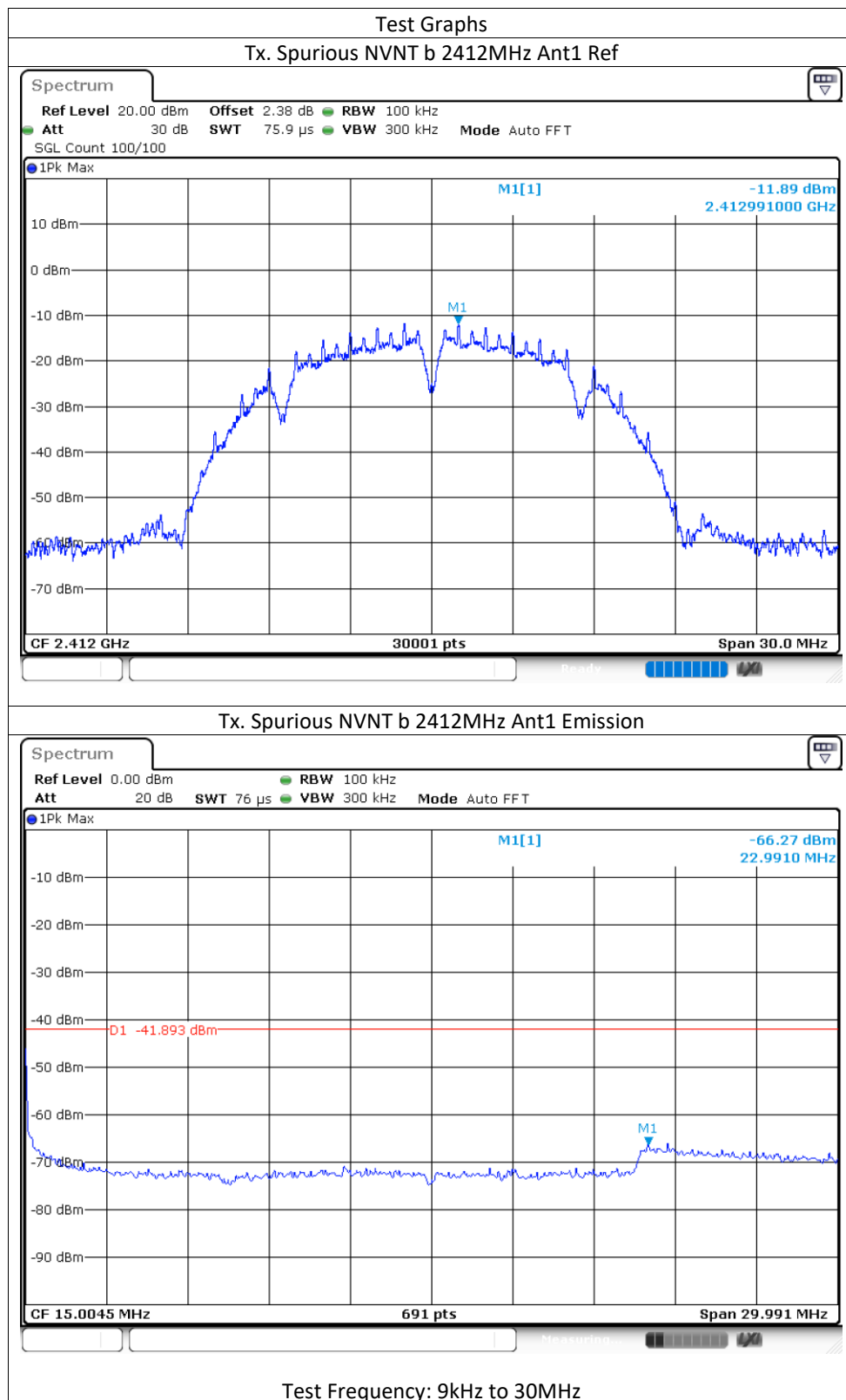
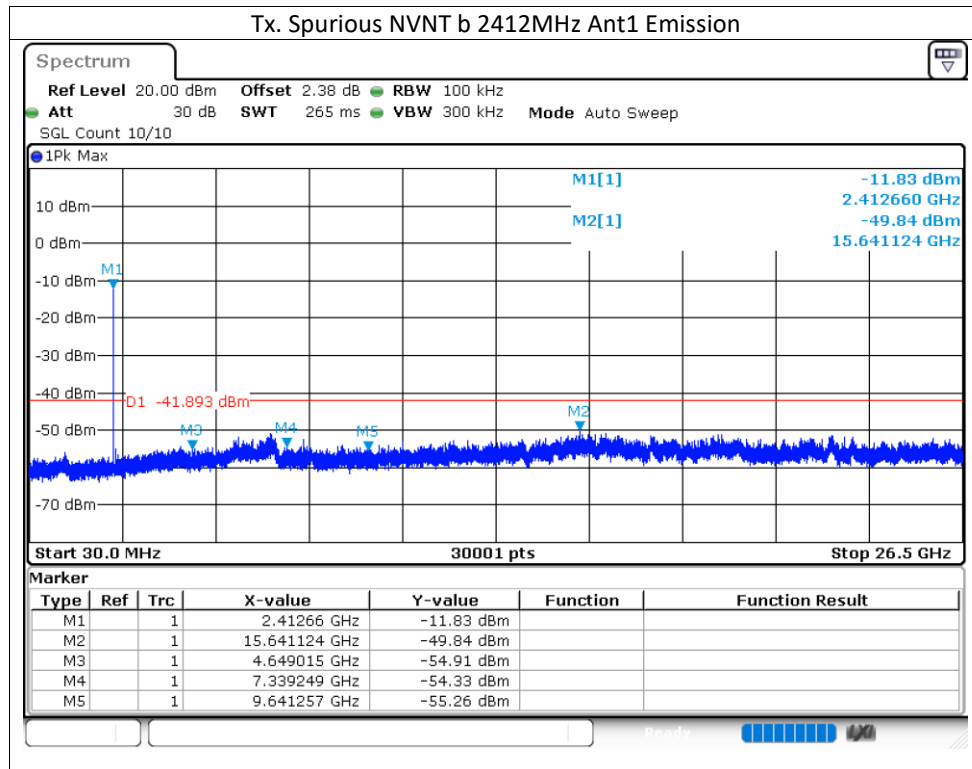
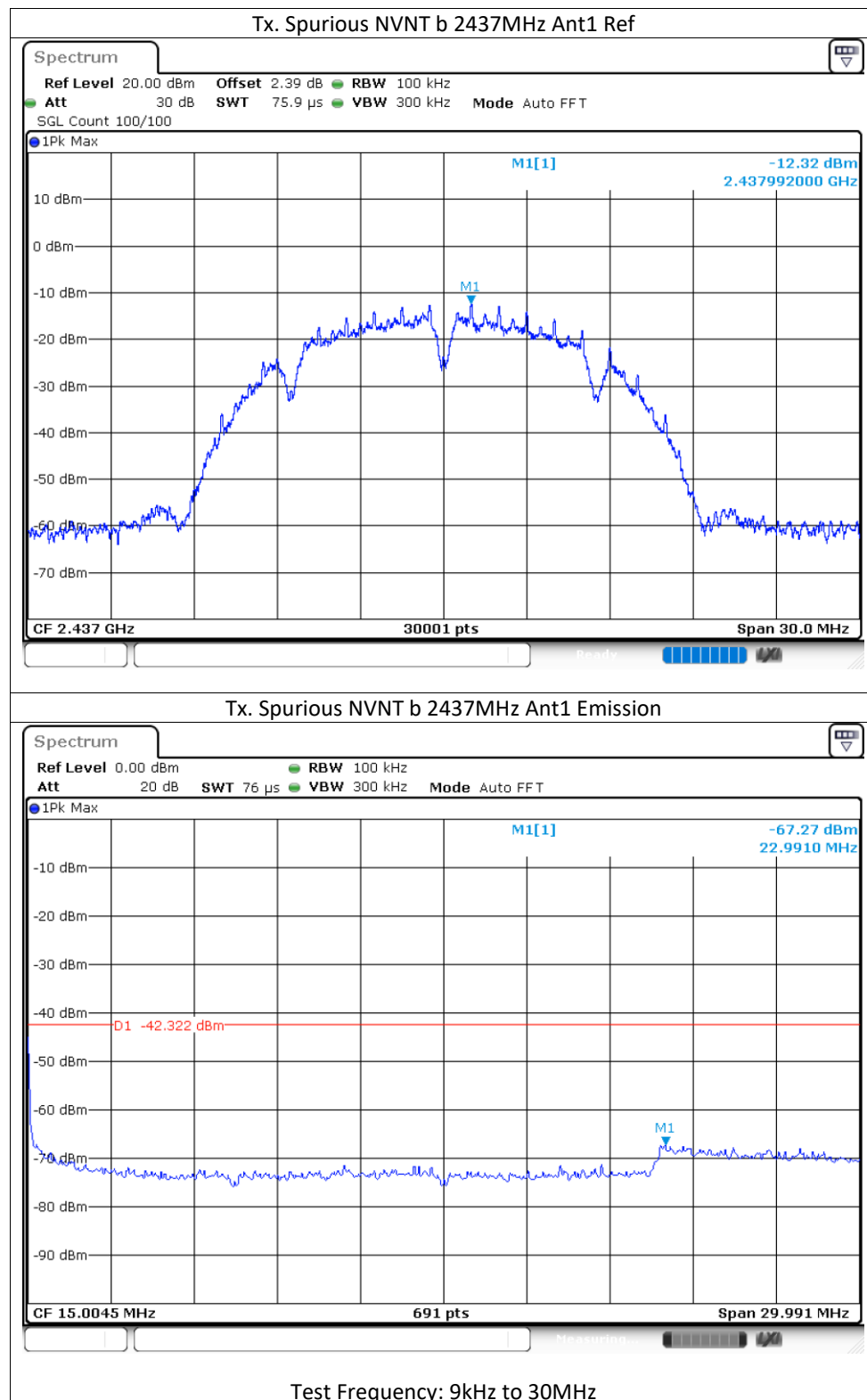
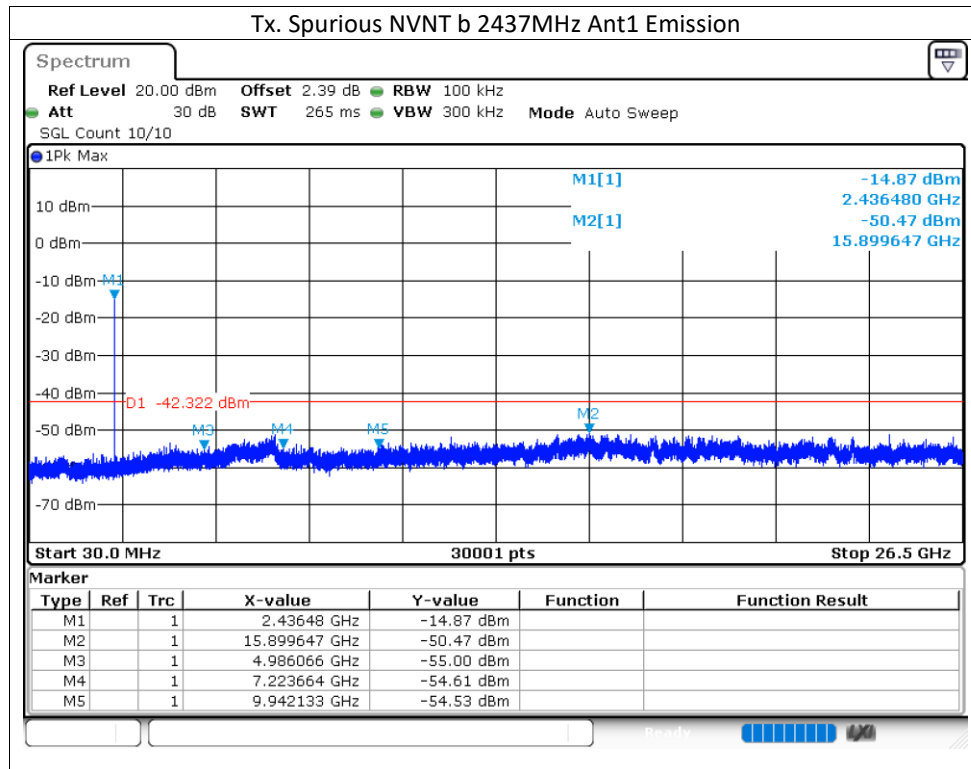




