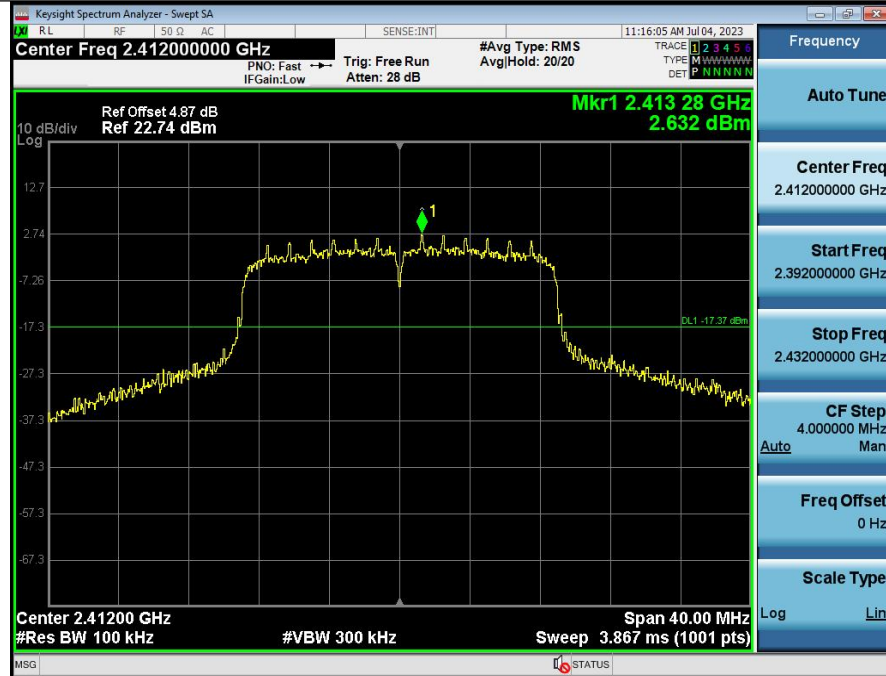
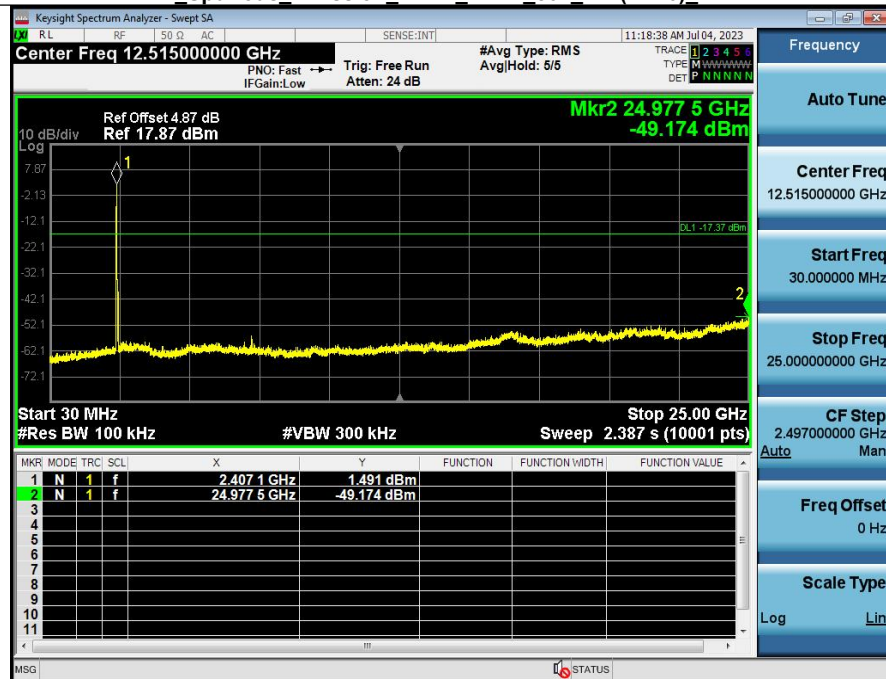


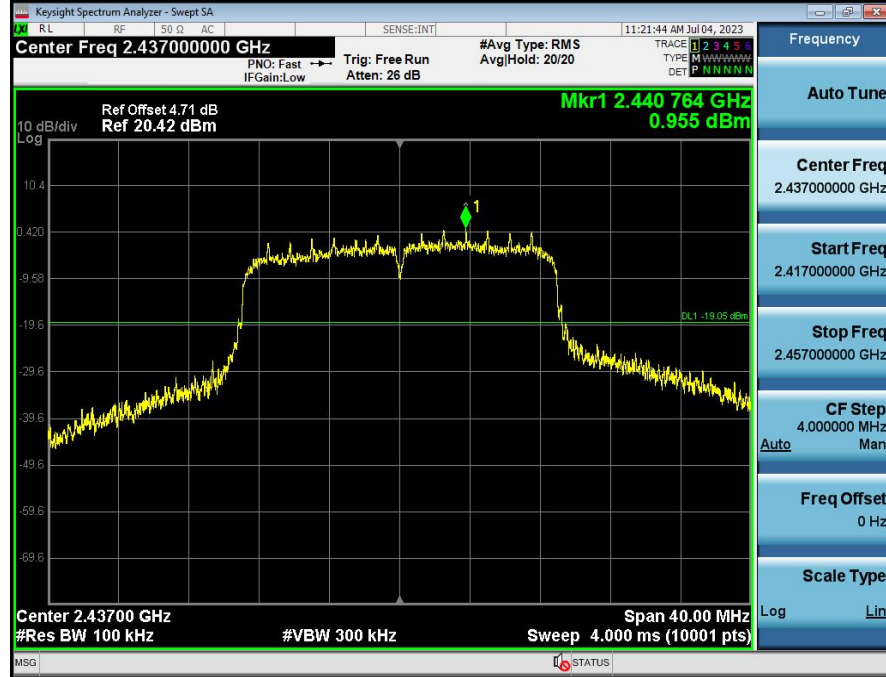
1 Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



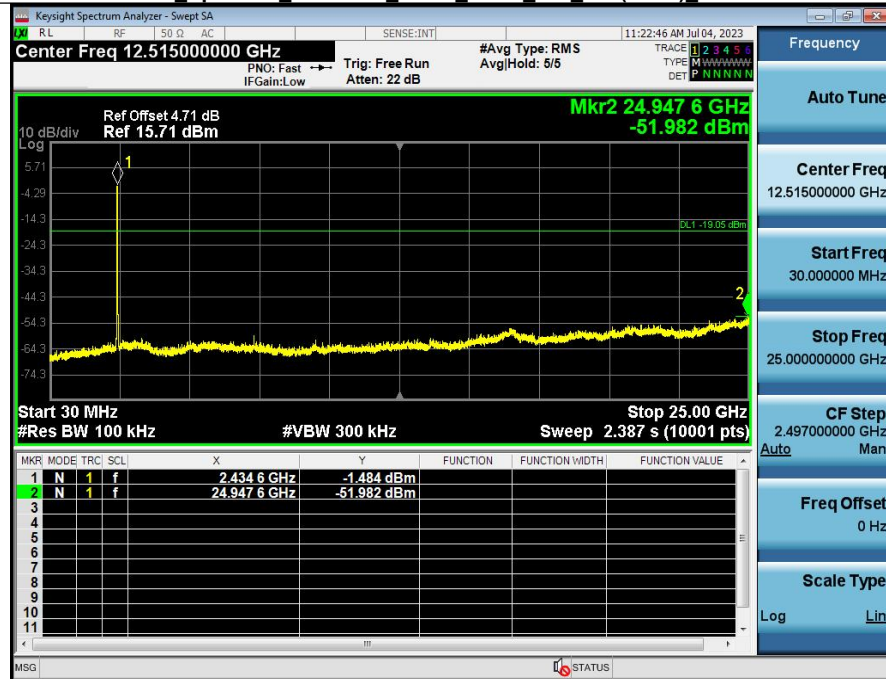
2 Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2412



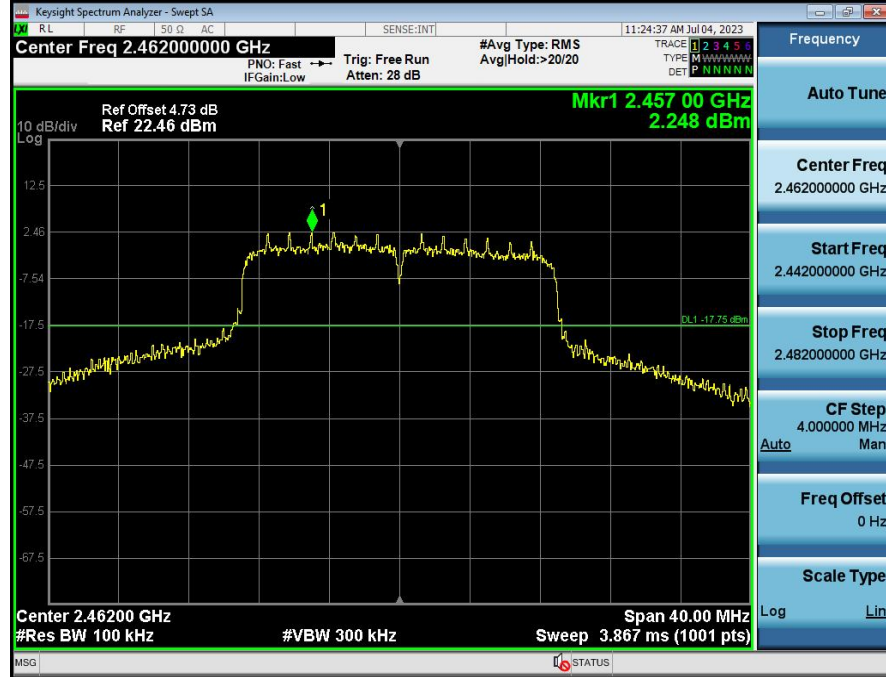
1 Reference_Level_NVNT_ANT1_802_11n(HT20)_2437



