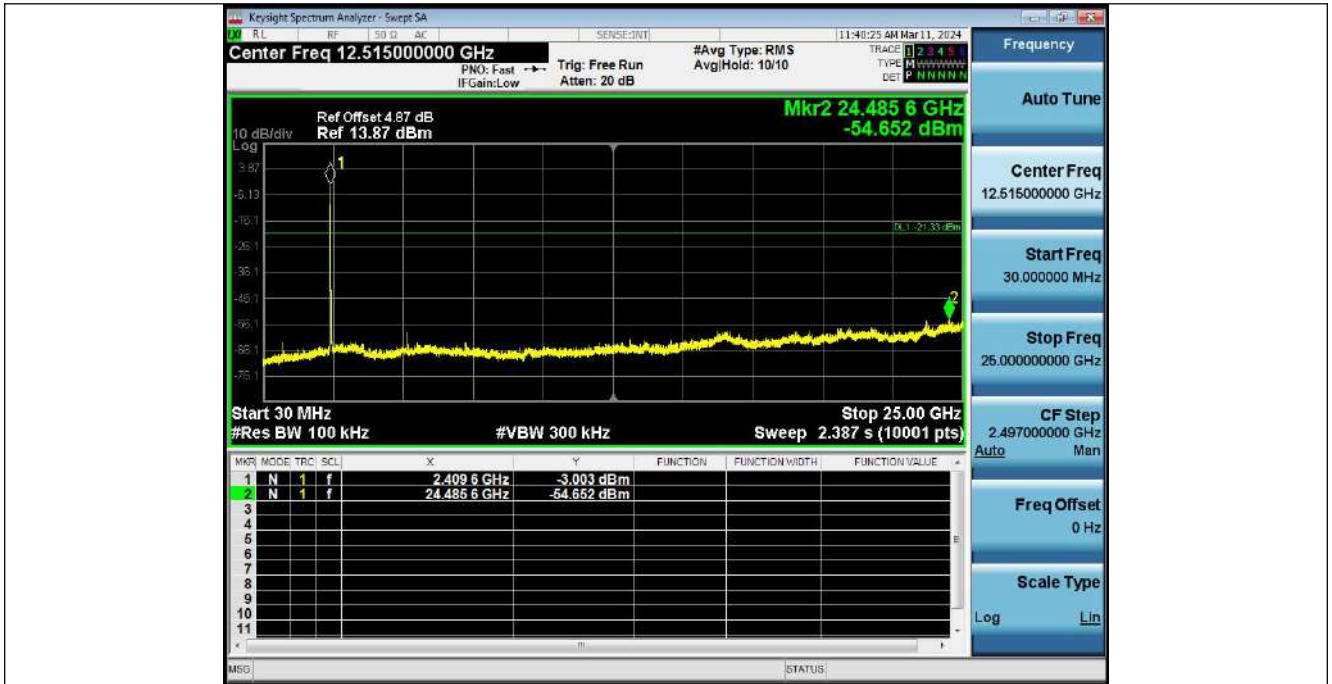
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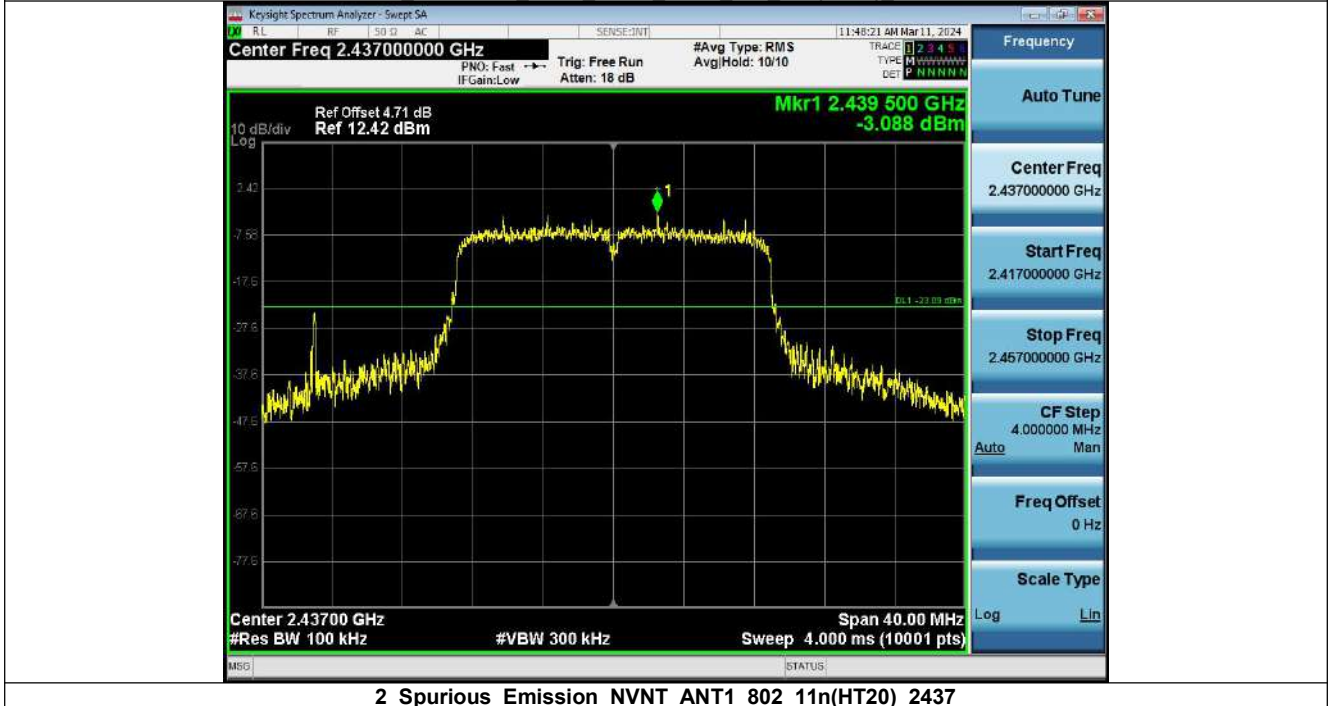