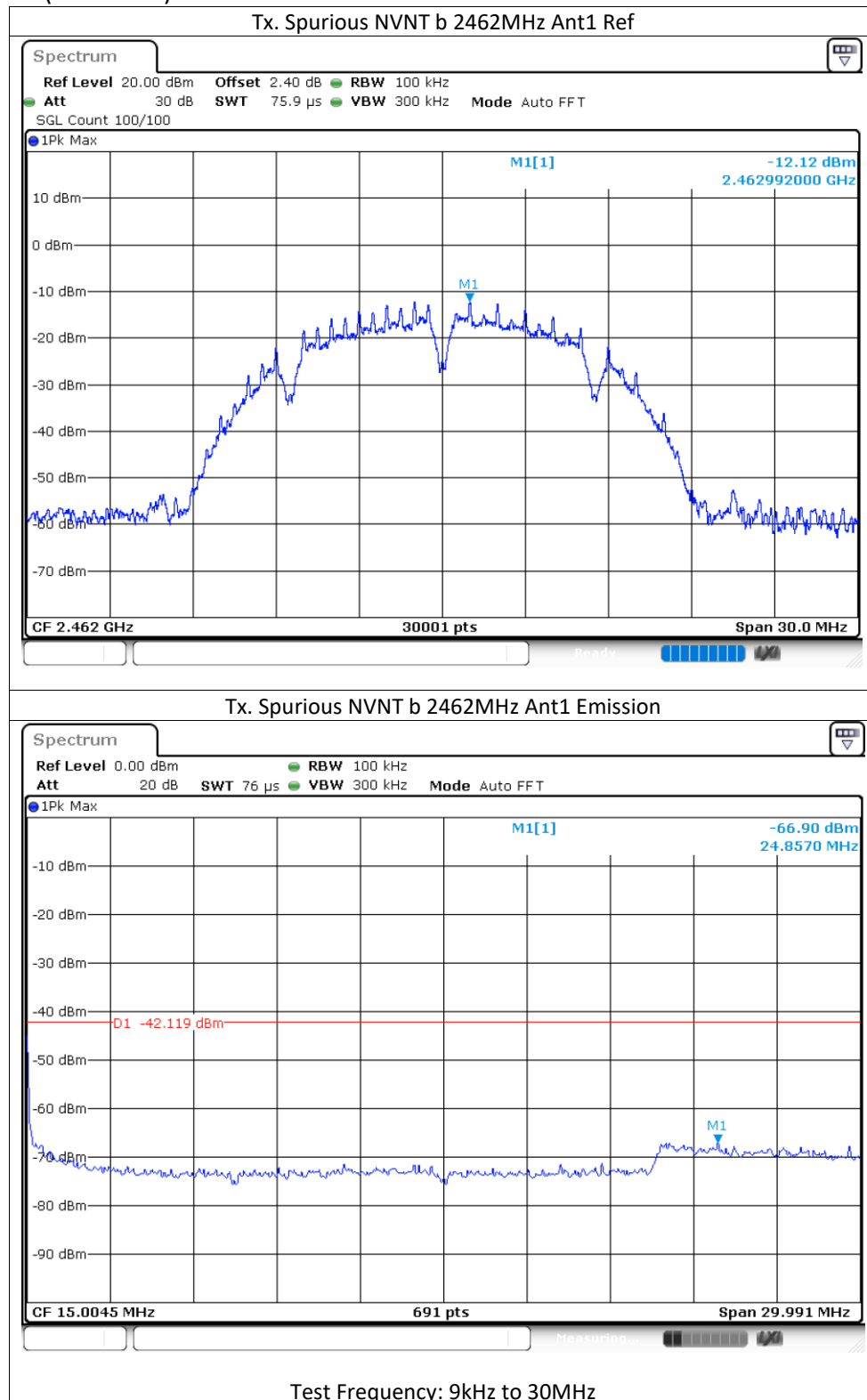


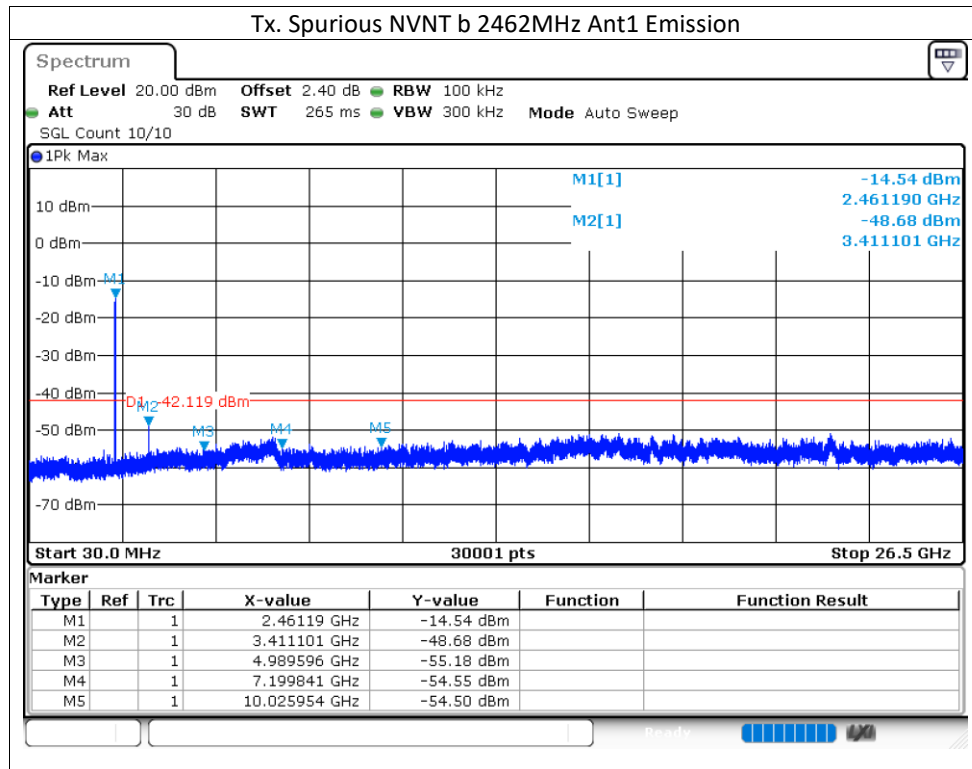
Channel 06 (2437MHz)





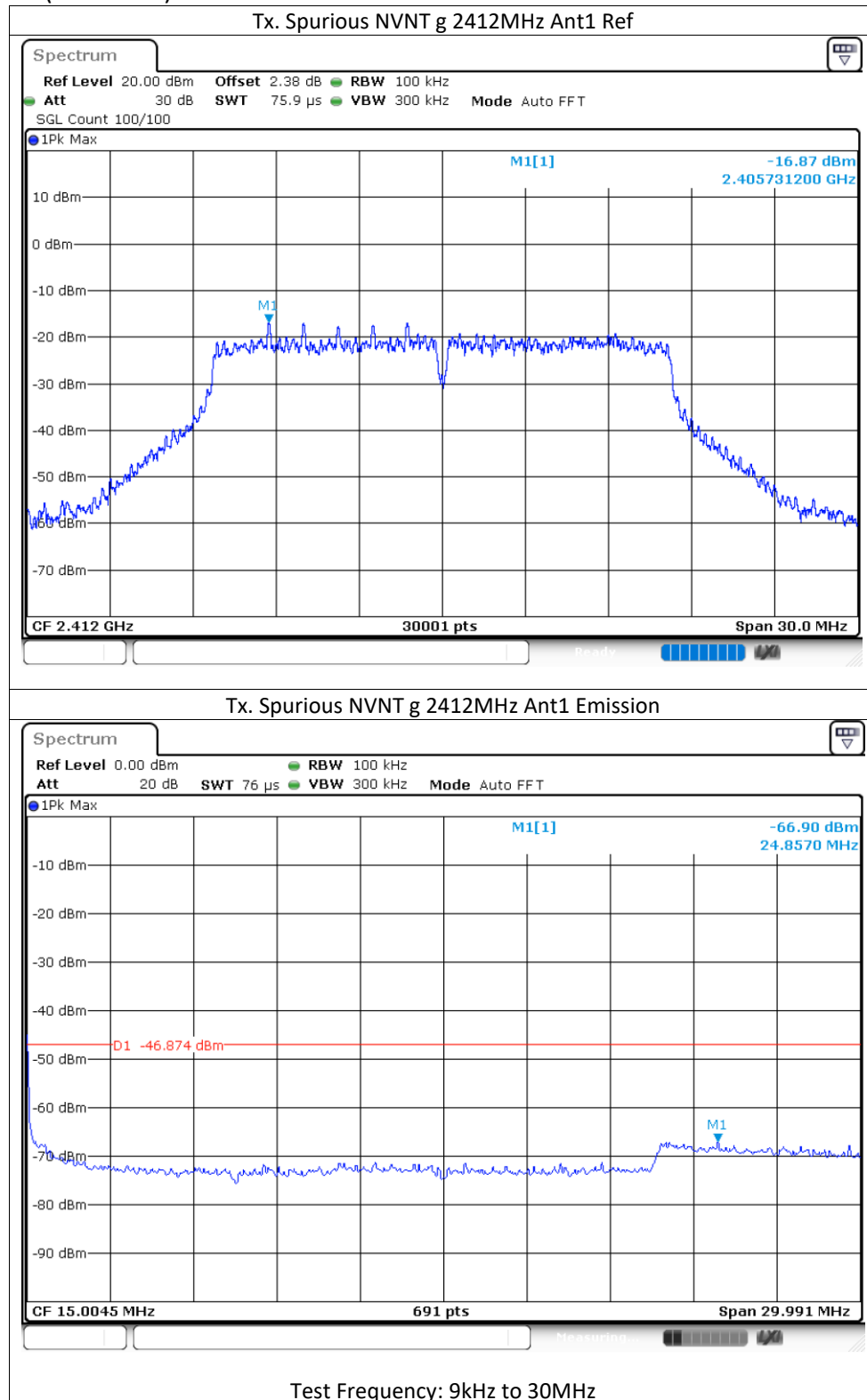
Channel 11 (2462MHz)