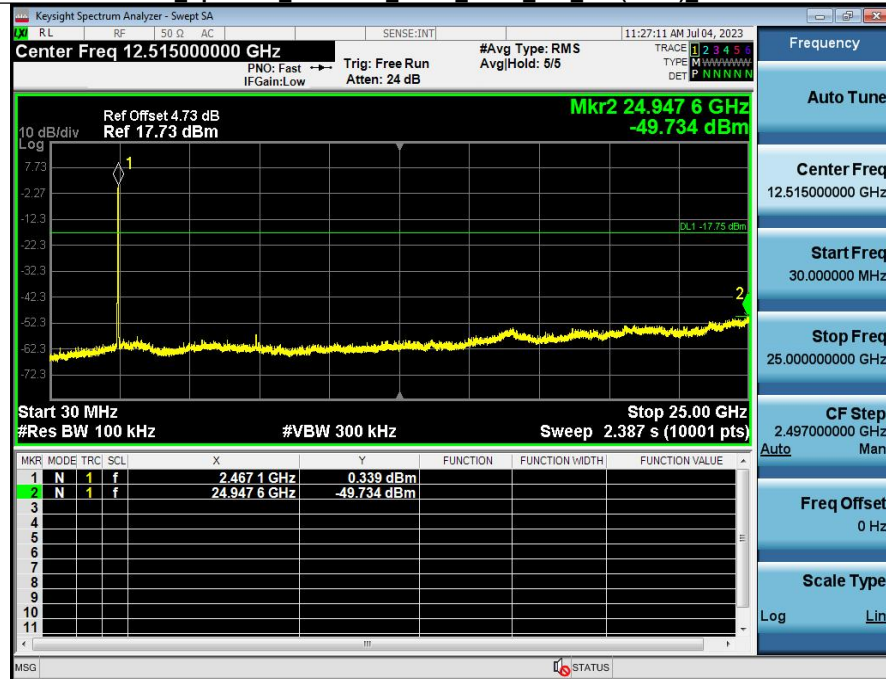
2 Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2437



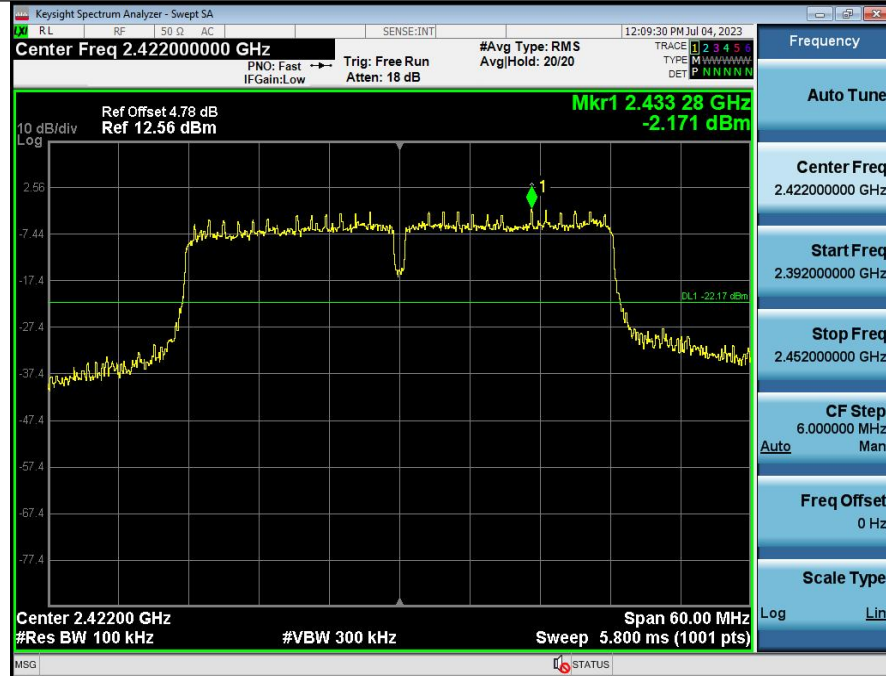
1 Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



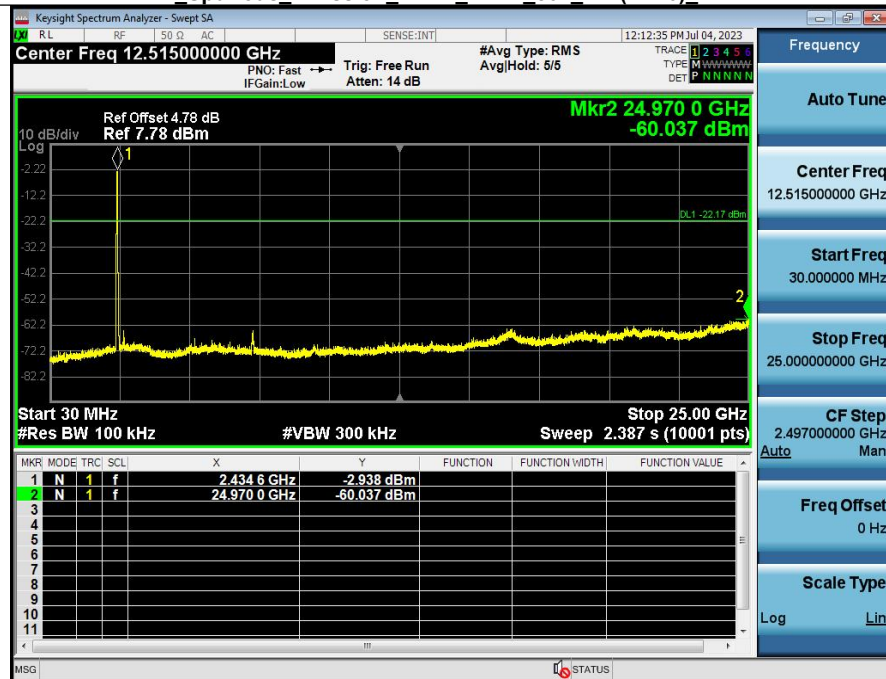
2 Spurious_Emission_NVNT_ANT1_802_11n(HT20)_2462



1 Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



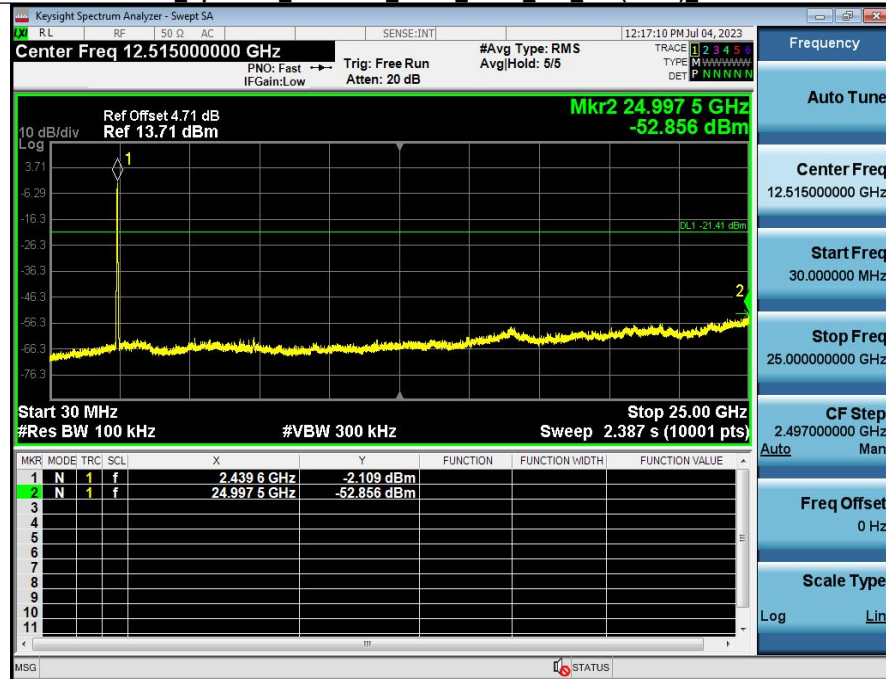
2 Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2422



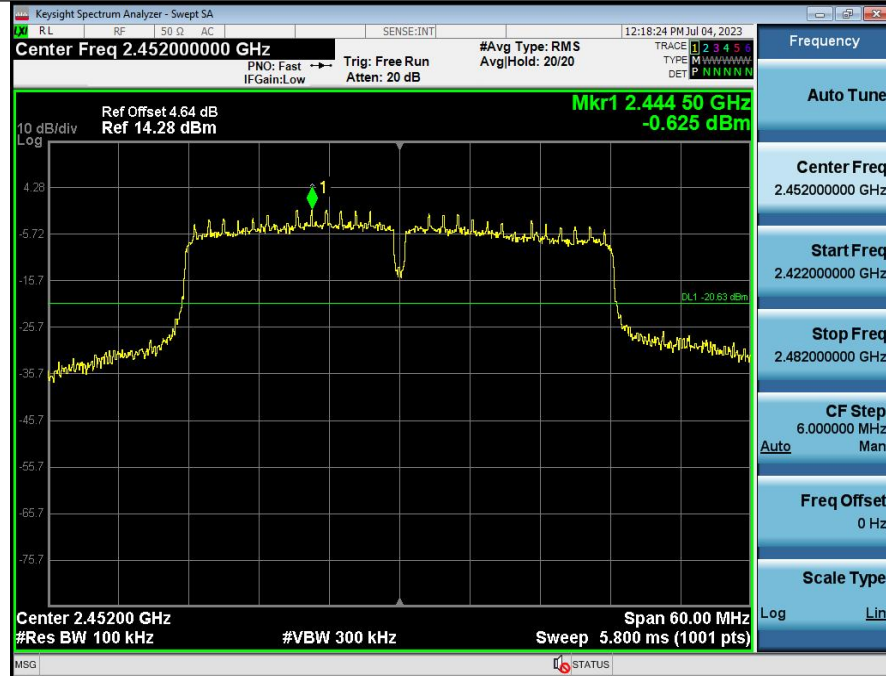
1 Reference_Level_NVNT_ANT1_802_11n(HT40)_2437