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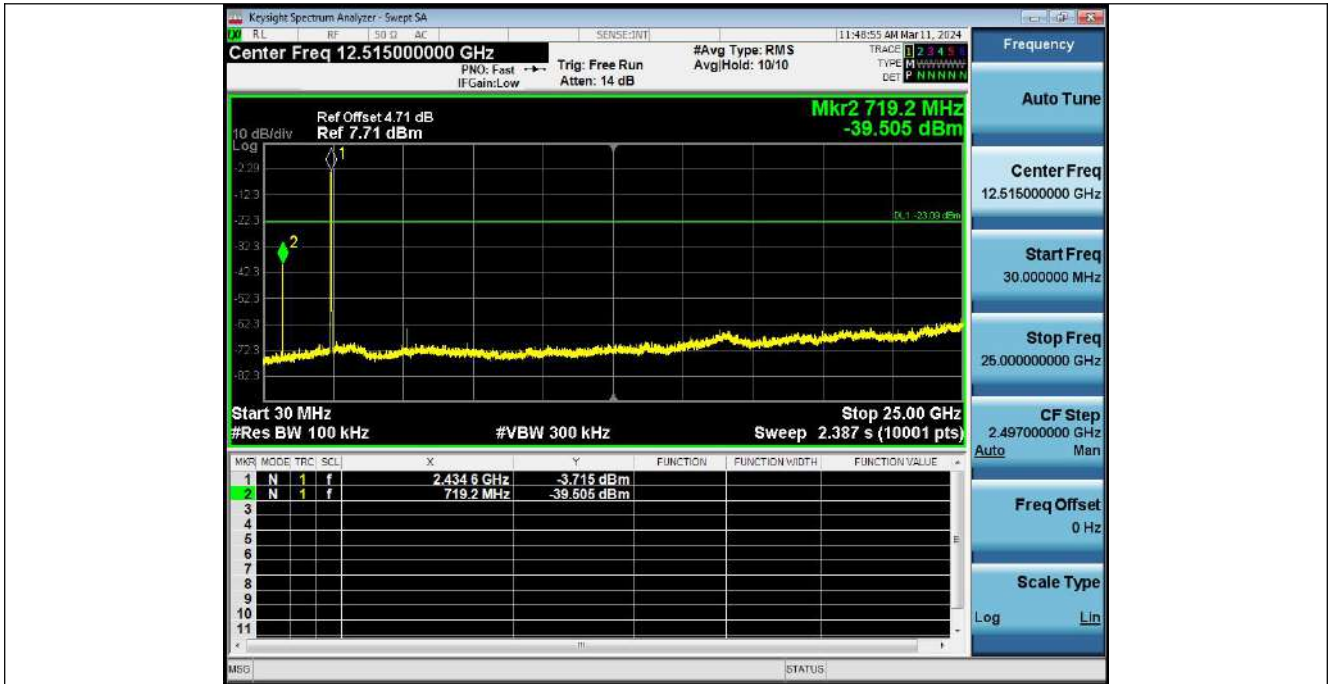
2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2412