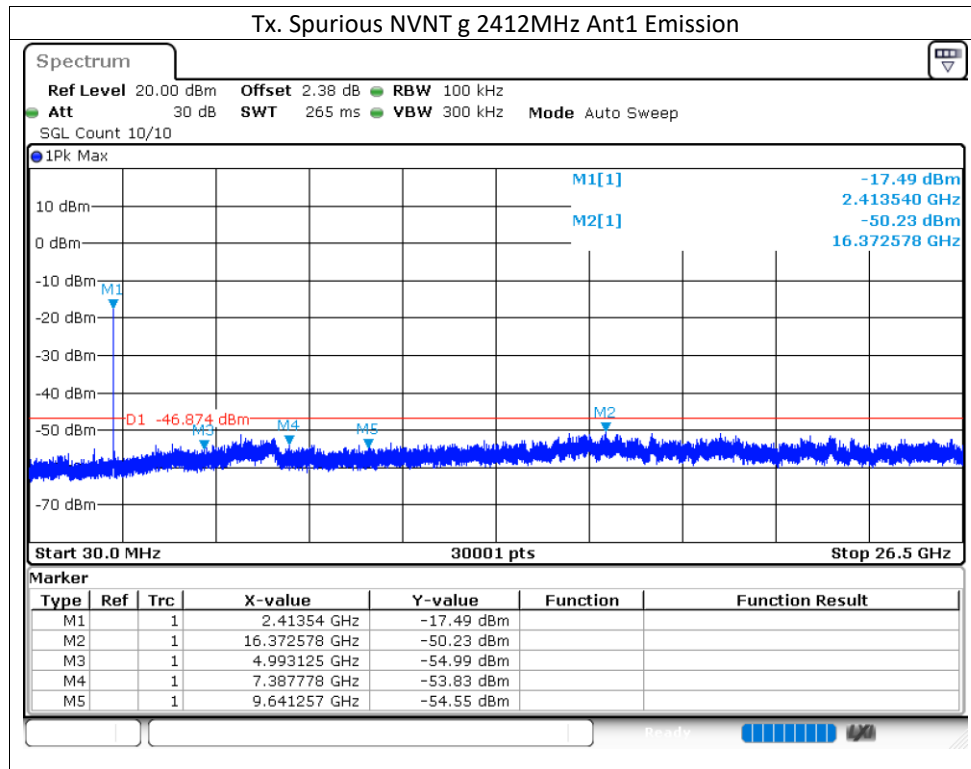




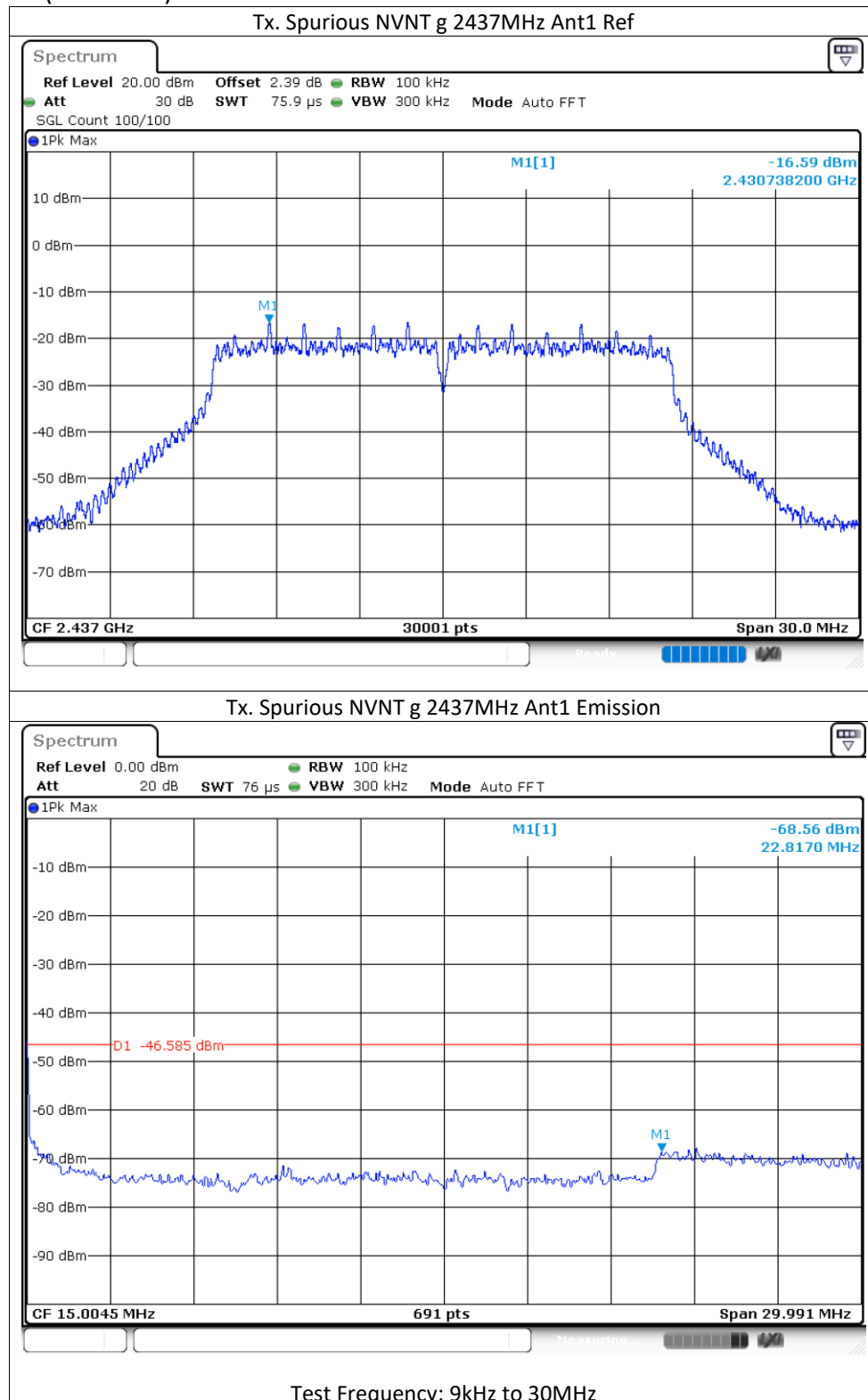
802.11g

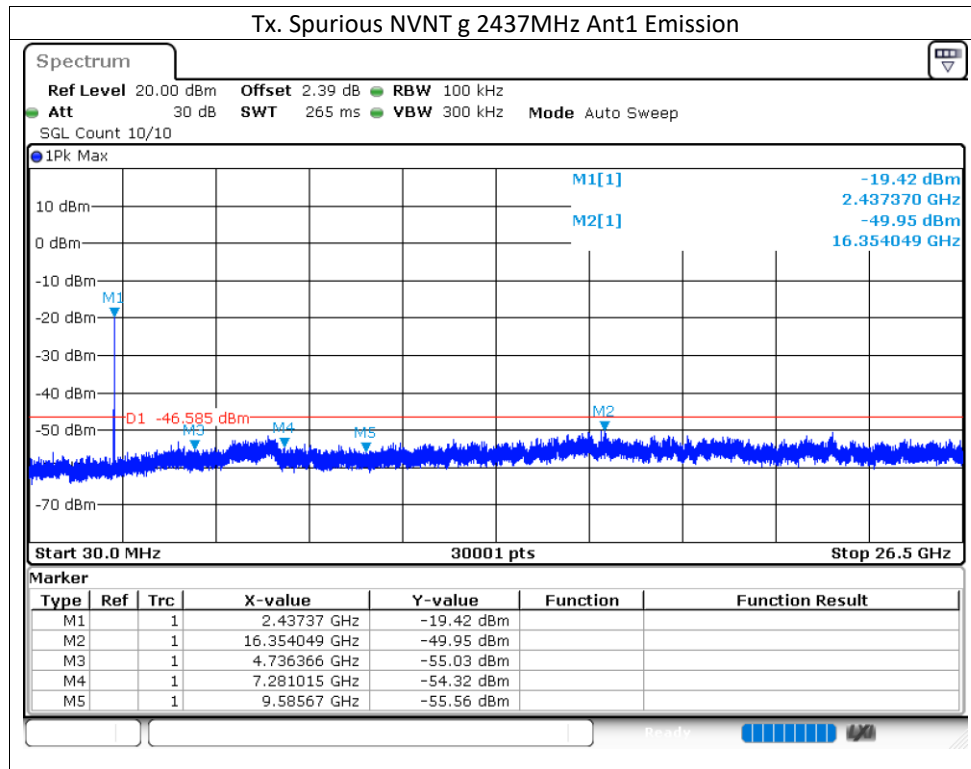
Channel 01 (2412MHz)



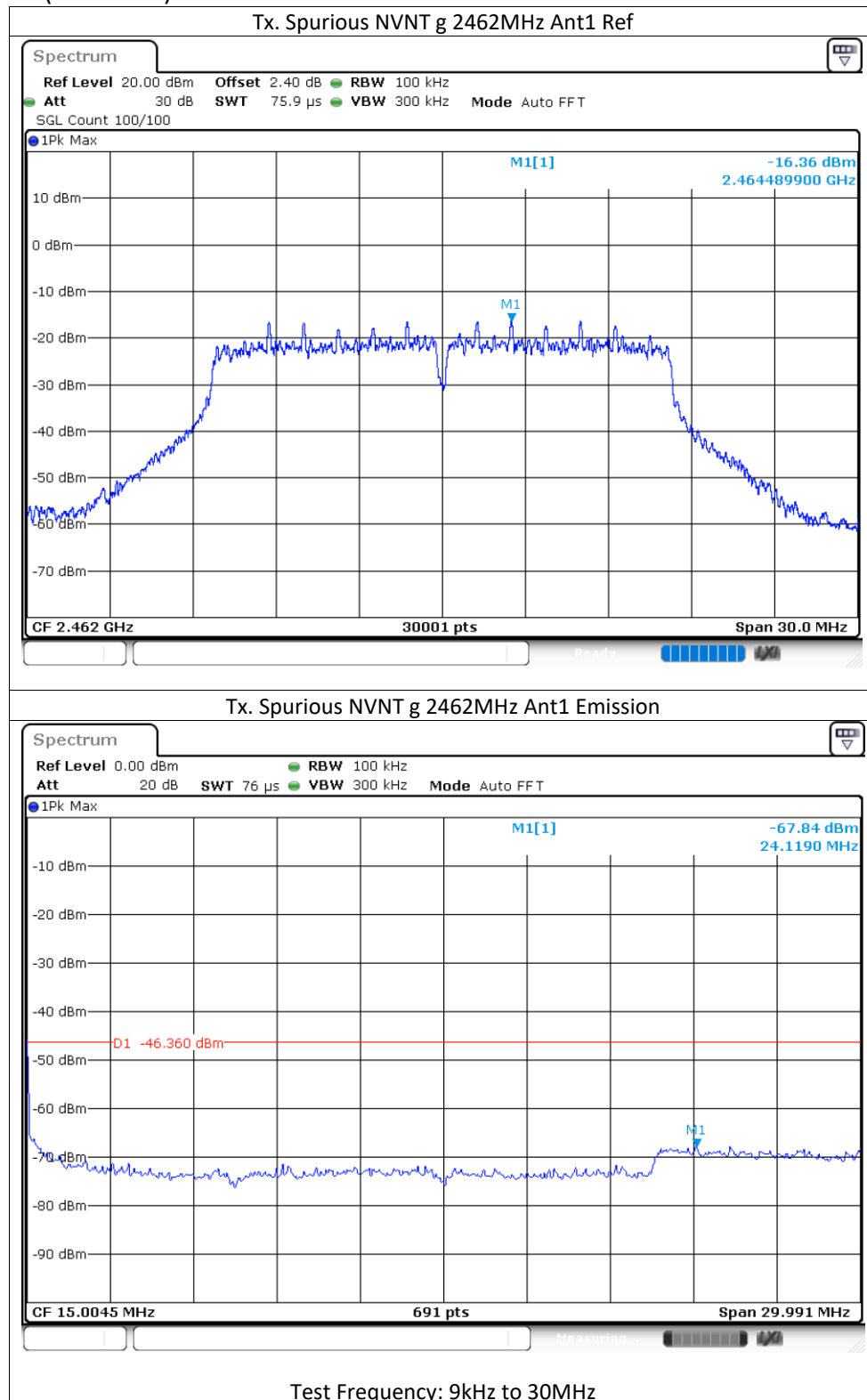


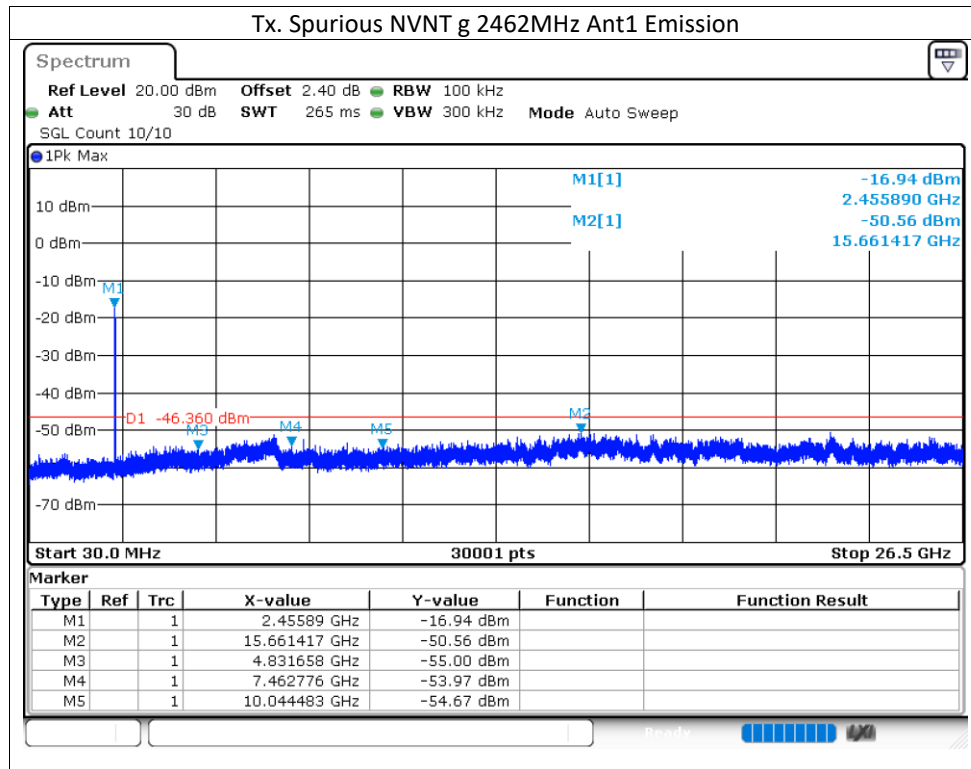
Channel 06 (2437MHz)





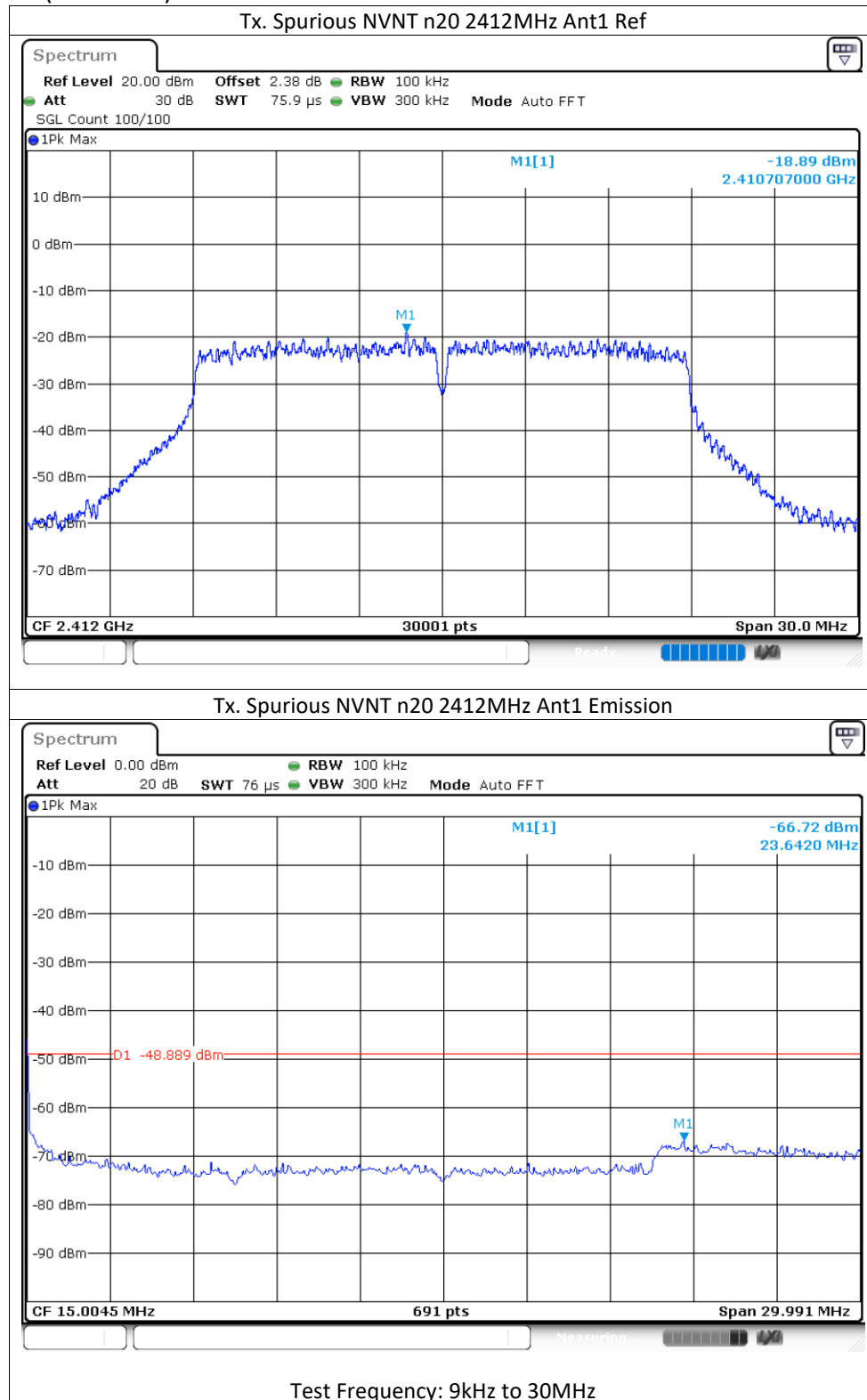
Channel 11 (2462MHz)