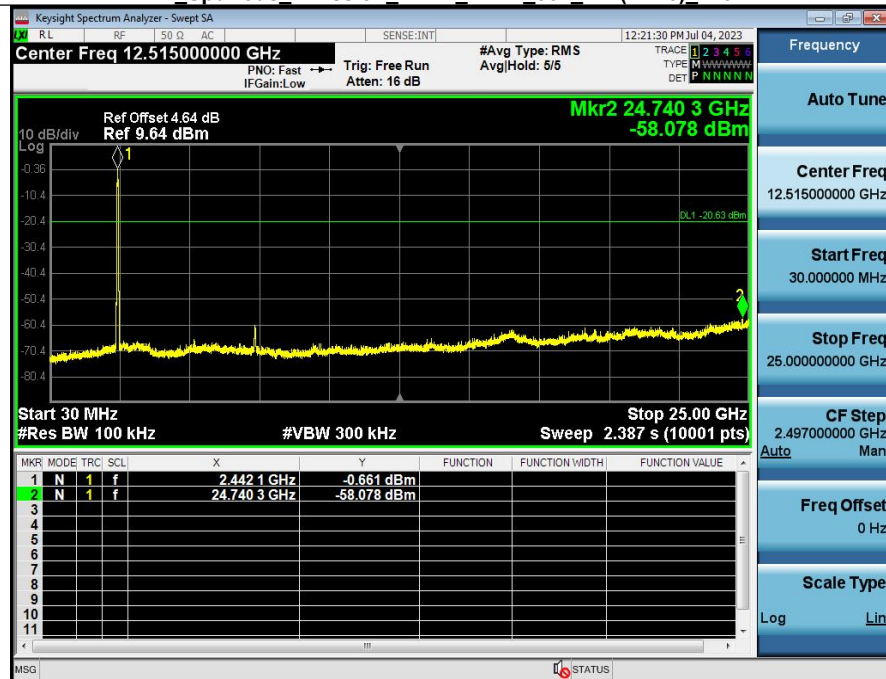
2 Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2437



1 Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



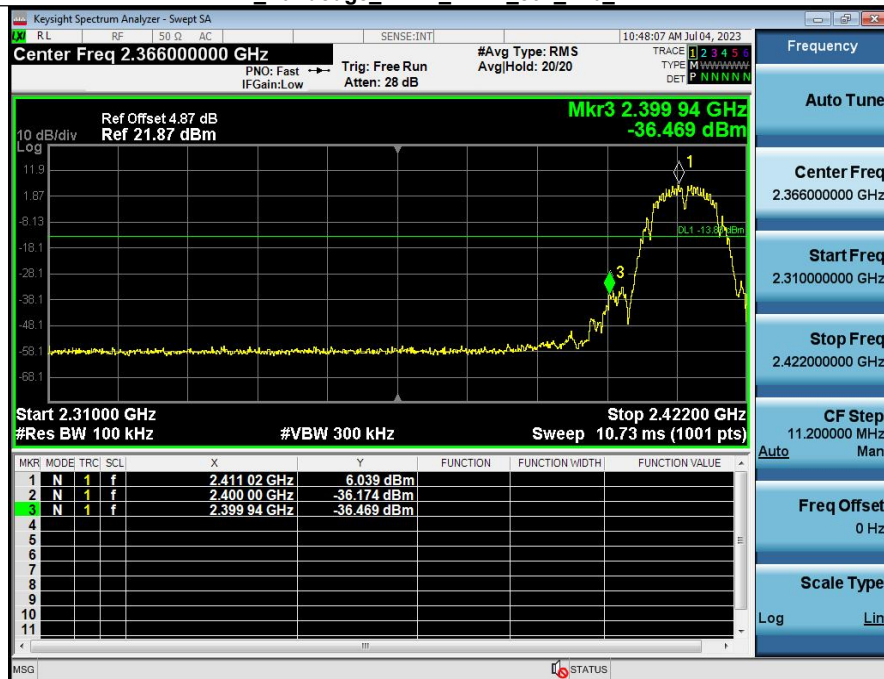
2 Spurious_Emission_NVNT_ANT1_802_11n(HT40)_2452



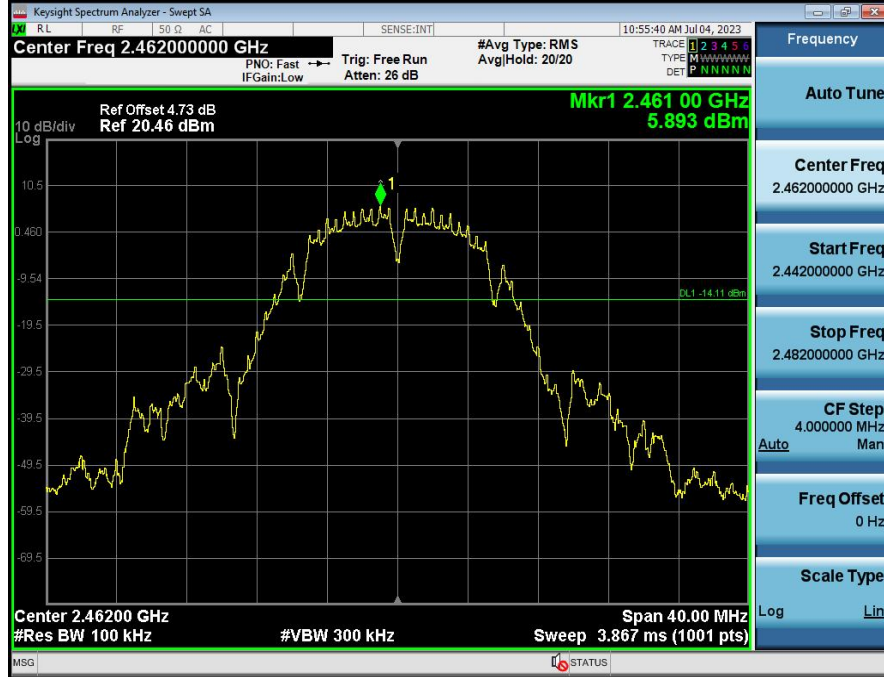
1 Reference_Level_NVNT_ANT1_802_11b_2412



2 Bandedge_NVNT_ANT1_802_11b_2412



1_Reference_Level_NVNT_ANT1_802_11b_2462



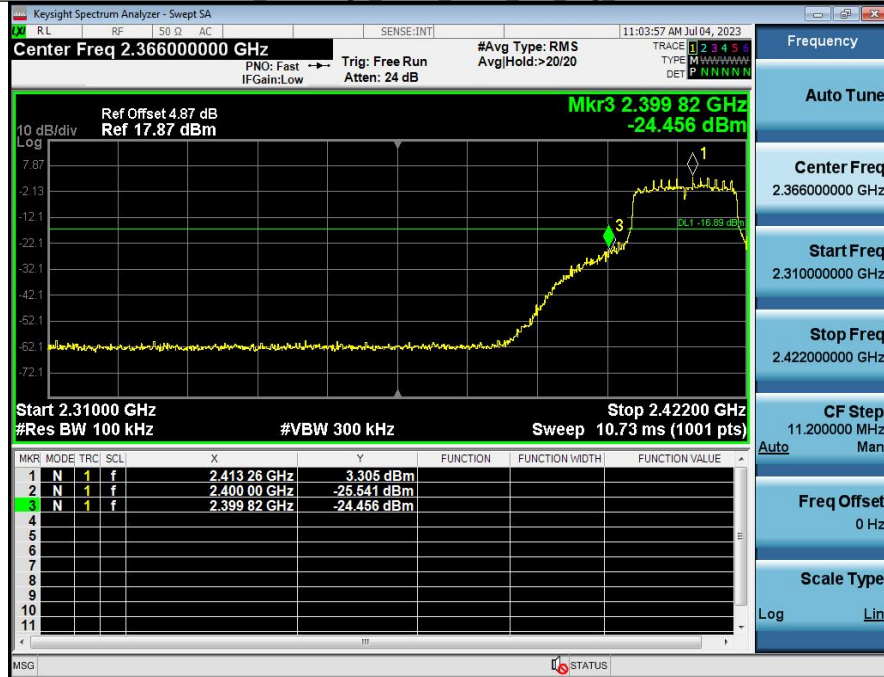
2_Bandedge_NVNT_ANT1_802_11b_2462



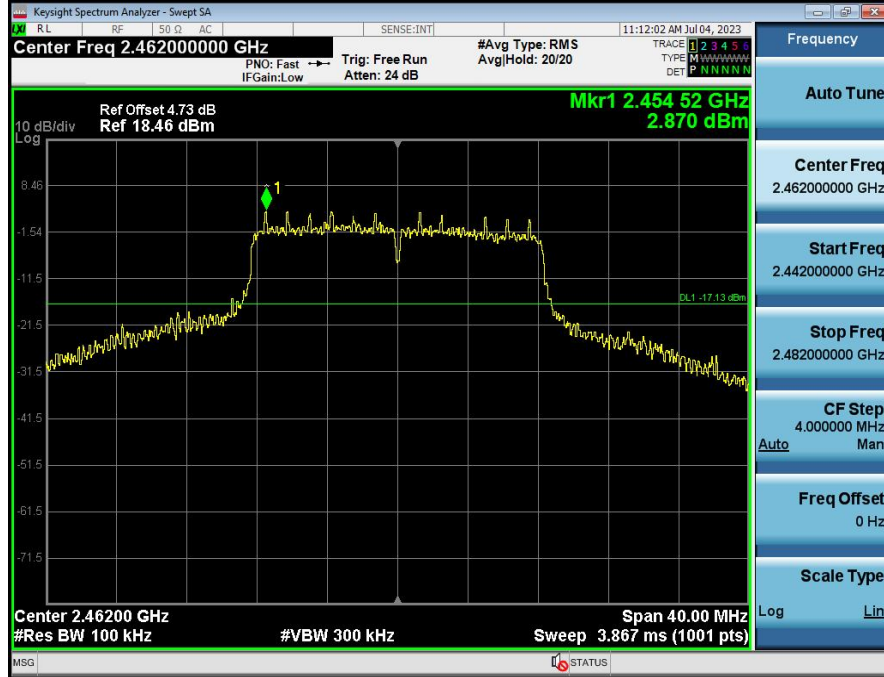
1_Reference_Level_NVNT_ANT1_802_11g_2412