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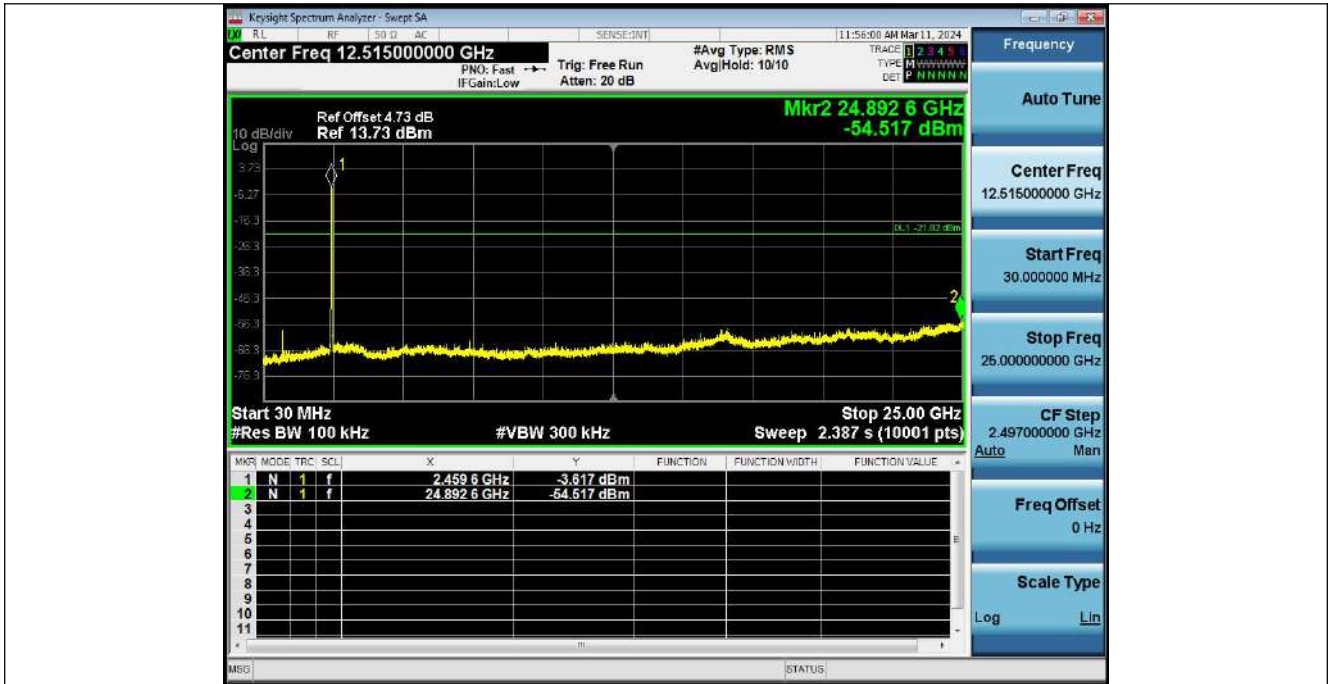