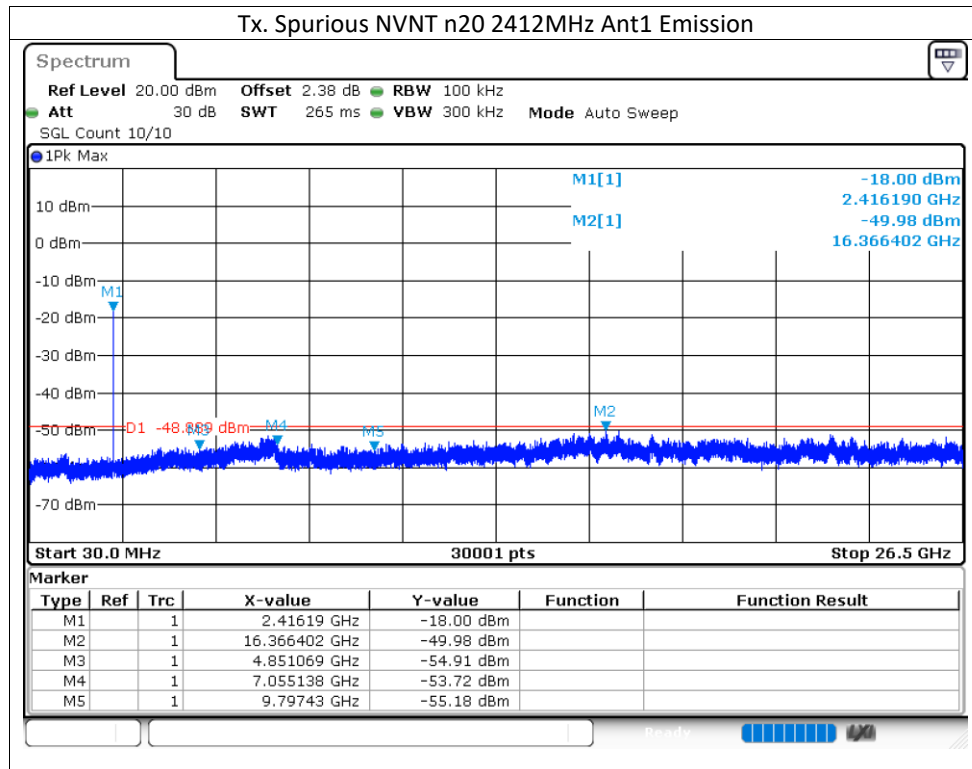




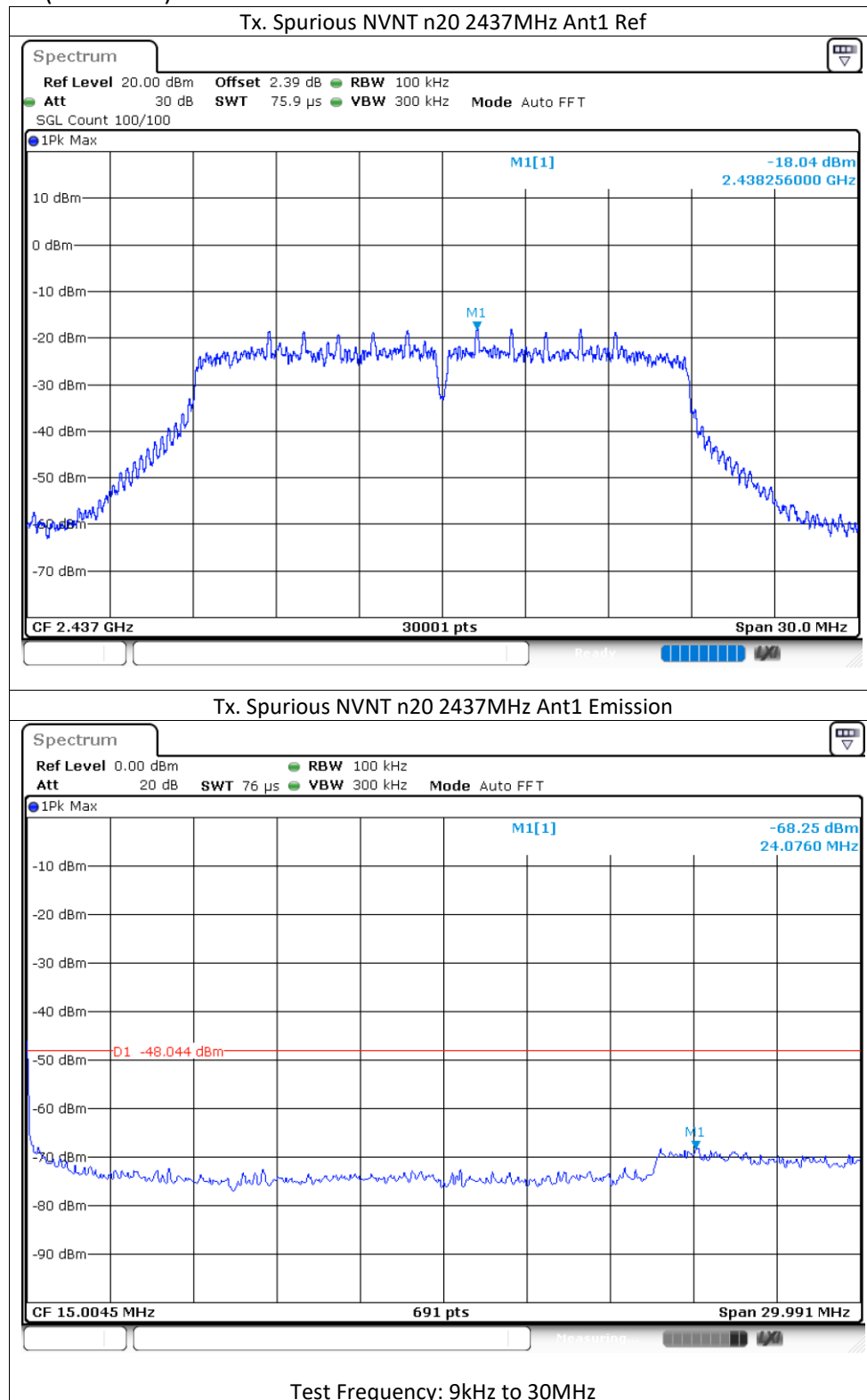
802.11n-HT20

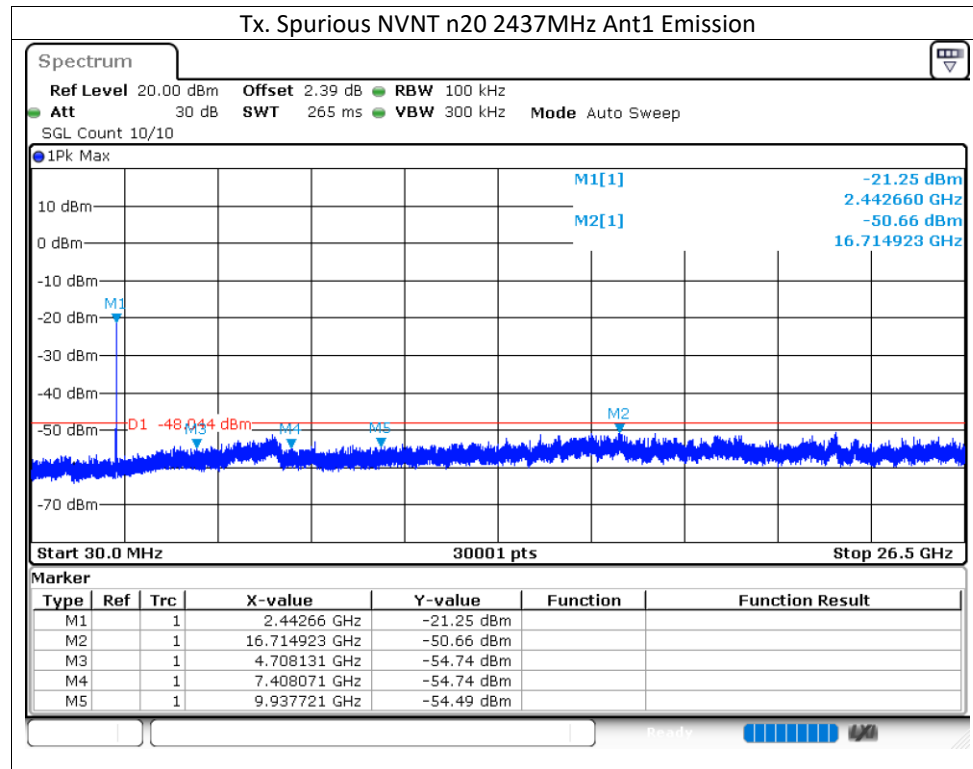
Channel 01 (2412MHz)



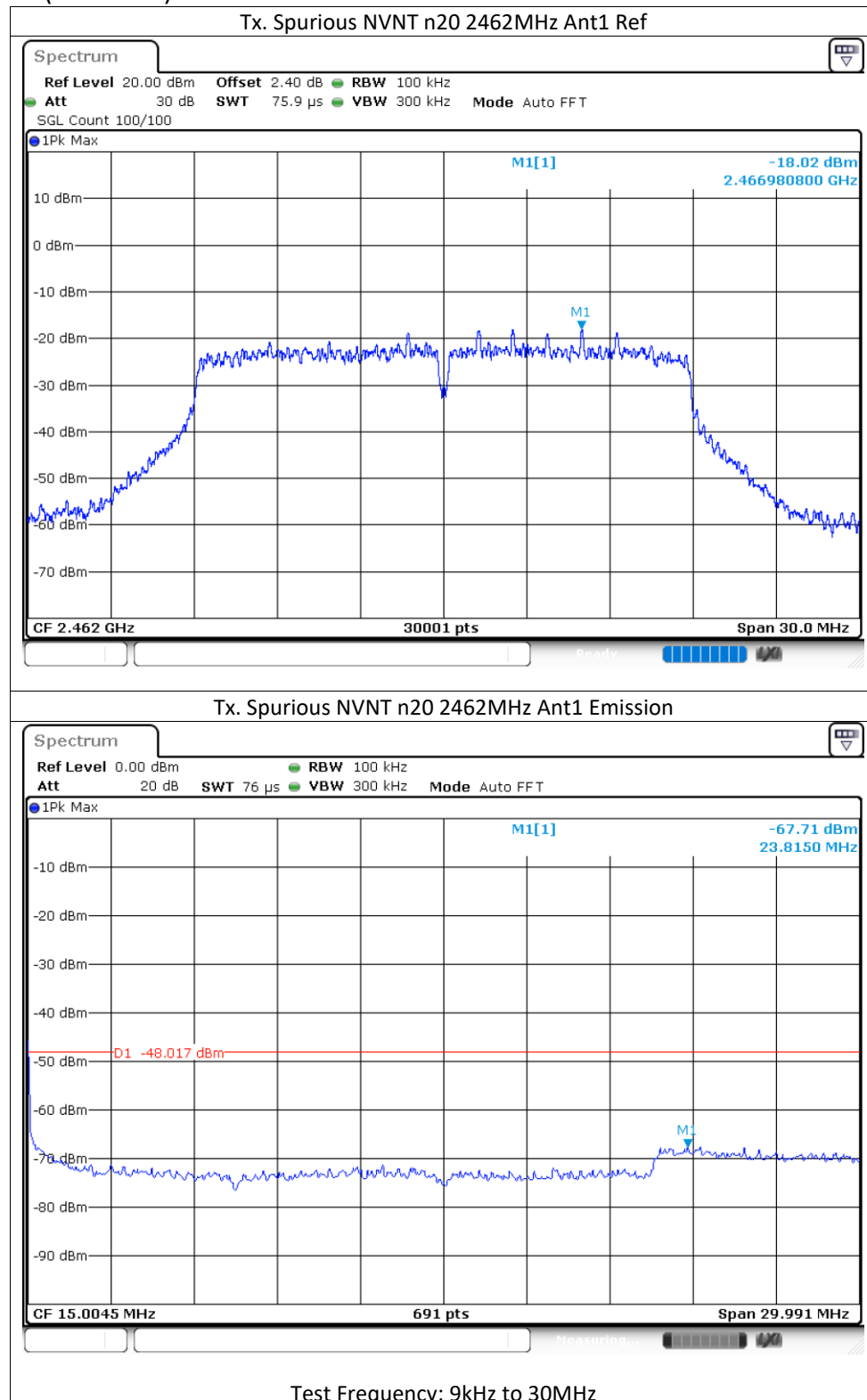


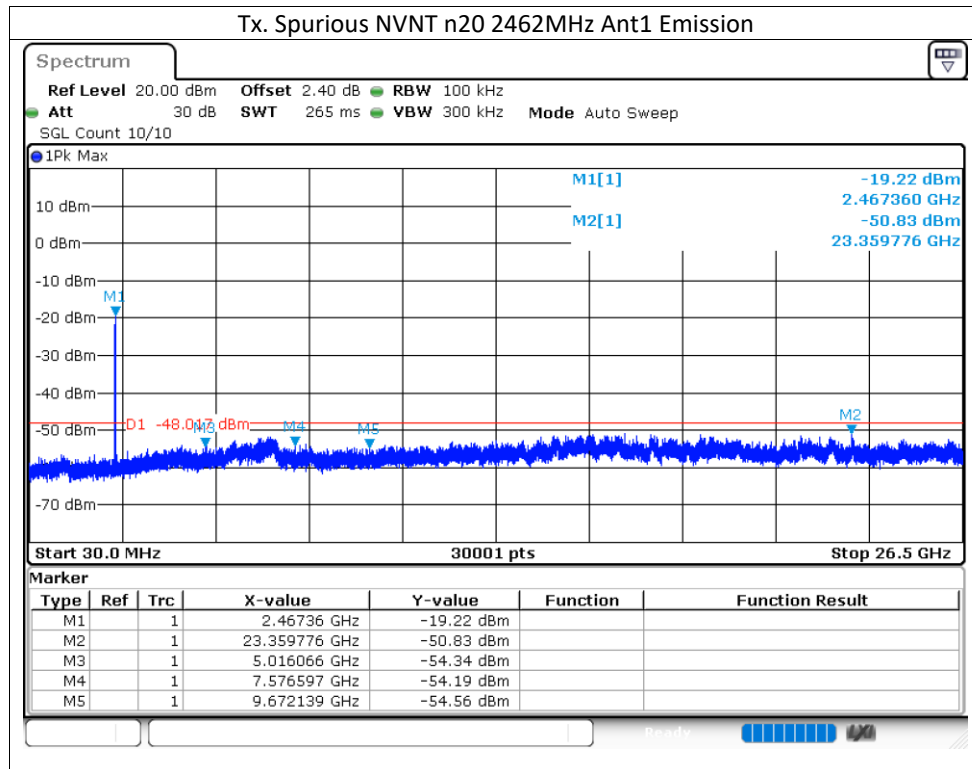
Channel 06 (2437MHz)