2_Bandedge_NVNT_ANT1_802_11g_2412



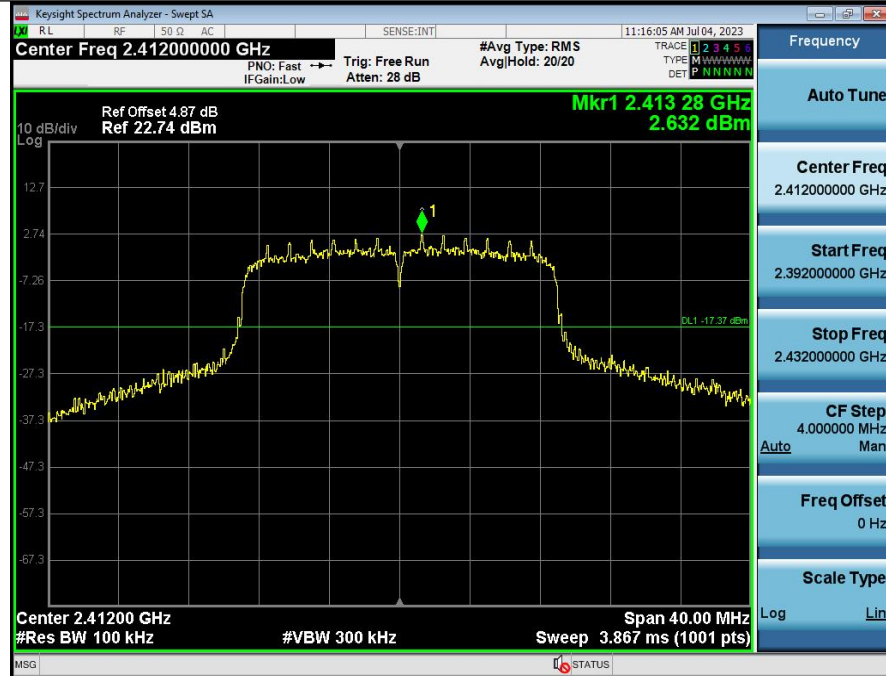
1_Reference_Level_NVNT_ANT1_802_11g_2462



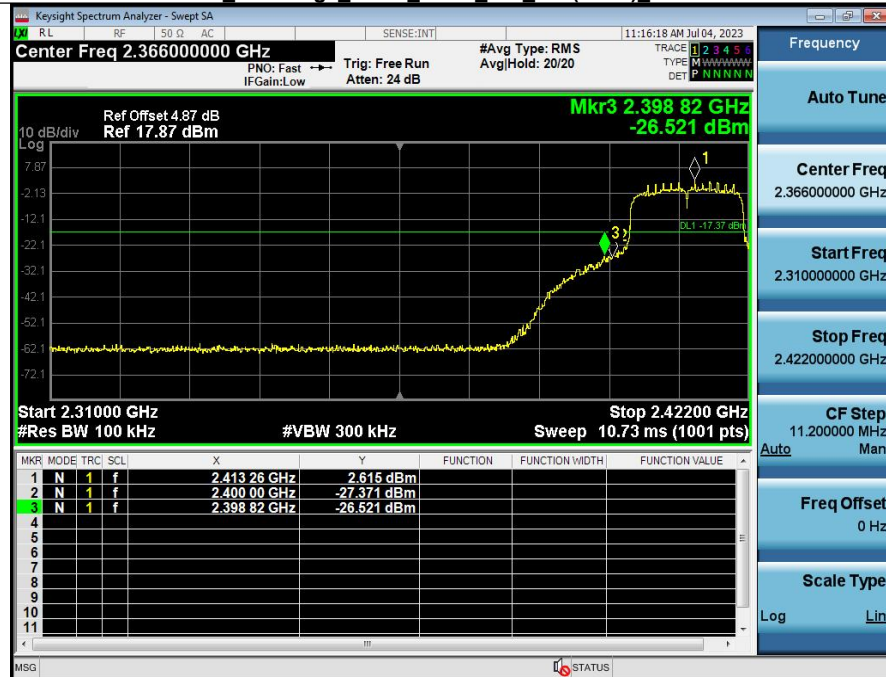
2_Bandedge_NVNT_ANT1_802_11g_2462



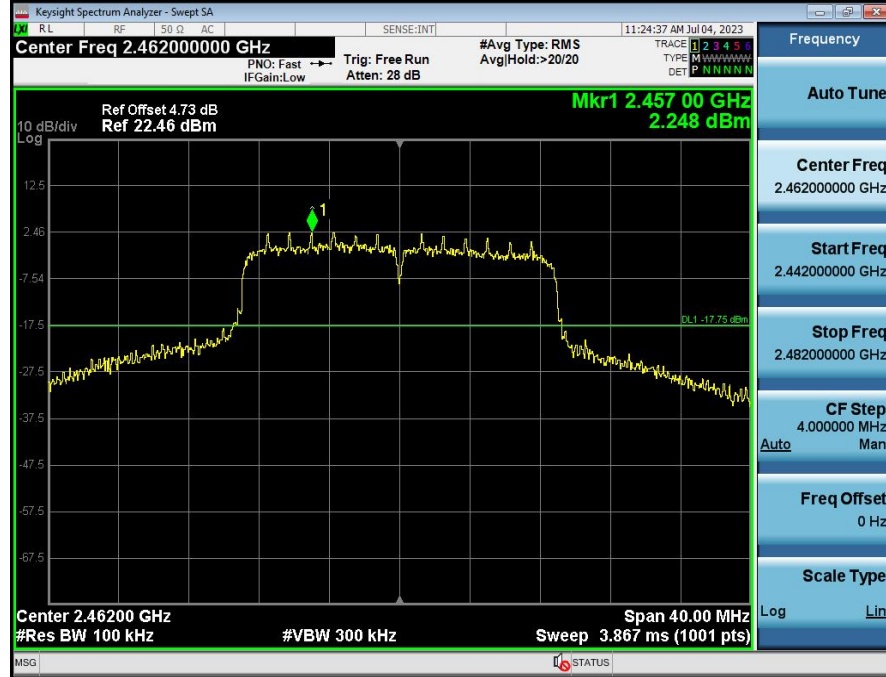
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2412



2_Bandedge_NVNT_ANT1_802_11n(HT20)_2412



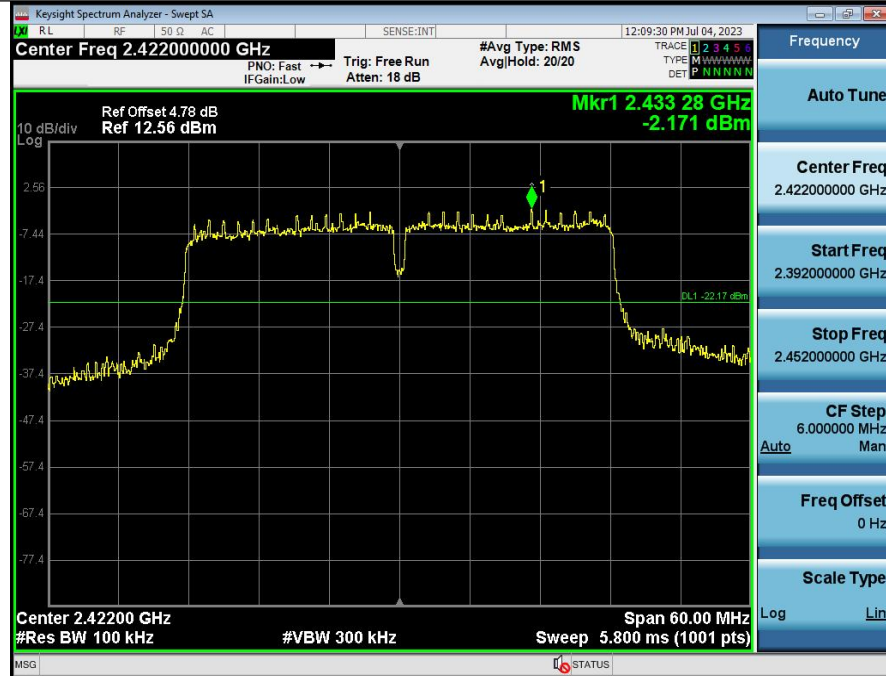
1_Reference_Level_NVNT_ANT1_802_11n(HT20)_2462