2 Spurious Emission NVNT_ANT1_802_11n(HT20)_2437



1 Reference Level NVNT_ANT1_802_11n(HT20)_2462

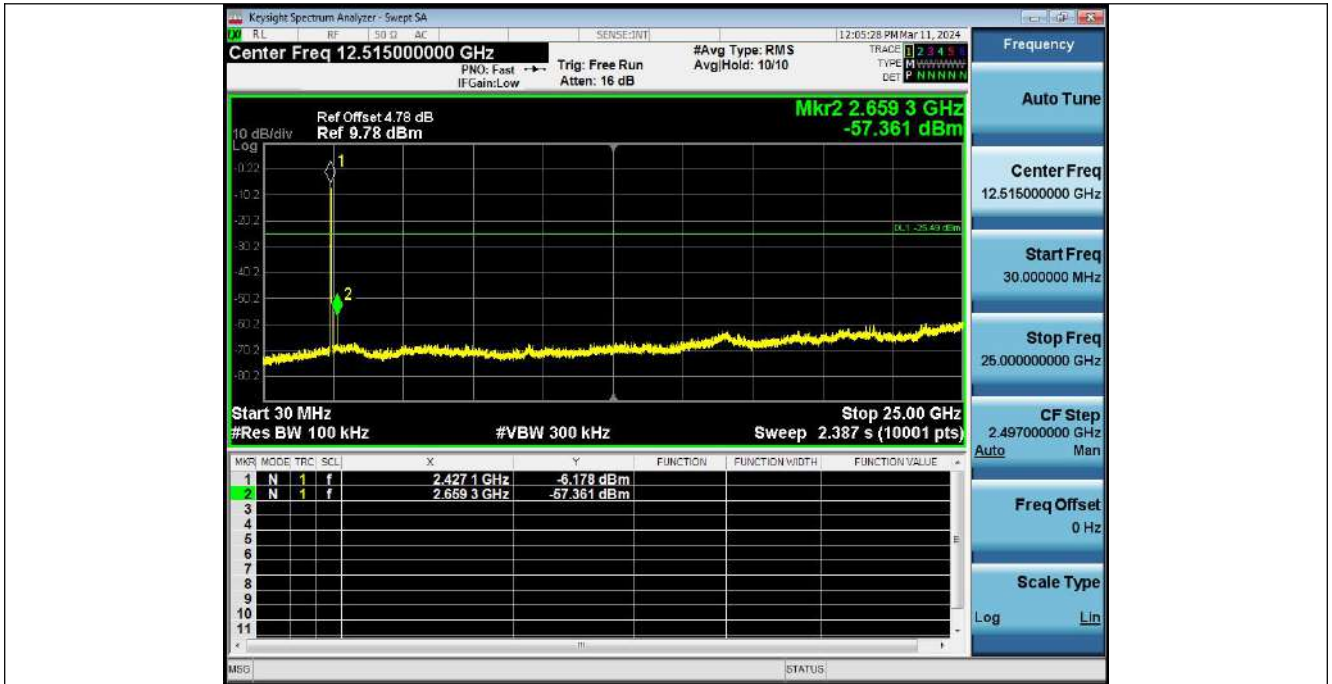




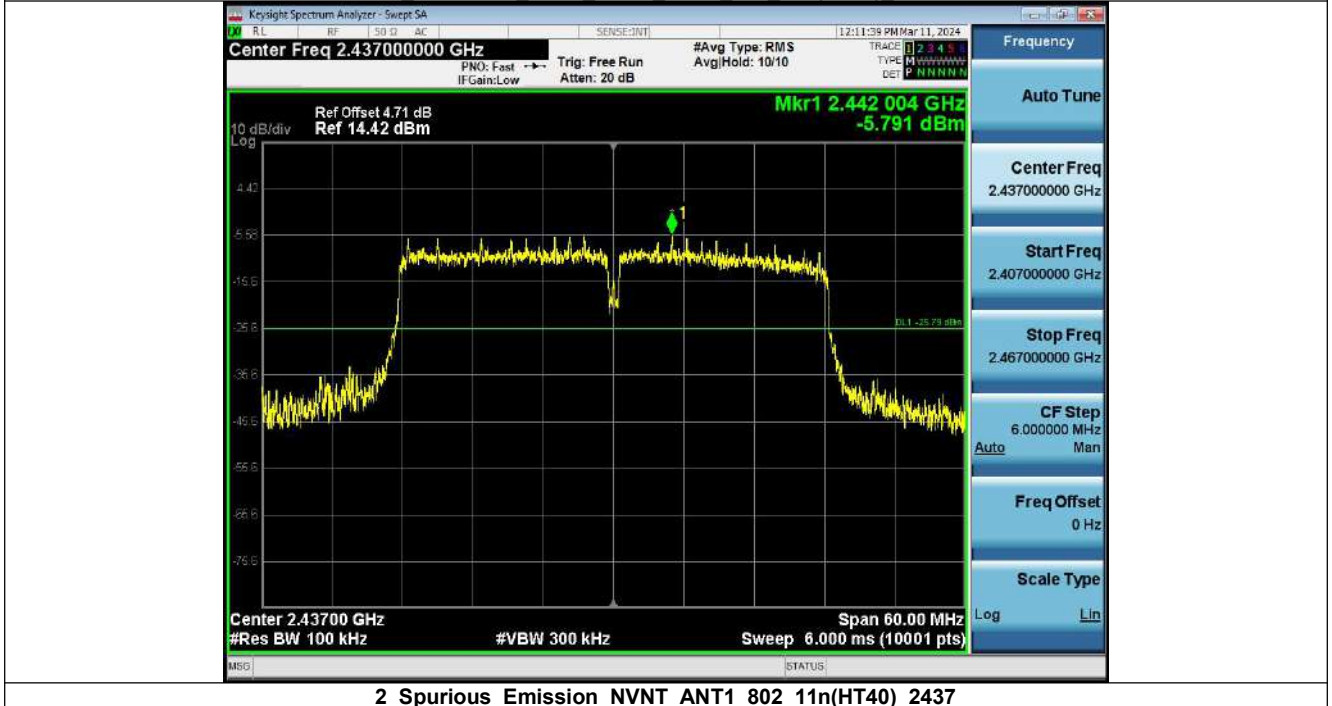
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2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2422