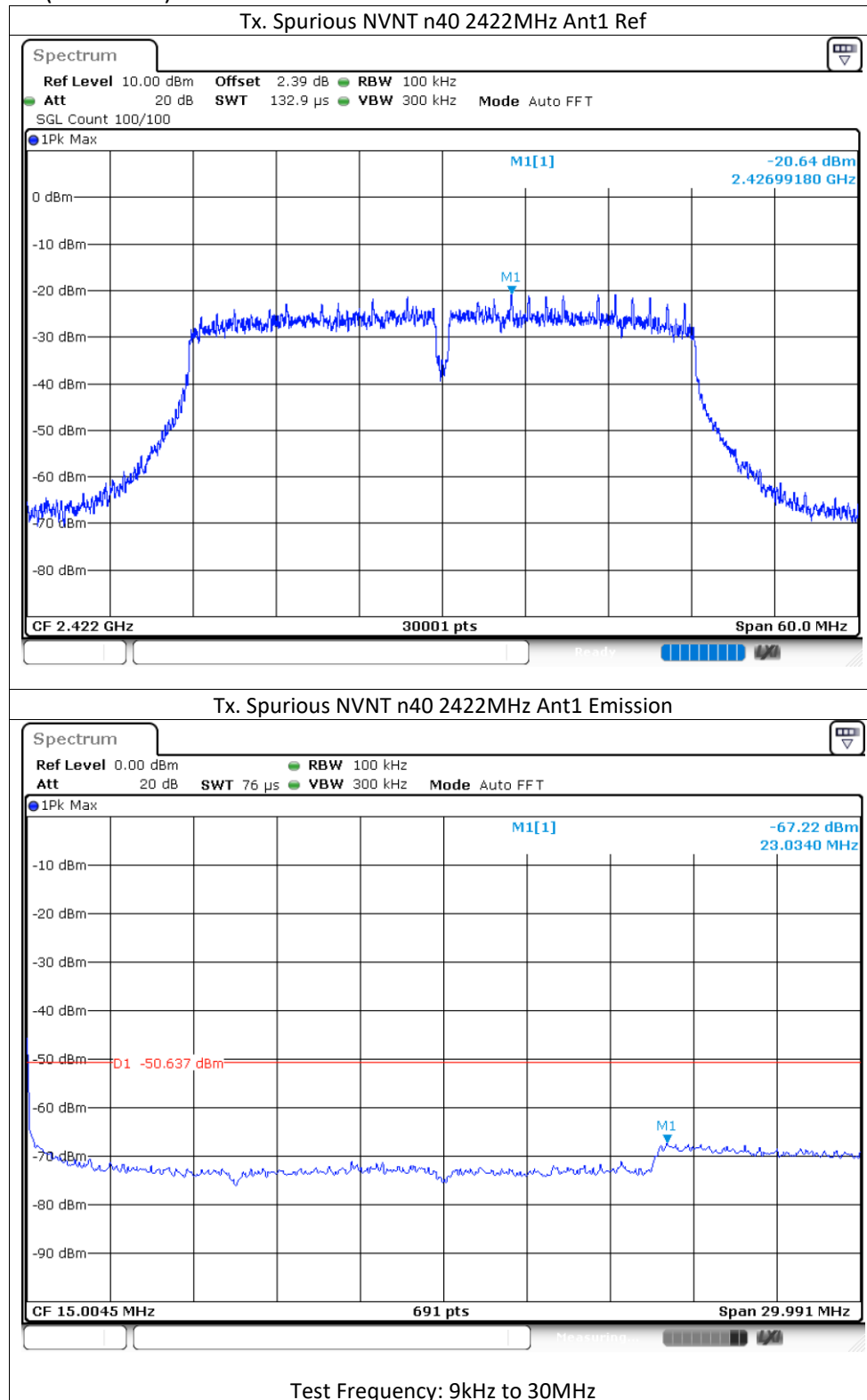
Channel 11 (2462MHz)

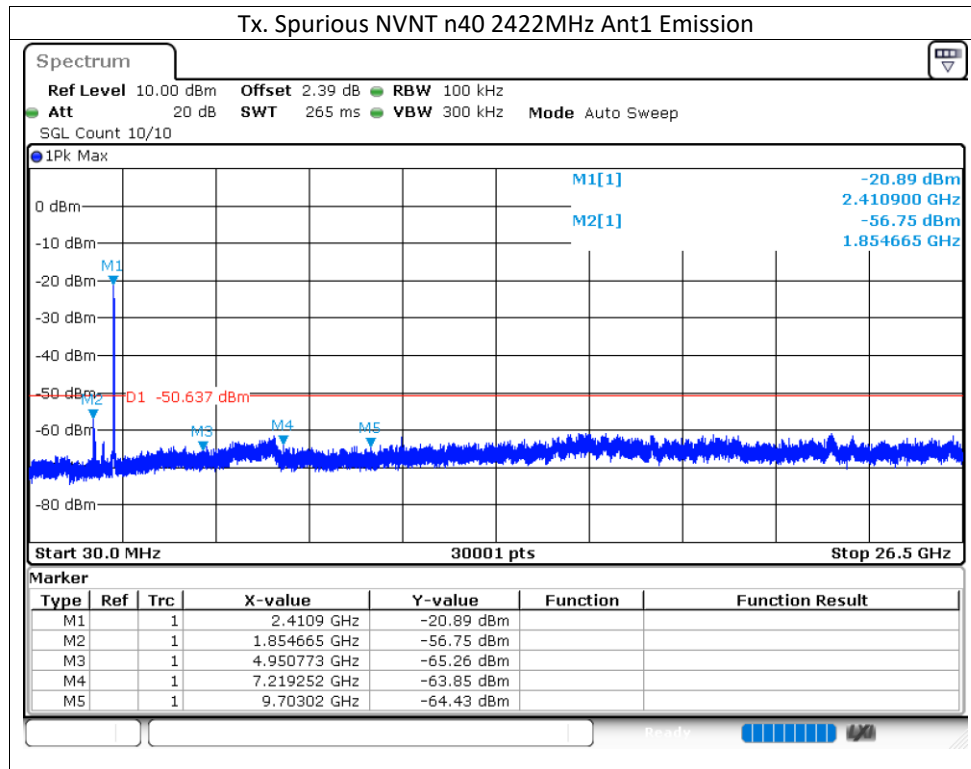




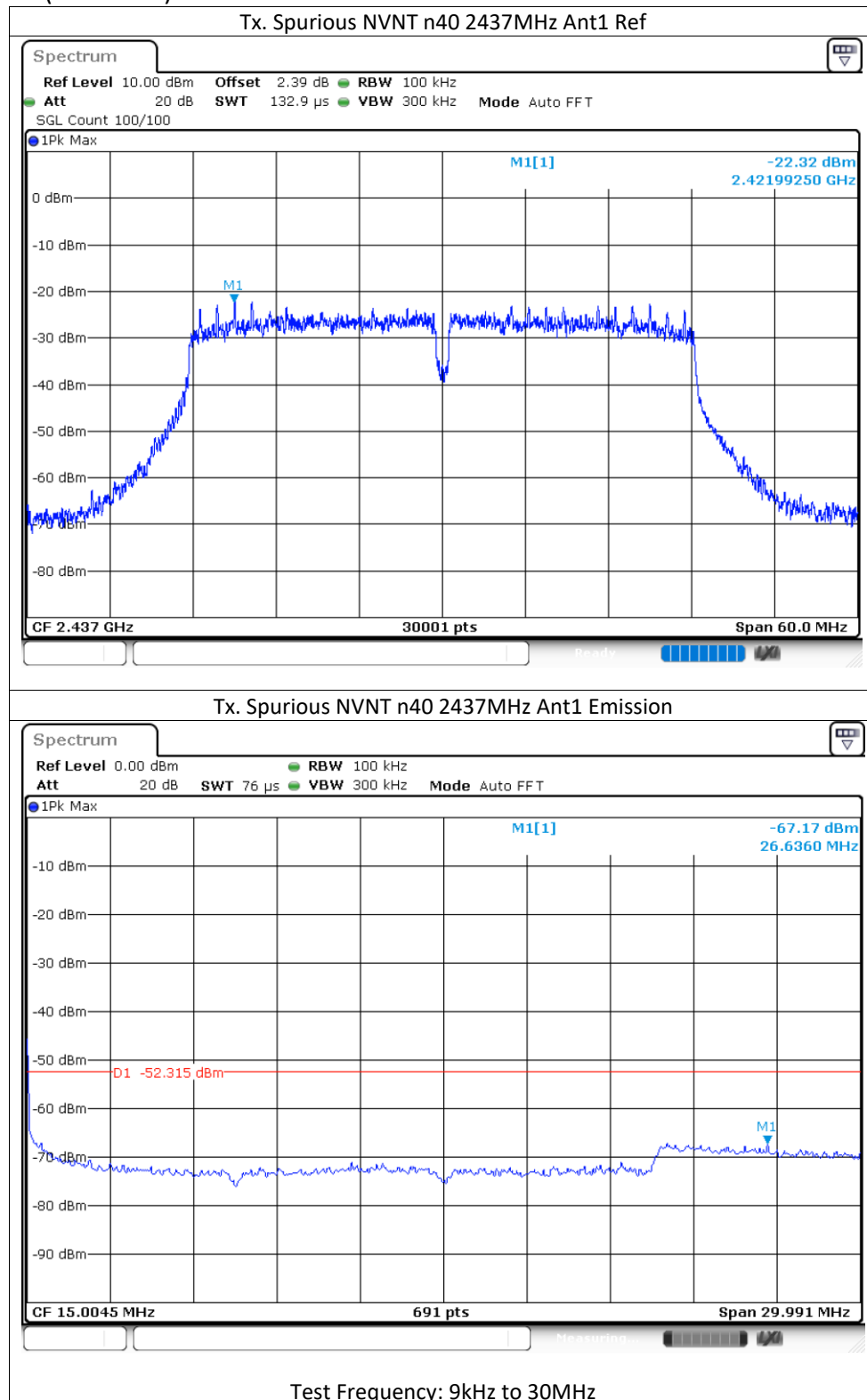
802.11n-HT40

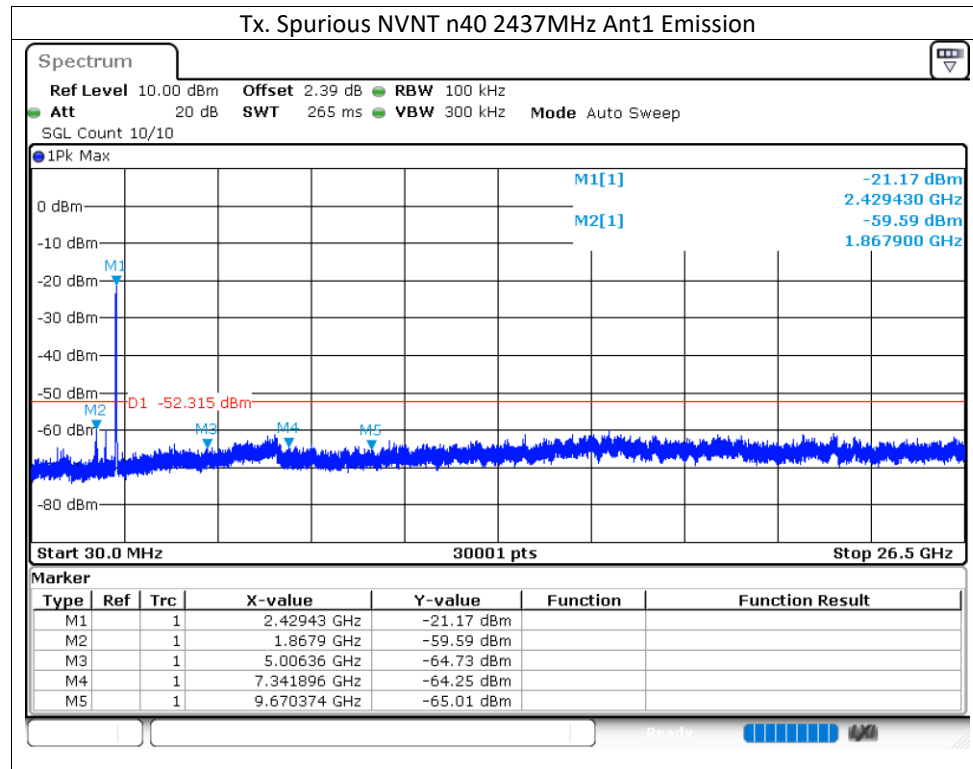
Channel 01 (2422MHz)