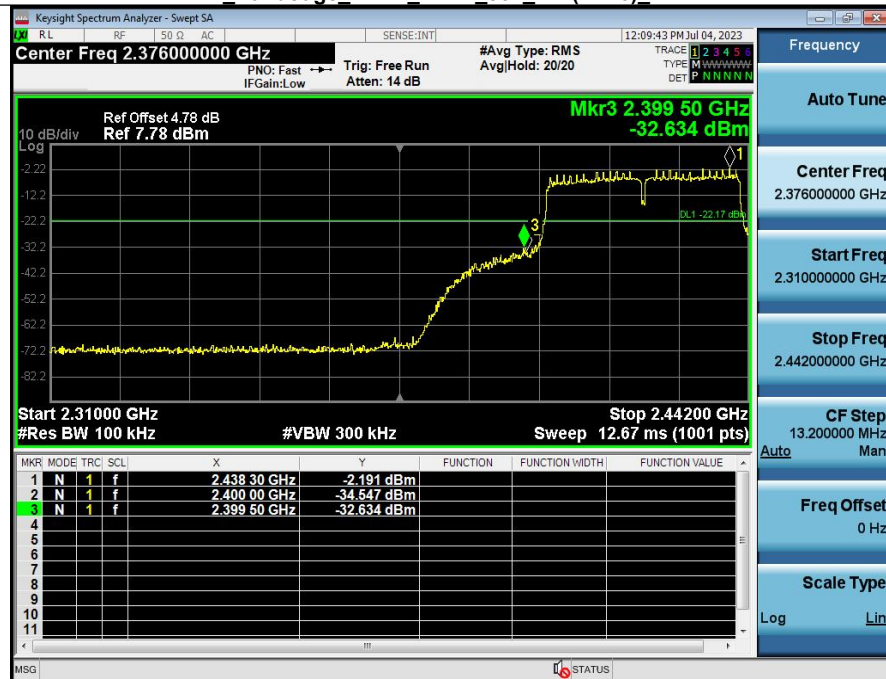
2_Bandedge_NVNT_ANT1_802_11n(HT20)_2462



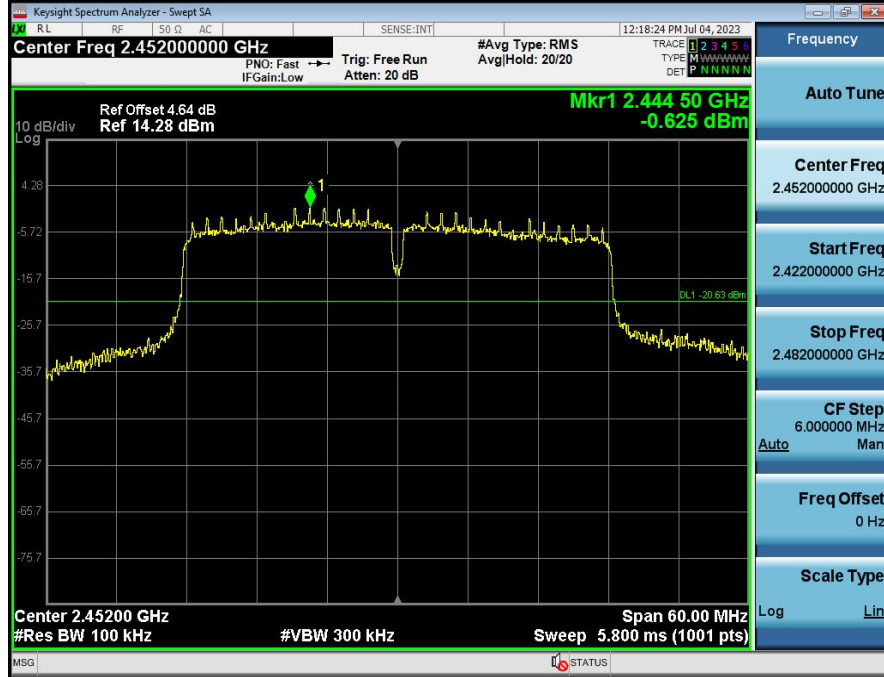
1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2422



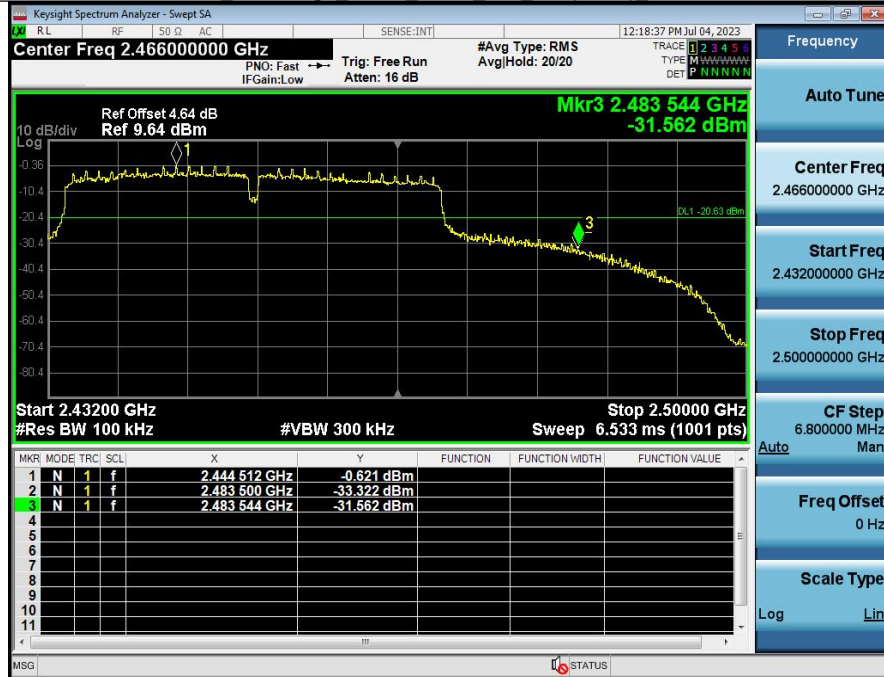
2_Bandedge_NVNT_ANT1_802_11n(HT40)_2422



1_Reference_Level_NVNT_ANT1_802_11n(HT40)_2452



2_Bandedge_NVNT_ANT1_802_11n(HT40)_2452





Test Report Number: BTF230703R00603

A.4 Conducted Emission

N/A

A.5 Radiated Spurious Emission

Note 1: The symbol of “--” in the table which means not application.

Note 2: For the test data above 1 GHz, according the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

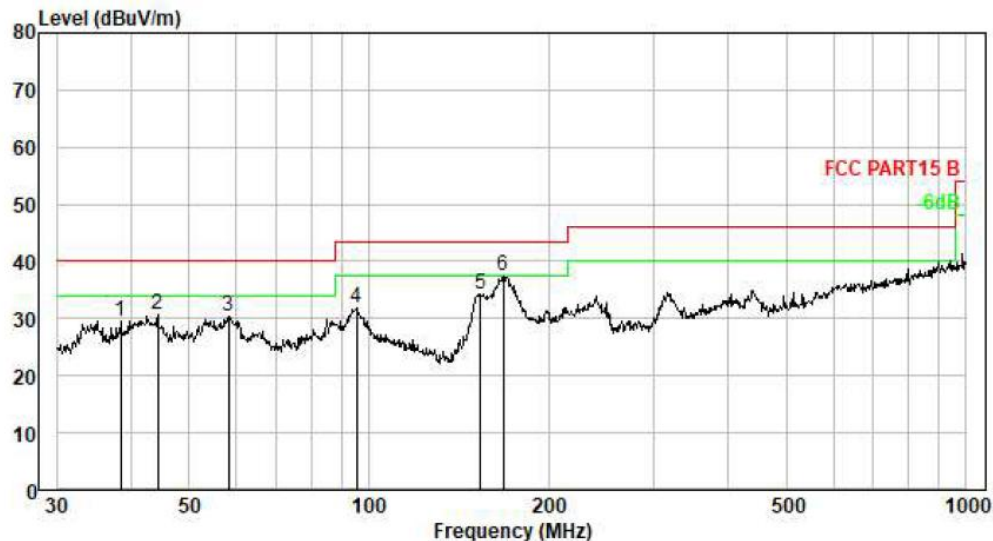
Note 3: The EUT is working in the Normal link mode below 1 GHz. All modes have been tested and DH5-Hopping mode is the worst.

Note 4: Results (dBuV/m) = Original reading level of Spectrum Analyzer (dBuV/m) + Factor (dB)

The low frequency, which started from 9 kHz to 30 MHz, was pre-scanned and the result which was 20 dB lower than the limit line per 15.31(o) was not reported.

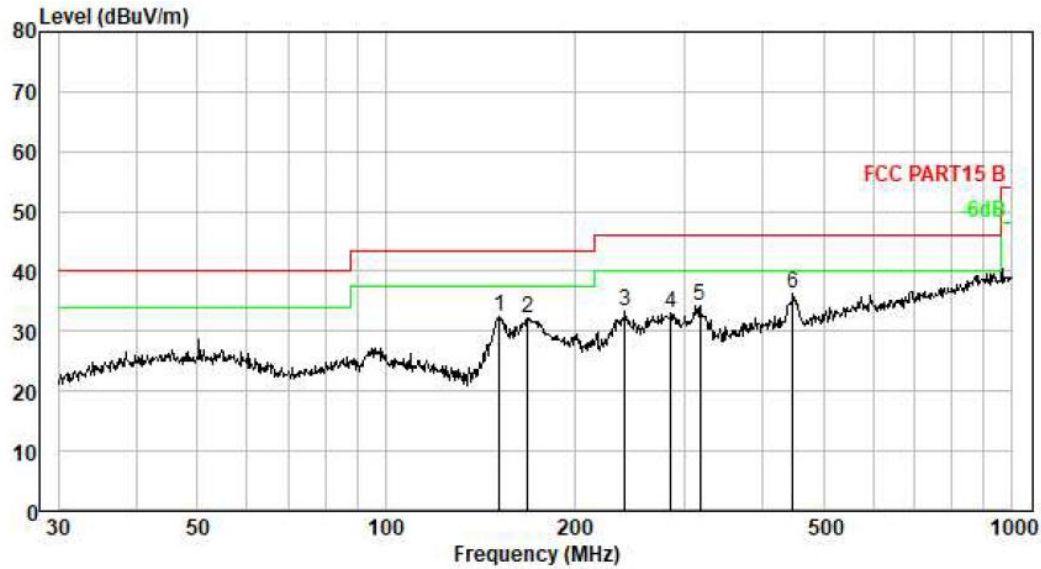
(30 MHz ~ 1GHz Harmonic)

30 MHz to 1 GHz, ANT Vertical 802.11b Channel 1



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBμV	Preamp Gain dB	Emission Level dBμV/m	Limit dBμV/m	Over Limit dB	Remark
1	38.346	0.33	12.07	17.25	0.00	29.65	40.00	-10.35	QP
2	44.275	0.39	12.59	17.60	0.00	30.58	40.00	-9.42	QP
3	58.203	0.49	11.87	18.19	0.00	30.55	40.00	-9.45	QP
4	95.427	0.67	10.57	20.72	0.00	31.96	43.50	-11.54	QP
5	153.739	0.92	8.49	24.98	0.00	34.39	43.50	-9.11	QP
6	167.824	0.97	9.19	27.34	0.00	37.50	43.50	-6.00	QP