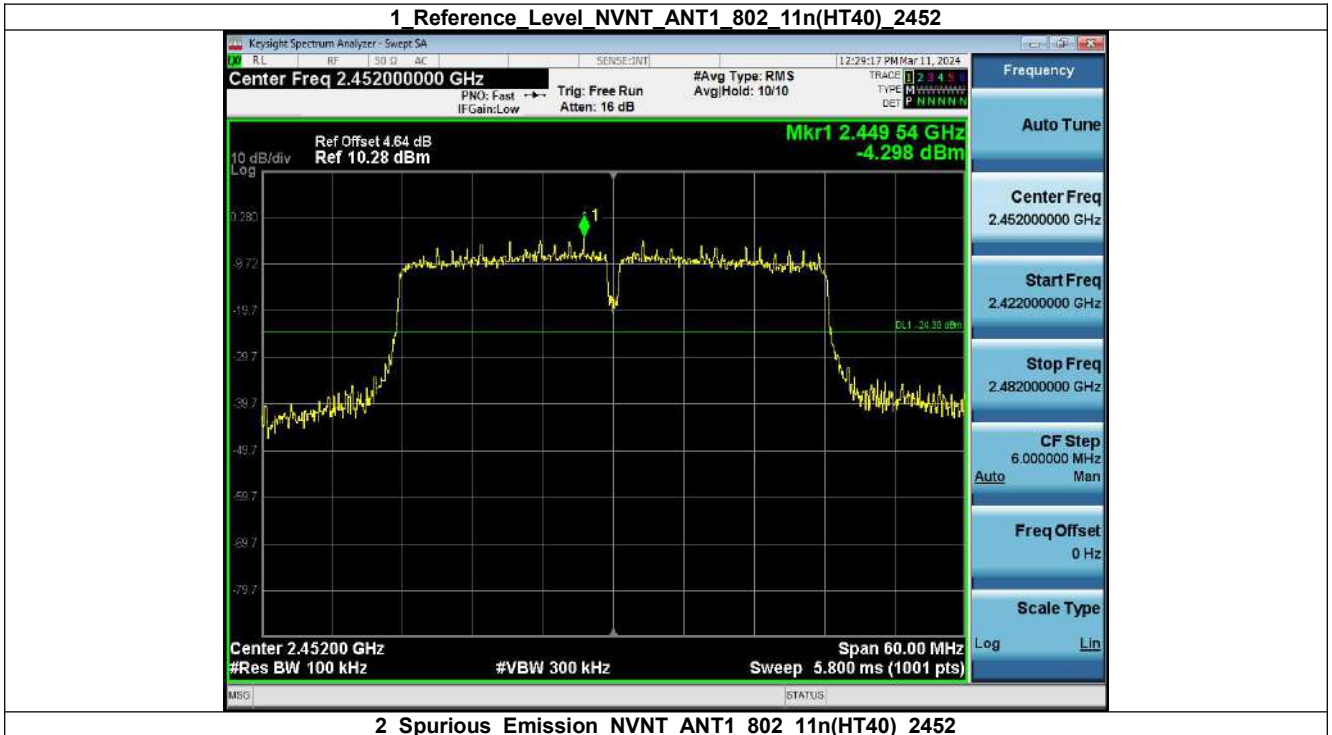
1 Reference Level NVNT_ANT1_802_11n(HT40)_2437



2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2437



1 Reference Level NVNT_ANT1_802_11n(HT40)_2452



2 Spurious Emission NVNT_ANT1_802_11n(HT40)_2452