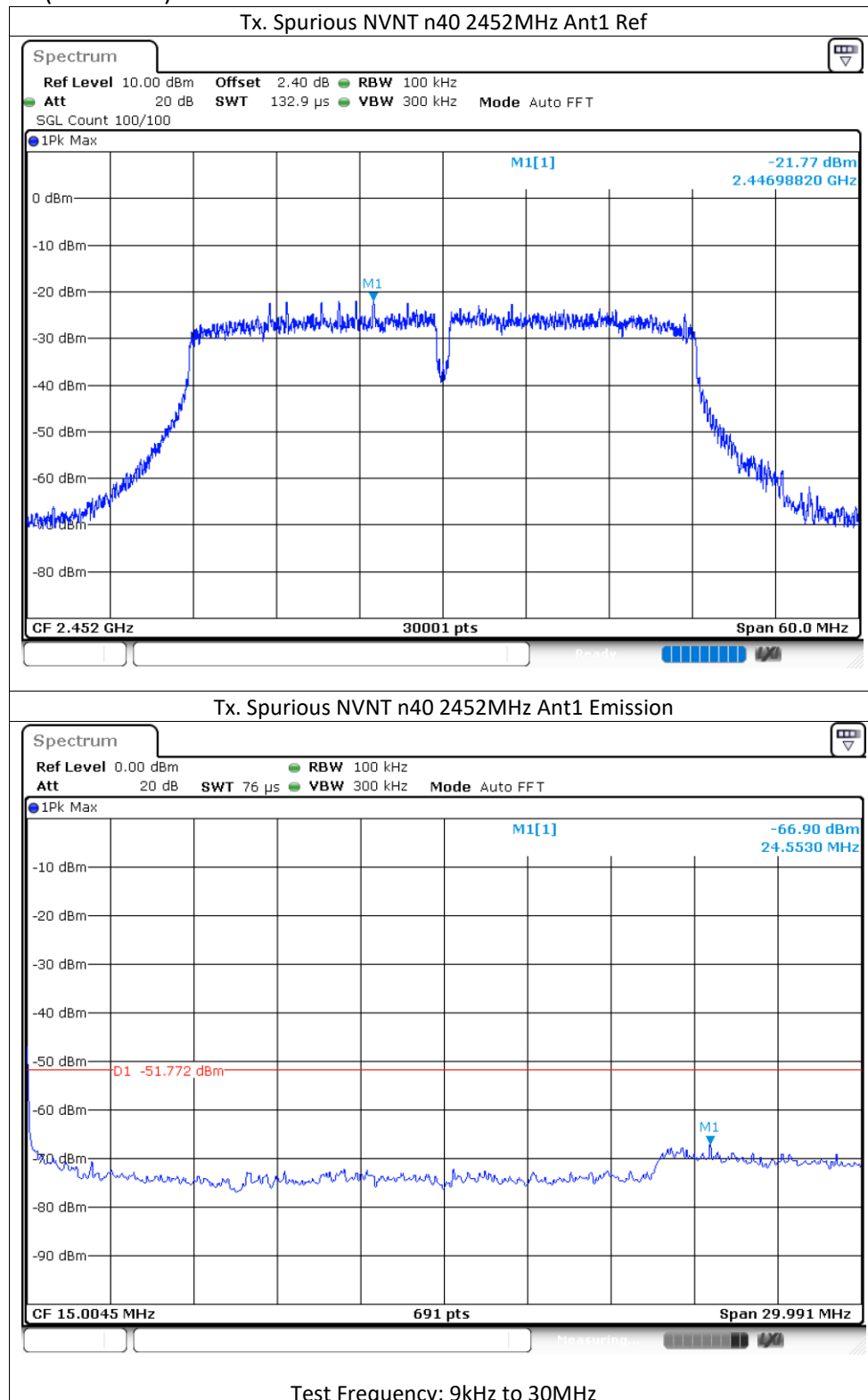


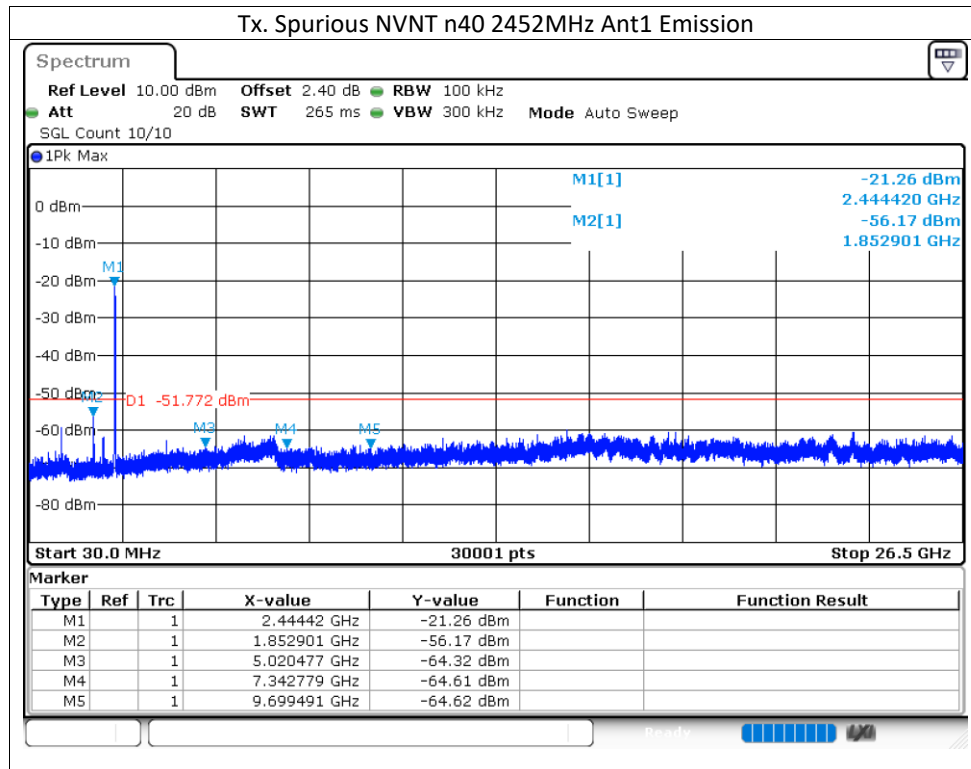
Channel 06 (2437MHz)





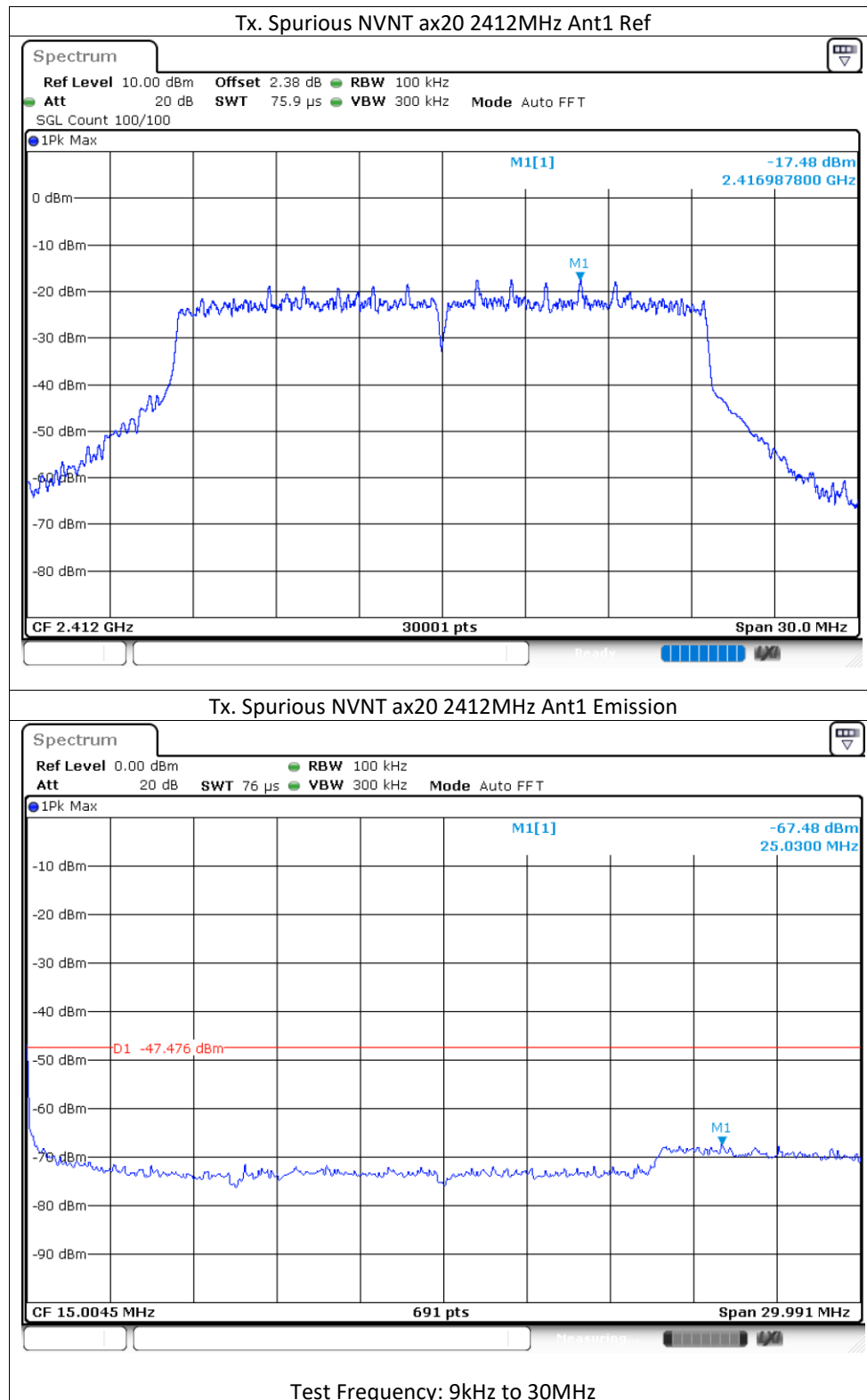
Channel 11 (2452MHz)

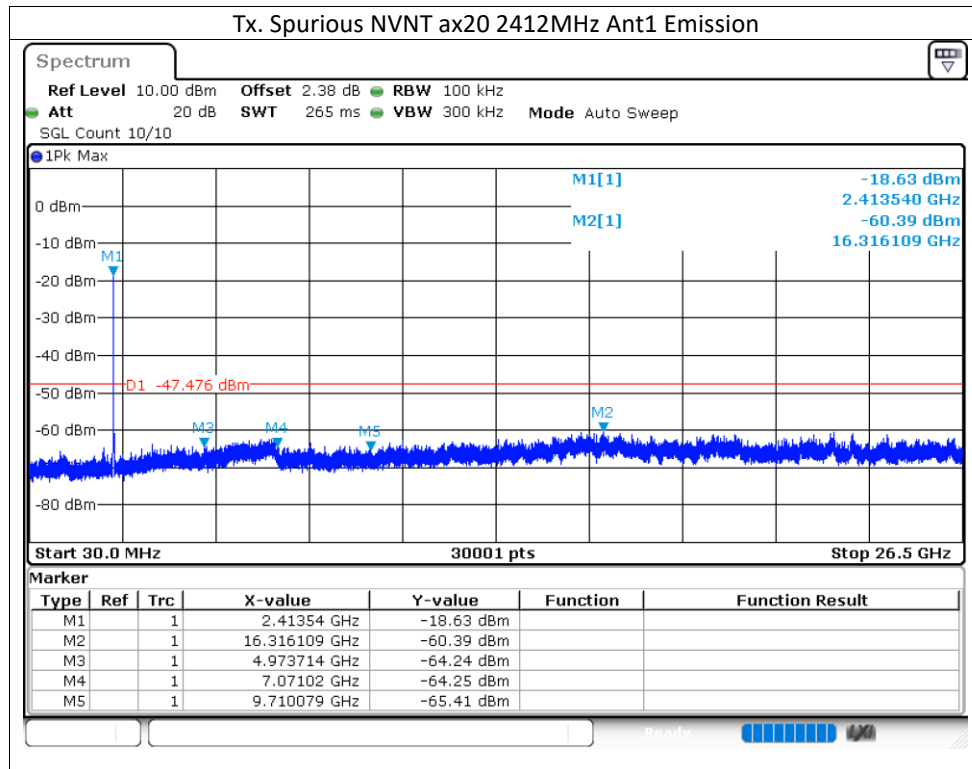




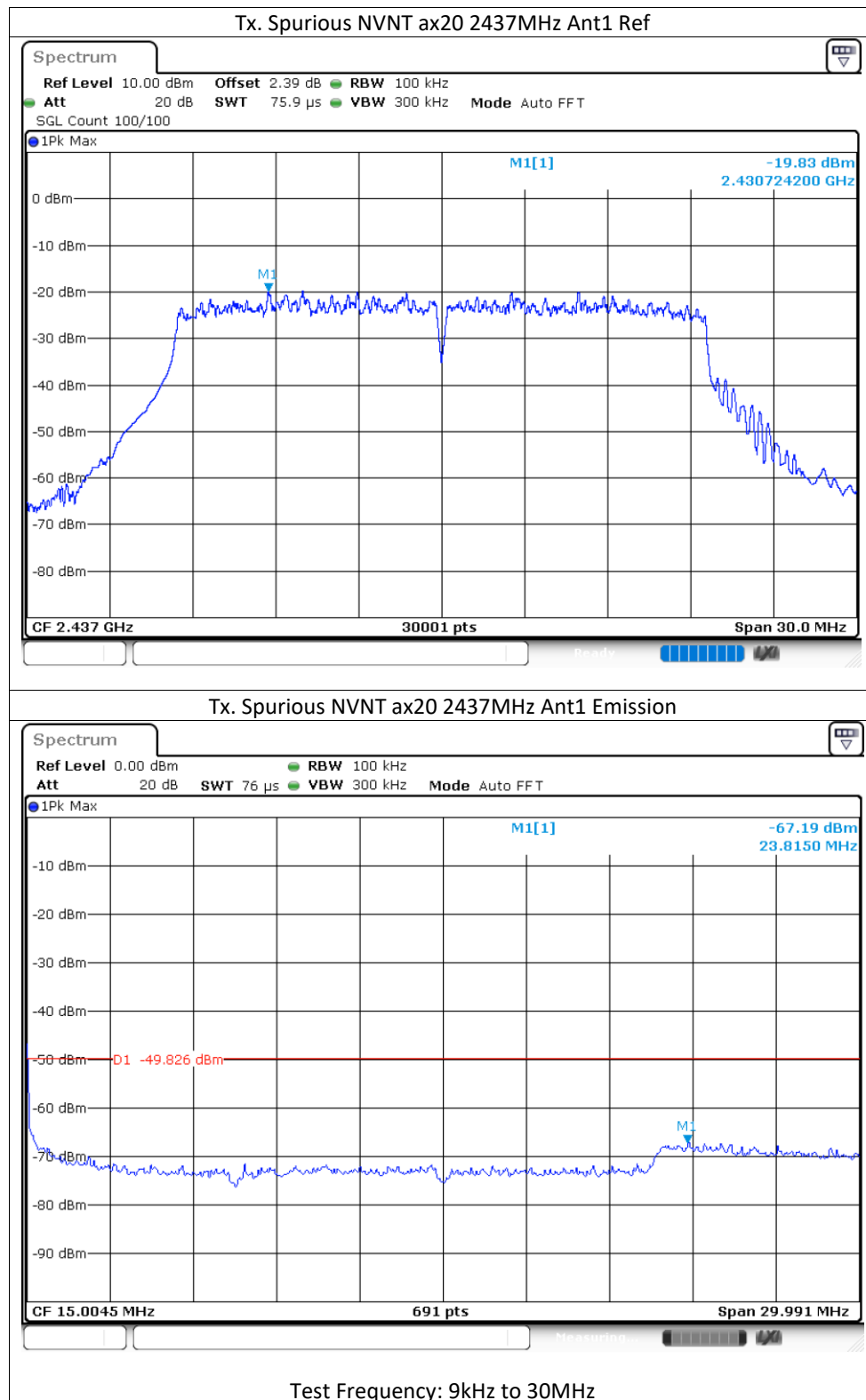
802.11ax-VHT20

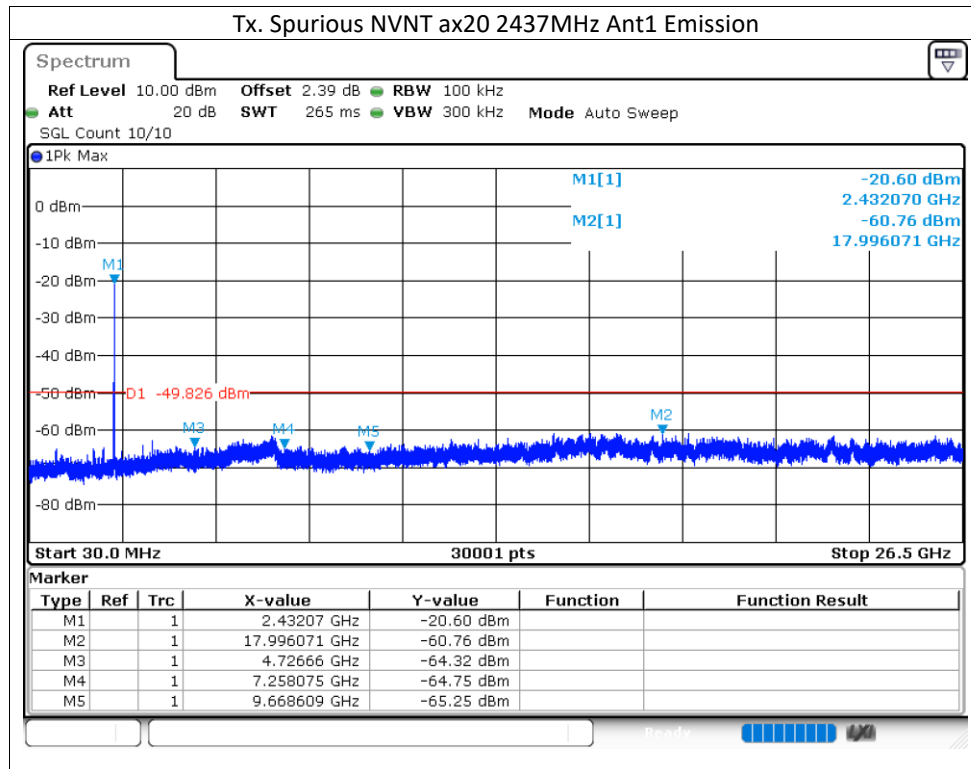
Channel 01 (2412MHz)