30 MHz to 1 GHz, ANT Horizontal 802.11b Channel 1



No.	Freq MHz	Cable Loss dB	ANT Factor dB/m	Receiver Reading dBμV	Preamp Gain dB	Emission Level dBμV/m	Limit dBμV/m	Over Limit dB	Remark
1	151.597	0.91	8.38	23.10	0.00	32.39	43.50	-11.11	QP
2	168.414	0.97	9.22	22.13	0.00	32.32	43.50	-11.18	QP
3	240.830	1.16	12.73	19.56	0.00	33.45	46.00	-12.55	QP
4	284.977	1.25	13.93	17.77	0.00	32.95	46.00	-13.05	QP
5	317.701	1.31	14.60	18.46	0.00	34.37	46.00	-11.63	QP
6	446.414	1.49	16.49	18.28	0.00	36.26	46.00	-9.74	QP

(1 GHz ~ 25 GHz)

802.11b

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detect or Type
Low Channel:2412MHz									
V	4824.00	50.68	30.55	5.77	24.66	50.56	74.00	-23.44	PK
V	4824.00	40.41	30.55	5.77	24.66	40.29	54.00	-13.71	AV
V	7236.00	47.34	30.33	6.32	24.55	47.88	74.00	-26.12	PK
V	7236.00	46.26	30.33	6.32	24.55	45.80	54.00	-8.20	AV
V	9648.00	48.34	30.85	7.45	24.69	49.63	74.00	-24.37	PK
V	9648.00	40.71	30.85	7.45	24.69	42.00	54.00	-12.00	AV
V	12060.00	48.62	31.02	8.99	25.57	52.16	74.00	-21.84	PK
V	12060.00	38.96	31.02	8.99	25.57	42.50	54.00	-11.50	AV
H	4824.00	50.57	30.55	5.77	24.66	50.45	74.00	-23.55	PK
H	4824.00	40.14	30.55	5.77	24.66	40.02	54.00	-13.98	AV
H	7236.00	50.58	30.33	6.32	24.55	51.12	74.00	-22.88	PK
H	7236.00	41.47	30.33	6.32	24.55	42.01	54.00	-11.99	AV
H	9648.00	49.71	30.85	7.45	24.69	51.00	74.00	-23.00	PK
H	9648.00	41.13	30.85	7.45	24.69	42.42	54.00	-11.58	AV
H	12060.00	49.94	31.02	8.99	25.57	53.48	74.00	-20.52	PK
H	12060.00	39.19	31.02	8.99	25.57	42.73	54.00	-11.27	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detect or Type
Middle Channel:2437MHz									
V	4874.00	50.63	30.55	5.77	24.66	50.51	74.00	-23.49	PK
V	4874.00	40.49	30.55	5.77	24.66	40.37	54.00	-13.63	AV
V	7311.00	48.02	30.33	6.32	24.55	48.56	74.00	-25.44	PK
V	7311.00	40.93	30.33	6.32	24.55	41.47	54.00	-12.53	AV
V	9748.00	48.24	30.85	7.45	24.69	49.53	74.00	-24.47	PK
V	9748.00	40.56	30.85	7.45	24.69	41.85	54.00	-12.15	AV
V	12185.00	48.66	31.02	8.99	25.57	52.20	74.00	-21.80	PK
V	12185.00	38.96	31.02	8.99	25.57	42.50	54.00	-11.50	AV
H	4874.00	50.94	30.55	5.77	24.66	50.82	74.00	-23.18	PK
H	4874.00	41.59	30.55	5.77	24.66	41.47	54.00	-12.53	AV
H	7311.00	49.36	30.33	6.32	24.55	49.90	74.00	-24.10	PK
H	7311.00	40.87	30.33	6.32	24.55	41.41	54.00	-12.59	AV
H	9748.00	50.08	30.85	7.45	24.69	51.37	74.00	-22.63	PK
H	9748.00	41.33	30.85	7.45	24.69	42.62	54.00	-11.38	AV
H	12185.00	49.98	31.02	8.99	25.57	53.52	74.00	-20.48	PK
H	12185.00	40.07	31.02	8.99	25.57	43.61	54.00	-10.39	AV

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/ m)	Margin (dB)	Detect or Type
High Channel:2462MHz									
V	4924.00	50.65	30.55	5.77	24.66	50.53	74.00	-23.47	PK
V	4924.00	40.37	30.55	5.77	24.66	40.25	54.00	-13.75	AV
V	7386.00	48.09	30.33	6.32	24.55	48.63	74.00	-25.37	PK
V	7386.00	41.83	30.33	6.32	24.55	42.37	54.00	-11.63	AV
V	9848.00	48.89	30.85	7.45	24.69	50.18	74.00	-23.82	PK
V	9848.00	41.50	30.85	7.45	24.69	42.79	54.00	-11.21	AV
V	12310.00	48.42	31.02	8.99	25.57	51.96	74.00	-22.04	PK
V	12310.00	38.69	31.02	8.99	25.57	42.23	54.00	-11.77	AV
H	4924.00	51.44	30.55	5.77	24.66	51.32	74.00	-22.68	PK
H	4924.00	40.86	30.55	5.77	24.66	40.74	54.00	-13.26	AV
H	7386.00	49.64	30.33	6.32	24.55	50.18	74.00	-23.82	PK
H	7386.00	41.15	30.33	6.32	24.55	41.69	54.00	-12.31	AV
H	9848.00	49.22	30.85	7.45	24.69	50.51	74.00	-23.49	PK
H	9848.00	40.93	30.85	7.45	24.69	42.22	54.00	-11.78	AV
H	12310.00	49.42	31.02	8.99	25.57	52.96	74.00	-21.04	PK
H	12310.00	39.77	31.02	8.99	25.57	43.31	54.00	-10.69	AV

Remark:

1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit
2. If peak below the average limit, the average emission was no test.
3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
4. We test all the mode and recorded the worst mode in the report.

A.6 Band Edge (Restricted-band-edge)

Note 1: The lowest and highest channels are tested to verify the band edge emissions. Please refer to the following the plots for emissions values.

Note 2: The test data all are tested in the vertical and horizontal antenna which the trace is max hold. So these plots have shown the worst case.

Note 3: According the ANSI C63.10-2013, where limits are specified for both average and peak (or quasi-peak) detector functions, if the peak (or quasi-peak) measured value complies with the average limit, it is unnecessary to perform an average measurement.

Note 4: The Level (dBuV/m) has been corrected by factor.

	Polar (H/V)	Frequenc y (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV /m)	Detec tor Type	Result
802.11b	Low Channel 2412MHz									
	H	2390.00	54.91	30.22	4.85	23.98	53.52	74.00	PK	PASS
	H	2390.00	45.19	30.22	4.85	23.98	43.80	54.00	AV	PASS
	H	2400.00	58.02	30.22	4.85	23.98	56.63	74.00	PK	PASS
	H	2400.00	47.48	30.22	4.85	23.98	46.09	54.00	AV	PASS
	V	2390.00	55.55	30.22	4.85	23.98	54.16	74.00	PK	PASS
	V	2390.00	47.25	30.22	4.85	23.98	45.86	54.00	AV	PASS
	V	2400.00	57.32	30.22	4.85	23.98	55.93	74.00	PK	PASS
	V	2400.00	46.18	30.22	4.85	23.98	44.79	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	52.75	30.22	4.85	23.98	51.36	74.00	PK	PASS
	H	2483.50	46.27	30.22	4.85	23.98	44.88	54.00	AV	PASS
	H	2500.00	56.66	30.22	4.85	23.98	55.27	74.00	PK	PASS
	H	2500.00	47.17	30.22	4.85	23.98	45.78	54.00	AV	PASS
	V	2483.50	55.24	30.22	4.85	23.98	53.85	74.00	PK	PASS
	V	2483.50	45.98	30.22	4.85	23.98	44.59	54.00	AV	PASS
	V	2500.00	57.75	30.22	4.85	23.98	56.36	74.00	PK	PASS
	V	2500.00	45.78	30.22	4.85	23.98	44.39	54.00	AV	PASS
802.11g	Low Channel 2412MHz									
	H	2390.00	55.72	30.22	4.85	23.98	54.33	74.00	PK	PASS
	H	2390.00	44.83	30.22	4.85	23.98	43.44	54.00	AV	PASS
	H	2400.00	57.72	30.22	4.85	23.98	56.33	74.00	PK	PASS
	H	2400.00	46.30	30.22	4.85	23.98	44.91	54.00	AV	PASS
	V	2390.00	53.29	30.22	4.85	23.98	51.90	74.00	PK	PASS
	V	2390.00	48.76	30.22	4.85	23.98	47.37	54.00	AV	PASS
	V	2400.00	53.72	30.22	4.85	23.98	52.33	74.00	PK	PASS
	V	2400.00	44.67	30.22	4.85	23.98	43.28	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	52.26	30.22	4.85	23.98	50.87	74.00	PK	PASS
	H	2483.50	44.84	30.22	4.85	23.98	43.45	54.00	AV	PASS
	H	2500.00	55.74	30.22	4.85	23.98	54.35	74.00	PK	PASS
	H	2500.00	48.82	30.22	4.85	23.98	47.43	54.00	AV	PASS

	V	2483.50	56.92	30.22	4.85	23.98	55.53	74.00	PK	PASS
	V	2483.50	45.80	30.22	4.85	23.98	44.41	54.00	AV	PASS
	V	2500.00	54.98	30.22	4.85	23.98	53.59	74.00	PK	PASS
	V	2500.00	46.87	30.22	4.85	23.98	45.48	54.00	AV	PASS
802.11n20	Low Channel 2412MHz									
	H	2390.00	54.02	30.22	4.85	23.98	52.63	74.00	PK	PASS
	H	2390.00	48.15	30.22	4.85	23.98	46.76	54.00	AV	PASS
	H	2400.00	56.71	30.22	4.85	23.98	55.32	74.00	PK	PASS
	H	2400.00	47.73	30.22	4.85	23.98	46.34	54.00	AV	PASS
	V	2390.00	53.13	30.22	4.85	23.98	51.74	74.00	PK	PASS
	V	2390.00	45.74	30.22	4.85	23.98	44.35	54.00	AV	PASS
	V	2400.00	58.66	30.22	4.85	23.98	57.27	74.00	PK	PASS
	V	2400.00	44.15	30.22	4.85	23.98	42.76	54.00	AV	PASS
	High Channel 2462MHz									
	H	2483.50	56.12	30.22	4.85	23.98	54.73	74.00	PK	PASS
	H	2483.50	43.86	30.22	4.85	23.98	42.47	54.00	AV	PASS
	H	2500.00	58.10	30.22	4.85	23.98	56.71	74.00	PK	PASS
	H	2500.00	45.52	30.22	4.85	23.98	44.13	54.00	AV	PASS
	V	2483.50	55.02	30.22	4.85	23.98	53.63	74.00	PK	PASS
	V	2483.50	48.20	30.22	4.85	23.98	46.81	54.00	AV	PASS
	V	2500.00	54.46	30.22	4.85	23.98	53.07	74.00	PK	PASS
	V	2500.00	47.32	30.22	4.85	23.98	45.93	54.00	AV	PASS
802.11n40	Low Channel 2422MHz									
	H	2390.00	54.49	30.22	4.85	23.98	53.10	74.00	PK	PASS
	H	2390.00	47.49	30.22	4.85	23.98	46.10	54.00	AV	PASS
	H	2400.00	58.65	30.22	4.85	23.98	57.26	74.00	PK	PASS
	H	2400.00	46.87	30.22	4.85	23.98	45.48	54.00	AV	PASS
	V	2390.00	52.52	30.22	4.85	23.98	51.13	74.00	PK	PASS
	V	2390.00	47.27	30.22	4.85	23.98	45.88	54.00	AV	PASS
	V	2400.00	57.30	30.22	4.85	23.98	55.91	74.00	PK	PASS
	V	2400.00	46.77	30.22	4.85	23.98	45.38	54.00	AV	PASS
	High Channel 2452MHz									
	H	2483.50	55.28	30.22	4.85	23.98	53.89	74.00	PK	PASS
	H	2483.50	45.07	30.22	4.85	23.98	43.68	54.00	AV	PASS
	H	2500.00	54.37	30.22	4.85	23.98	52.98	74.00	PK	PASS
	H	2500.00	47.36	30.22	4.85	23.98	45.97	54.00	AV	PASS
	V	2483.50	56.90	30.22	4.85	23.98	55.51	74.00	PK	PASS
	V	2483.50	45.16	30.22	4.85	23.98	43.77	54.00	AV	PASS
	V	2500.00	53.84	30.22	4.85	23.98	52.45	74.00	PK	PASS
	V	2500.00	47.03	30.22	4.85	23.98	45.64	52.36	AV	PASS
Remark:										
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										

A.7 Power Spectral Density

Modulation	Frequency (MHz)	PSD(dBm/3kHz)	limit(dBm/3kHz)	Result
802.11b	2412.00	-4.63	8	Pass
802.11b	2437.00	-6.27	8	Pass
802.11b	2462.00	-4.55	8	Pass
802.11g	2412.00	-12.05	8	Pass
802.11g	2437.00	-12.02	8	Pass
802.11g	2462.00	-12.24	8	Pass
802.11n(HT20)	2412.00	-12.37	8	Pass
802.11n(HT20)	2437.00	-12.84	8	Pass
802.11n(HT20)	2462.00	-12.27	8	Pass
802.11n(HT40)	2422.00	-16.10	8	Pass
802.11n(HT40)	2437.00	-16.05	8	Pass
802.11n(HT40)	2452.00	-15.39	8	Pass



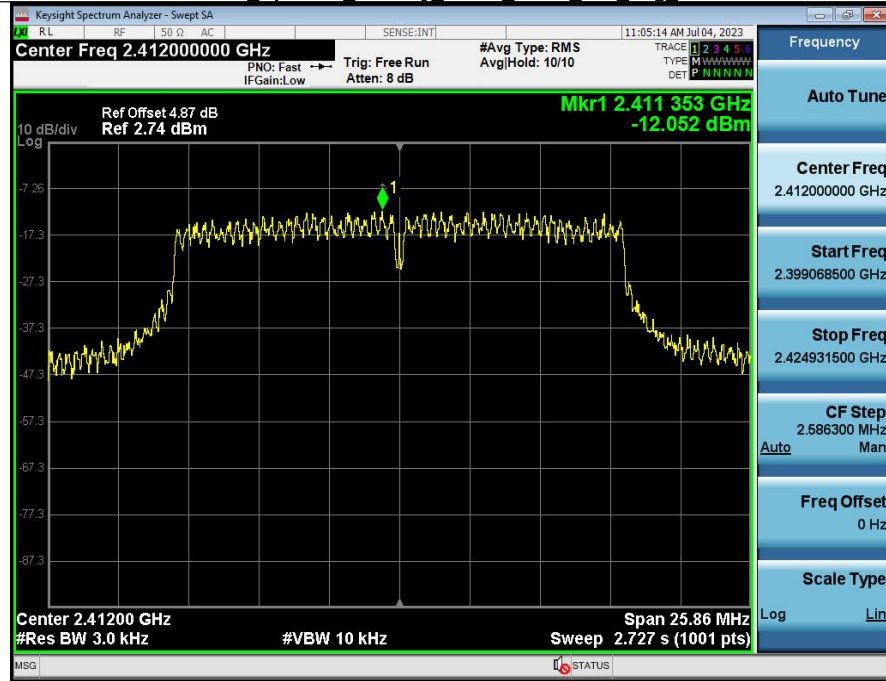
Power Spectral Density_NVNT_ANT1_802_11b_2437



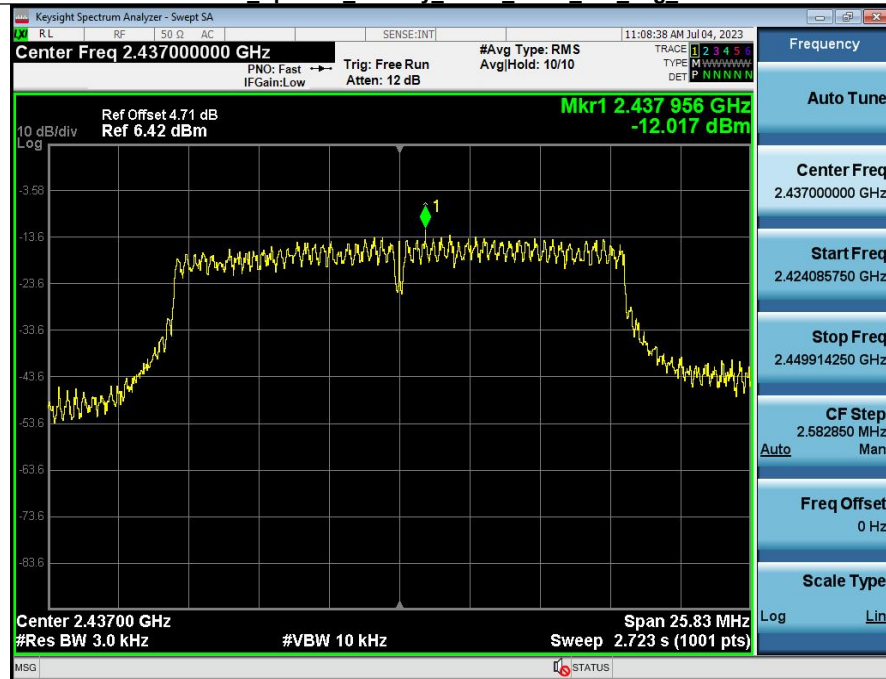
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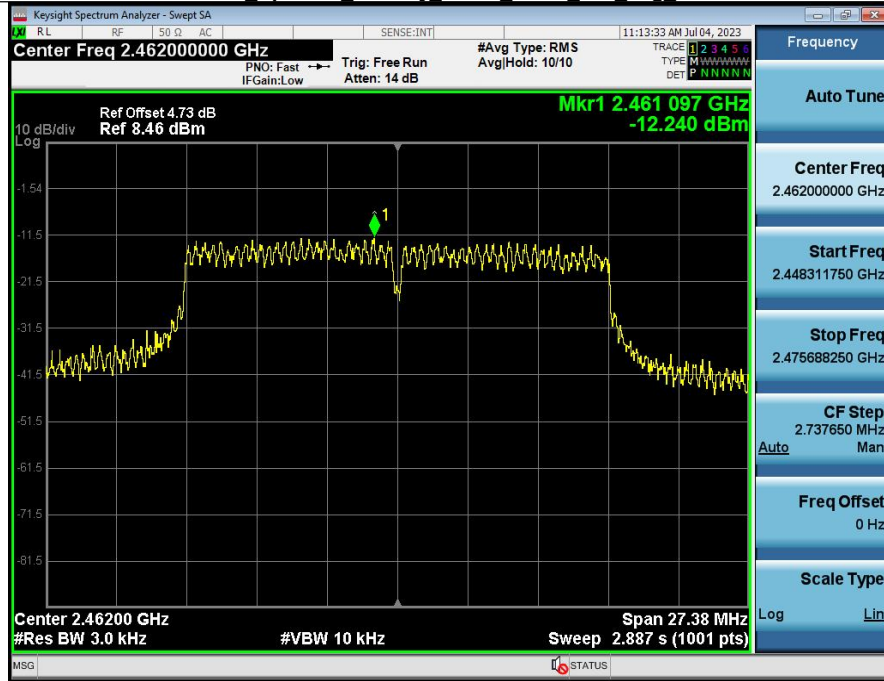
Power Spectral Density_NVNT_ANT1_802_11g_2412