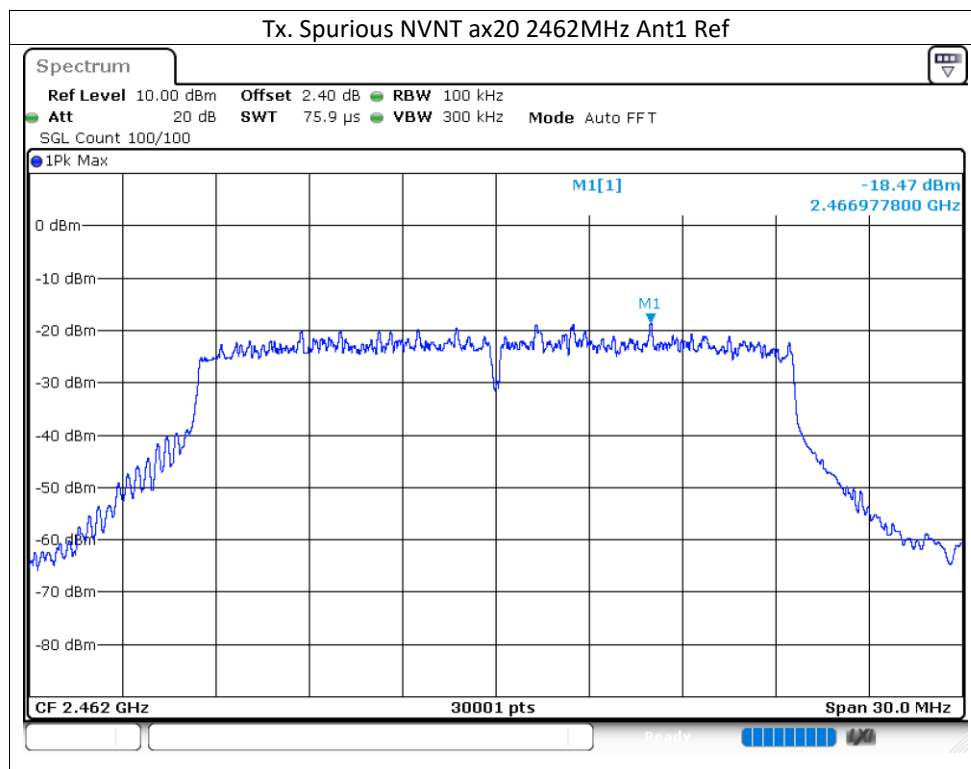


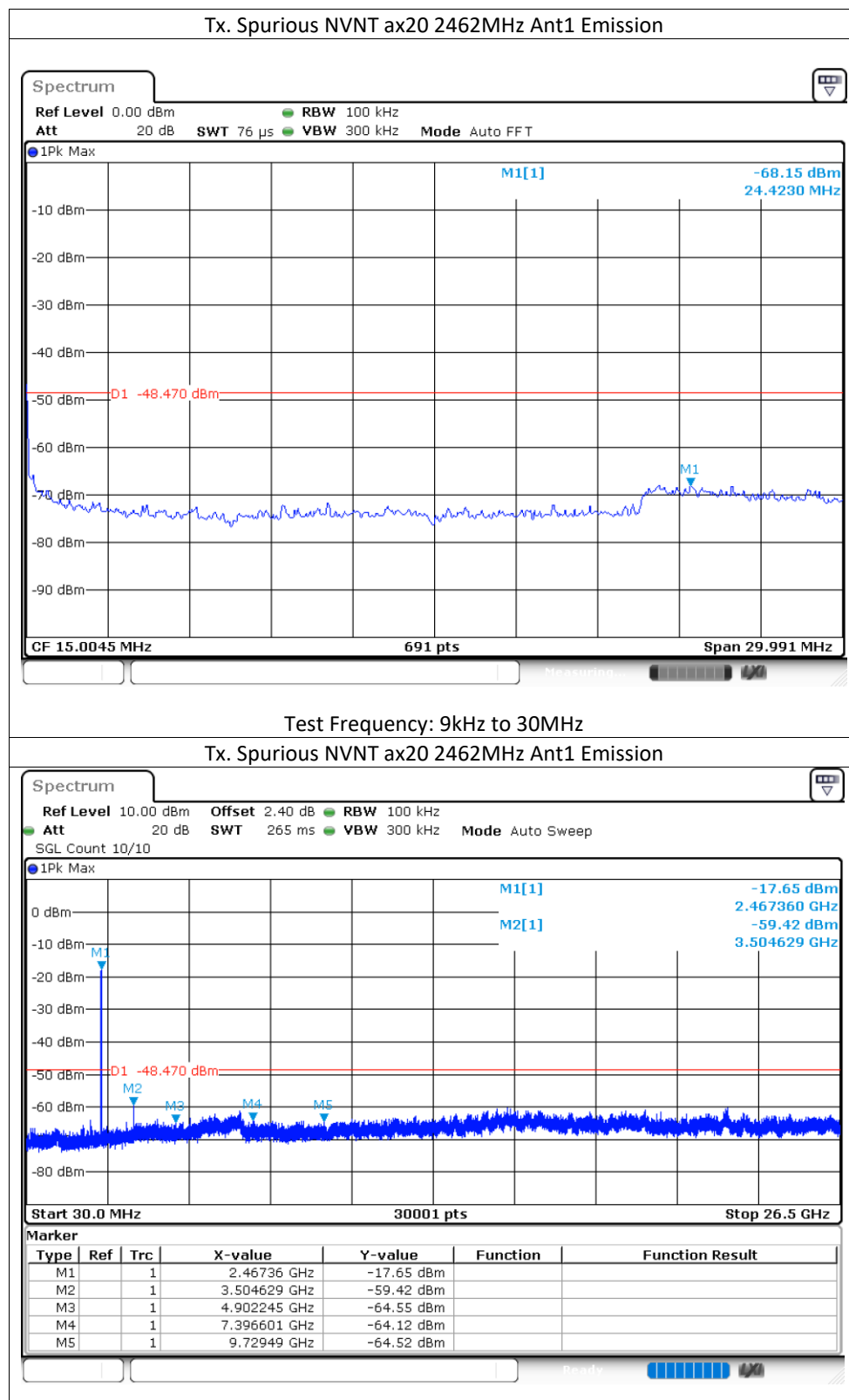
Channel 06 (2437MHz)





Channel 11 (2462MHz)





Applicant: EcoFlow Inc.

Date of Test: 30 July 2025

Worst Case Model: EF-HB-140-X

4.5 Out of Band Radiated Emissions (for emissions in 4.4 above that are less than 30dB below carrier), FCC Rule 15.247(d):

For out of band emissions that are close to or that exceed the 30dB attenuation requirement described in the specification, radiated measurements were performed at a 3m separation distance to determine whether these emissions complied with the general radiated emission requirement.

☒ Not required, since all emissions are more than 30dB below fundamental

☐ See attached data sheet

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

4.6 Transmitter Radiated Emissions in Restricted Bands, FCC Rule 15.35(b) (c):

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

4.7 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

$$FS = RA + AF + CF - AG + PD$$

Where

- FS = Field Strength in dB μ V/m
- RA = Receiver Amplitude (including preamplifier) in dB μ V
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB/m
- AG = Amplifier Gain in dB
- PD = Pulse Desensitization in dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

$$FS = RA + AF + CF - AG + PD$$

Example

Assume a receiver reading of 62.0 dB μ V is obtained. The antenna factor of 7.4 dB/m and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB. The net field strength for comparison to the appropriate emission limit is 42 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

$$RA = 62.0 \text{ dB}\mu\text{V}$$

$$AF = 7.4 \text{ dB/m}$$

$$CF = 1.6 \text{ dB}$$

$$AG = 29.0 \text{ dB}$$

$$PD = 0 \text{ dB}$$

$$FS = 62 + 7.4 + 1.6 - 29 + 0 = 42 \text{ dB}\mu\text{V/m}$$

$$\text{Level in mV/m} = \text{Common Antilogarithm } [(42 \text{ dB}\mu\text{V/m})/20] = 125.9 \mu\text{V/m}$$

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Model: EF-HB-140-X

4.8 Radiated Spurious Emission

Worst Case Radiated Spurious Emission
at 4824.000 MHz
is passed by 3.36 dB margin.

For the electronic filing, the worst case radiated emission configuration photographs are saved with filename: radiated photos.pdf.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

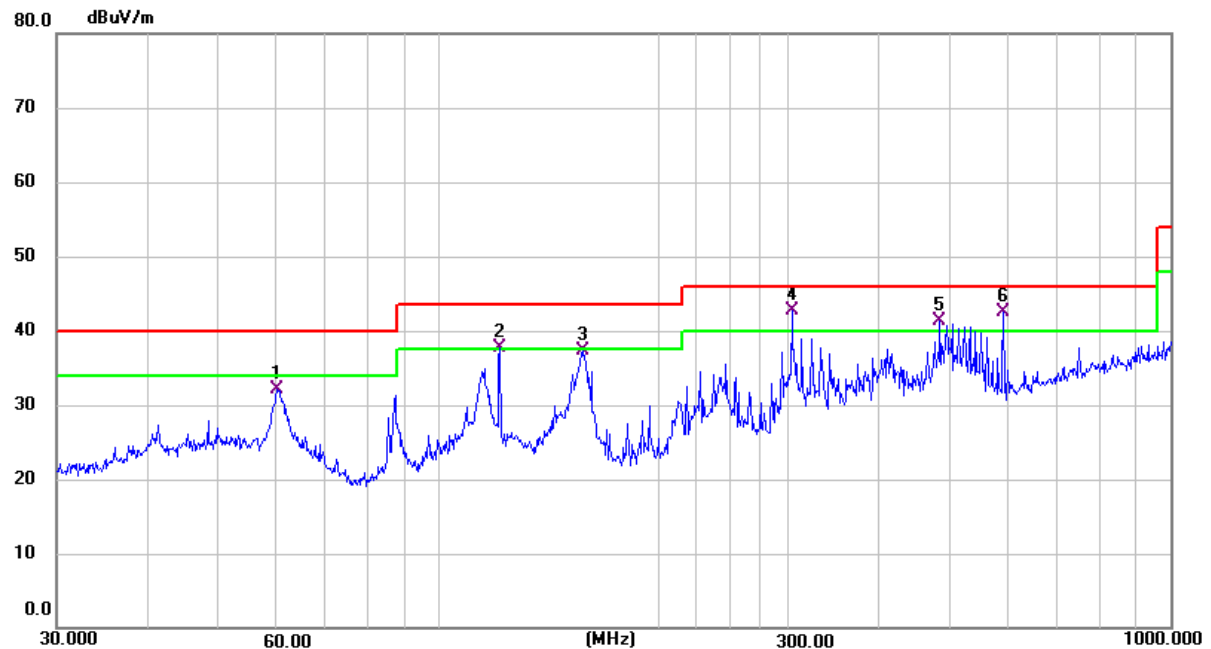
Worst Case Operating Mode:

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Model: EF-HB-140-X

Transmitting (802.11b-Channel 01)

ANT Polarity: Horizontal



Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
60.0690	12.74	19.31	32.05	40.00	-7.95	QP
121.1230	21.84	15.80	37.64	43.50	-5.86	QP
157.0072	22.32	15.02	37.34	43.50	-6.16	QP
303.5437	22.31	20.30	42.61	46.00	-3.39	QP
483.9094	16.43	24.80	41.23	46.00	-4.77	QP
590.9737	16.62	25.80	42.42	46.00	-3.58	QP

Remark:

1. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
2. Level (dBμV) = Reading (dBμV) + Factor (dB)
3. Margin (dB) = Level (dBμV) - Limit (dBμV)

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

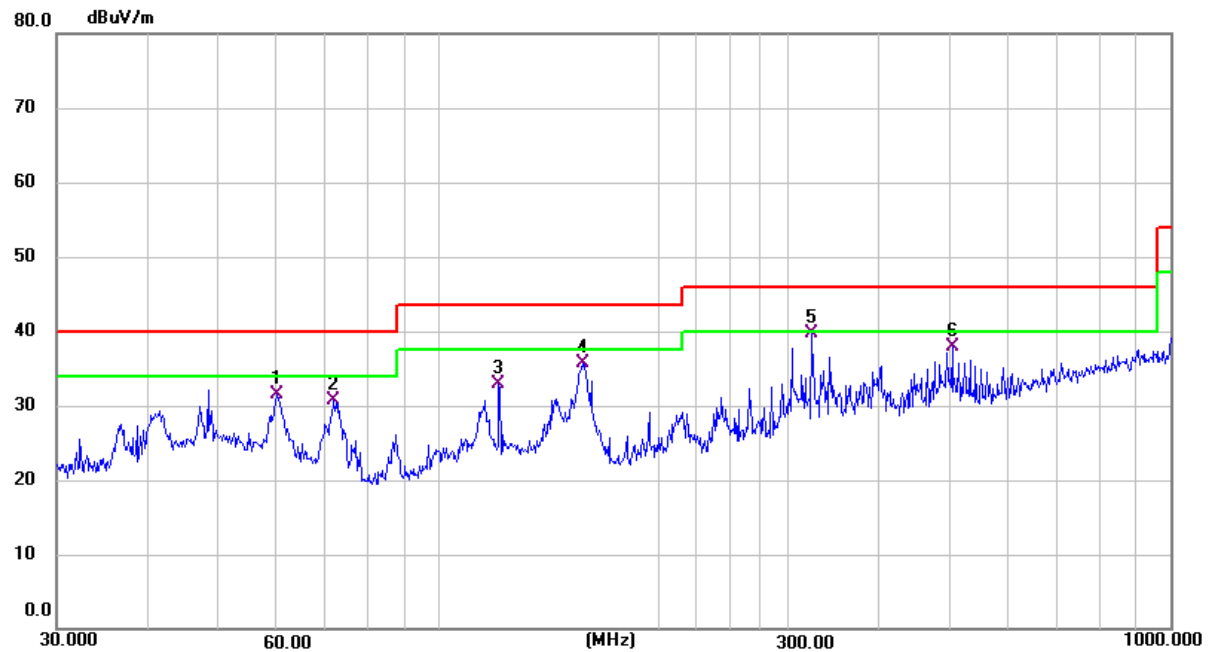
Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11b-Channel 01)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