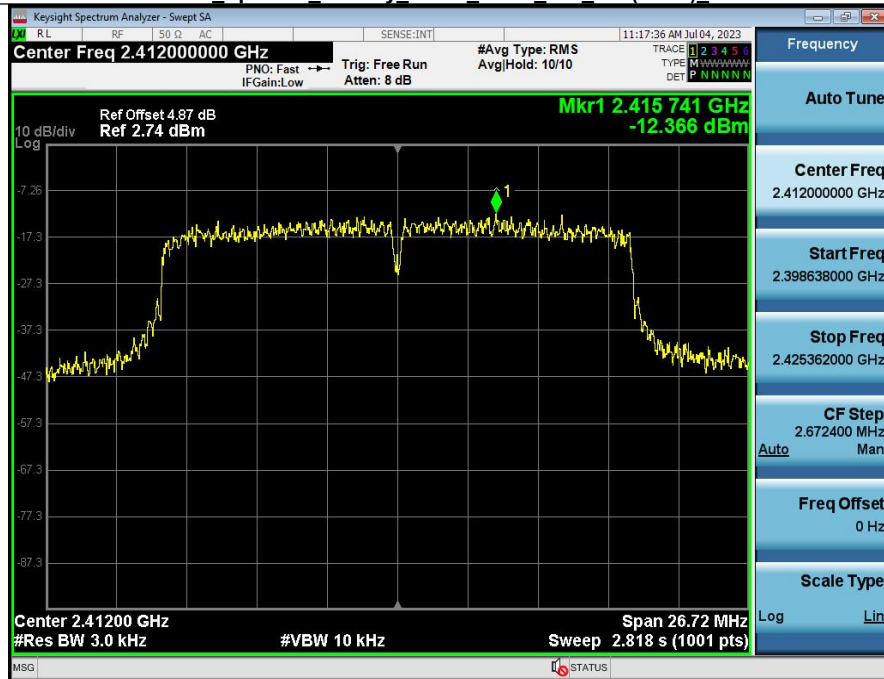
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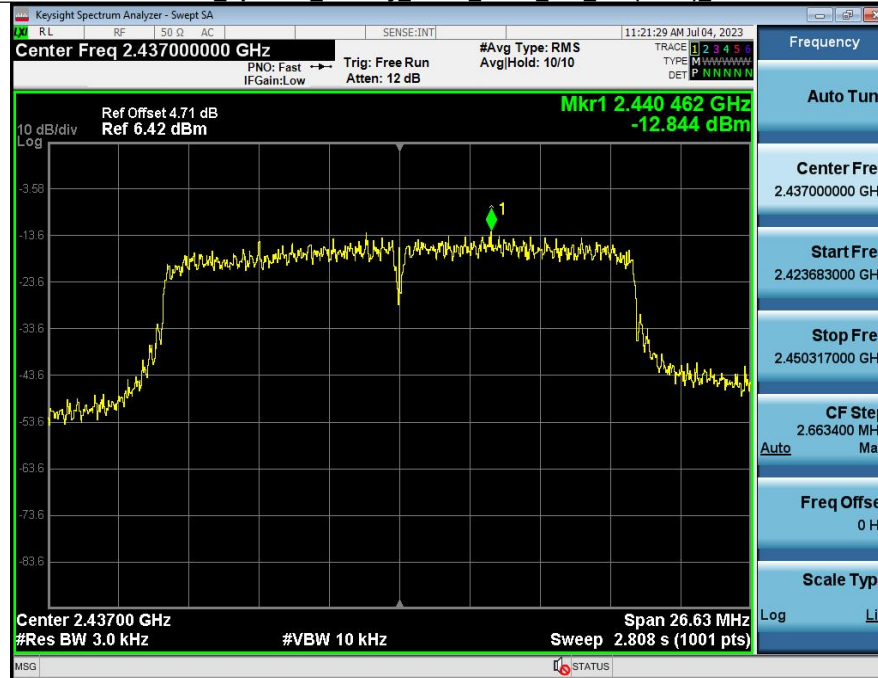
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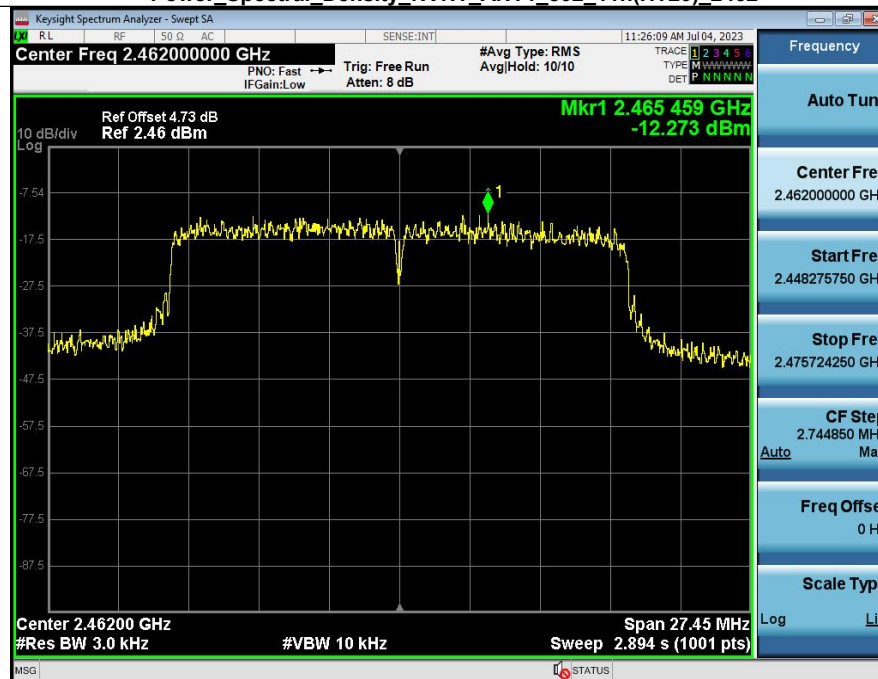
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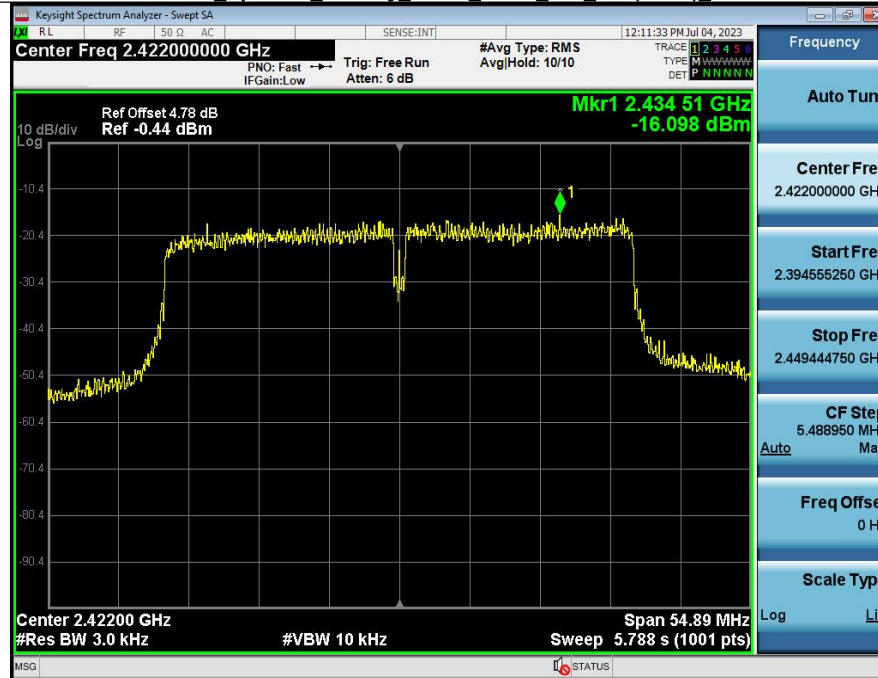
Power Spectral Density NVNT_ANT1_802_11n(HT20)_2437



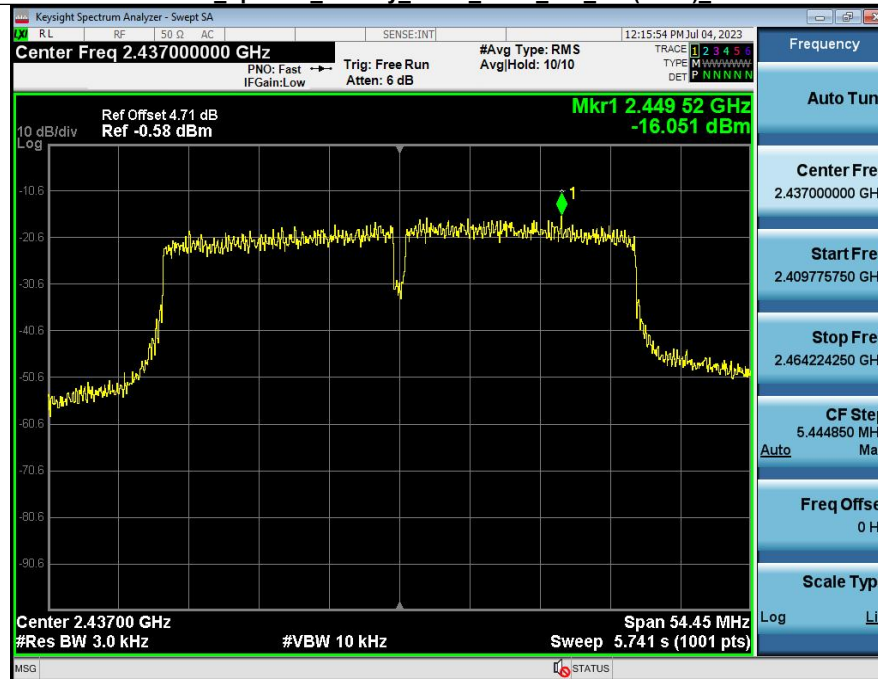
Power Spectral Density NVNT_ANT1_802_11n(HT20)_2462



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



ANNEX B TEST SETUP PHOTOS

Please see the attachment for the test setup photos.

ANNEX C EUT EXTERNAL PHOTOS

Please see the attachment for the External photos.

ANNEX D EUT INTERNAL PHOTOS

Please see the attachment for the Internal photos.



BTF Testing Lab (Shenzhen) Co., Ltd.

F101, 201 and 301, Building 1, Block 2, Tantou Industrial Park, Tantou Community, Songgang Street,
Bao'an District, Shenzhen, China

www.btf-lab.com

--END OF REPORT--