ANT Polarity: Vertical



Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
60.0690	12.26	19.31	31.57	40.00	-8.43	QP
71.8320	14.85	15.88	30.73	40.00	-9.27	QP
120.6991	17.06	15.80	32.86	43.50	-10.64	QP
157.0074	20.61	15.02	35.63	43.50	-7.87	QP
323.3204	18.61	21.05	39.66	46.00	-6.34	QP
502.9395	13.31	24.54	37.85	46.00	-8.15	QP

Remark:

- Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- Level (dBμV) = Reading (dBμV) + Factor (dB)
- Margin (dB) = Level (dBμV) - Limit (dBμV)

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Model: EF-HB-140-X

Transmitting (802.11b-Channel 01)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	55.70	-13.31	42.39	74.00	-31.61	peak
Vertical	4824.000	61.53	-6.95	54.58	74.00	-19.42	peak
Vertical	7236.000	54.43	-2.59	51.84	74.00	-22.16	peak
Vertical	9648.000	48.30	0.70	49.00	74.00	-25.00	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	47.71	-13.31	34.40	54.00	-19.60	AVG
Vertical	4824.000	57.59	-6.95	50.64	54.00	-3.36	AVG
Vertical	7236.000	48.09	-2.59	45.50	54.00	-8.50	AVG
Vertical	9648.000	40.20	0.70	40.90	54.00	-13.10	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11b-Channel 07)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4884.000	59.60	-7.28	52.32	74.00	-21.68	peak
Vertical	7311.000	52.24	-2.20	50.04	74.00	-23.96	peak
Vertical	9768.000	47.58	0.45	48.03	74.00	-25.97	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4884.000	55.86	-7.28	48.58	54.00	-5.42	AVG
Vertical	7311.000	46.43	-2.20	44.23	54.00	-9.77	AVG
Vertical	9768.000	40.20	0.45	40.65	54.00	-13.35	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Model: EF-HB-140-X

Transmitting (802.11b-Channel 11)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	55.30	-12.38	42.92	74.00	-31.08	peak
Vertical	4924.000	57.16	-6.76	50.40	74.00	-23.60	peak
Vertical	7386.000	52.19	-2.63	49.56	74.00	-24.44	peak
Vertical	9848.000	47.55	1.08	48.63	74.00	-25.37	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	48.30	-12.38	35.92	54.00	-18.08	AVG
Vertical	4924.000	53.04	-6.76	46.28	54.00	-7.72	AVG
Vertical	7386.000	44.58	-2.63	41.95	54.00	-12.05	AVG
Vertical	9848.000	41.25	1.08	42.33	54.00	-11.67	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Model: EF-HB-140-X

Transmitting (802.11g-Channel 01)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	54.36	-13.31	41.05	74.00	-32.95	peak
Vertical	4824.000	56.02	-6.95	49.07	74.00	-24.93	peak
Vertical	7236.000	54.24	-2.59	51.65	74.00	-22.35	peak
Vertical	9648.000	47.50	0.70	48.20	74.00	-25.80	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	47.69	-13.31	34.38	54.00	-19.62	AVG
Vertical	4824.000	50.00	-6.95	43.05	54.00	-10.95	AVG
Vertical	7236.000	45.63	-2.59	43.04	54.00	-10.96	AVG
Vertical	9648.000	38.50	0.70	39.20	54.00	-14.80	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11g-Channel 07)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4884.000	57.66	-7.28	50.38	74.00	-23.62	peak
Vertical	7311.000	53.49	-2.20	51.29	74.00	-22.71	peak
Vertical	9768.000	48.50	0.45	48.95	74.00	-25.05	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4884.000	51.30	-7.28	44.02	54.00	-9.98	AVG
Vertical	7311.000	44.75	-2.20	42.55	54.00	-11.45	AVG
Vertical	9768.000	39.30	0.45	39.75	54.00	-14.25	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11g-Channel 11)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	55.08	-12.38	42.70	74.00	-31.30	peak
Vertical	4924.000	54.59	-6.76	47.83	74.00	-26.17	peak
Vertical	7386.000	51.71	-2.63	49.08	74.00	-24.92	peak
Vertical	9848.000	48.25	1.08	49.33	74.00	-24.67	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	47.25	-12.38	34.87	54.00	-19.13	AVG
Vertical	4924.000	47.09	-6.76	40.33	54.00	-13.67	AVG
Vertical	7386.000	44.26	-2.63	41.63	54.00	-12.37	AVG
Vertical	9848.000	39.30	1.08	40.38	54.00	-13.62	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Model: EF-HB-140-X

Transmitting (802.11n20-Channel 01)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	54.88	-13.31	41.57	74.00	-32.43	peak
Vertical	4824.000	57.52	-6.95	50.57	74.00	-23.43	peak
Vertical	7236.000	53.36	-2.59	50.77	74.00	-23.23	peak
Vertical	9648.000	47.45	0.70	48.15	74.00	-25.85	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	47.69	-13.31	34.38	54.00	-19.62	AVG
Vertical	4824.000	50.55	-6.95	43.60	54.00	-10.40	AVG
Vertical	7236.000	45.31	-2.59	42.72	54.00	-11.28	AVG
Vertical	9648.000	40.25	0.70	40.95	54.00	-13.05	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11n20-Channel 07)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4884.000	56.24	-7.28	48.96	74.00	-25.04	peak
Vertical	7311.000	51.74	-2.20	49.54	74.00	-24.46	peak
Vertical	9768.000	49.02	0.45	49.47	74.00	-24.53	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4884.000	49.90	-7.28	42.62	54.00	-11.38	AVG
Vertical	7311.000	43.98	-2.20	41.78	54.00	-12.22	AVG
Vertical	9768.000	41.45	0.45	41.90	54.00	-12.10	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11n20-Channel 11)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	55.25	-12.38	42.87	74.00	-31.13	peak
Vertical	4924.000	54.97	-6.76	48.21	74.00	-25.79	peak
Vertical	7386.000	51.20	-2.63	48.57	74.00	-25.43	peak
Vertical	9848.000	48.11	1.08	49.19	74.00	-24.81	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	48.33	-12.38	35.95	54.00	-18.05	AVG
Vertical	4924.000	47.50	-6.76	40.74	54.00	-13.26	AVG
Vertical	7386.000	43.20	-2.63	40.57	54.00	-13.43	AVG
Vertical	9848.000	40.20	1.08	41.28	54.00	-12.72	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Model: EF-HB-140-X

Transmitting (802.11n40-Channel 03)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	55.10	-13.31	41.79	74.00	-32.21	peak
Vertical	4844.000	55.34	-6.88	48.46	74.00	-25.54	peak
Vertical	7266.000	52.58	-2.67	49.91	74.00	-24.09	peak
Vertical	9688.000	48.30	0.97	49.27	74.00	-24.73	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	47.30	-13.31	33.99	54.00	-20.01	AVG
Vertical	4844.000	48.03	-6.88	41.15	54.00	-12.85	AVG
Vertical	7266.000	44.20	-2.67	41.53	54.00	-12.47	AVG
Vertical	9688.000	40.20	0.97	41.17	54.00	-12.83	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Model: EF-HB-140-X

Transmitting (802.11n40-Channel 06)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4844.000	54.62	-6.88	47.74	74.00	-26.26	peak
Vertical	7311.000	51.92	-2.20	49.72	74.00	-24.28	peak
Vertical	9748.000	48.90	0.32	49.22	74.00	-24.78	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4844.000	47.32	-6.88	40.44	54.00	-13.56	AVG
Vertical	7311.000	44.05	-2.20	41.85	54.00	-12.15	AVG
Vertical	9748.000	41.20	0.32	41.52	54.00	-12.48	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11n40-Channel 09)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	55.20	-12.38	42.82	74.00	-31.18	peak
Vertical	4904.000	54.77	-7.35	47.42	74.00	-26.58	peak
Vertical	7356.000	52.61	-1.93	50.68	74.00	-23.32	peak
Vertical	9808.000	48.50	0.80	49.30	74.00	-24.70	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	47.30	-12.38	34.92	54.00	-19.08	AVG
Vertical	4904.000	47.09	-7.35	39.74	54.00	-14.26	AVG
Vertical	7356.000	43.30	-1.93	41.37	54.00	-12.63	AVG
Vertical	9808.000	40.50	0.80	41.30	54.00	-12.70	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Operating Mode:

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Worst Case Model: EF-HB-140-X

Transmitting (802.11ax20-Channel 01)

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	55.23	-13.31	41.92	74.00	-32.08	peak
Vertical	4824.000	56.96	-6.95	50.01	74.00	-23.99	peak
Vertical	7236.000	52.56	-2.59	49.97	74.00	-24.03	peak
Vertical	9648.000	48.25	0.70	48.95	74.00	-25.05	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2390.000	47.25	-13.31	33.94	54.00	-20.06	AVG
Vertical	4824.000	49.60	-6.95	42.65	54.00	-11.35	AVG
Vertical	7236.000	44.86	-2.59	42.27	54.00	-11.73	AVG
Vertical	9648.000	39.60	0.70	40.30	54.00	-13.70	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11ax20-Channel 07)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4874.000	56.29	-7.16	49.13	74.00	-24.87	peak
Vertical	7311.000	51.91	-2.20	49.71	74.00	-24.29	peak
Vertical	9748.000	48.88	0.32	49.20	74.00	-24.80	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	4874.000	48.91	-7.16	41.75	54.00	-12.25	AVG
Vertical	7311.000	44.65	-2.20	42.45	54.00	-11.55	AVG
Vertical	9748.000	41.02	0.32	41.34	54.00	-12.66	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 24 July 2025

Worst Case Model: EF-HB-140-X

Worst Case Operating Mode:

Transmitting (802.11ax20-Channel 11)

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Radiated Emissions (Above 1GHz)

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	55.02	-12.38	42.64	74.00	-31.36	peak
Vertical	4924.000	55.04	-6.76	48.28	74.00	-25.72	peak
Vertical	7386.000	52.58	-2.63	49.95	74.00	-24.05	peak
Vertical	9848.000	48.33	1.08	49.41	74.00	-24.59	peak

Polarization	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
Vertical	2483.500	48.50	-12.38	36.12	54.00	-17.88	AVG
Vertical	4924.000	47.99	-6.76	41.23	54.00	-12.77	AVG
Vertical	7386.000	44.73	-2.63	42.10	54.00	-11.90	AVG
Vertical	9848.000	41.08	1.08	42.16	54.00	-11.84	AVG

- NOTES:
1. Peak detector is used, RBW=1MHz/VBW=3MHz for peak value and RBW=1MHz / VBW=10Hz for average value.
 2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
 3. Negative value in the margin column shows emission below limit.
 4. Horn antenna used for the emission over 1000MHz.

Emission within the restricted band meets the requirement of section 15.205. The corresponding limit as per 15.209 is based on Quasi peak limit for frequencies below 1000 MHz and average limit for frequencies over 1000 MHz. The radio frequency emissions above 1GHz also meet corresponding 20dB permitted peak limit with a peak detector function.

Applicant: EcoFlow Inc.

Date of Test: 17 July 2025

Model: EF-HB-140-X

4.9 Conducted Emission

Worst Case Conducted Emission (802.11b-Channel 01)
at 0.1860 MHz
is passed by 8.88 dB margin.

For the electronic filing, the worst case radiated emission configuration photographs are saved with filename: conducted photos.pdf.

Applicant: EcoFlow Inc.

Date of Test: 17 July 2025

Model: EF-HB-140-X

Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

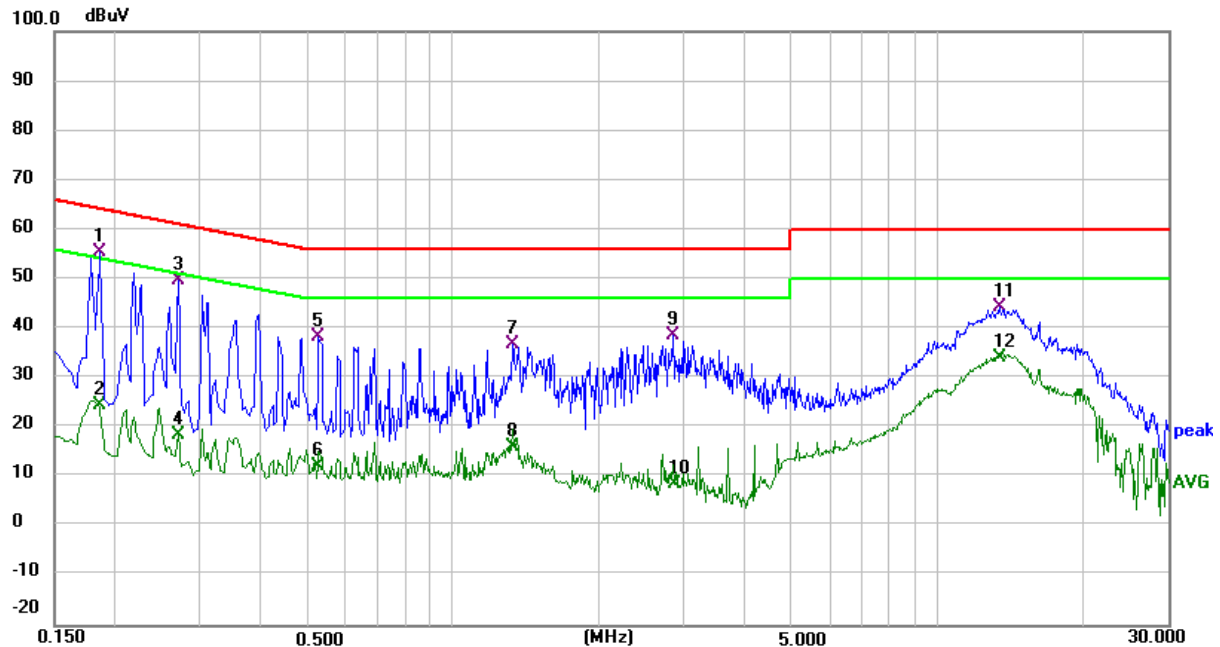
Worst Case Operating Mode: Transmitting (802.11b-Channel 01)

Phase: Live

Graphic / Data Table

Conducted Emissions

Pursuant to FCC 15.207: Emissions Requirement



Limit and Margin QP

Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV)	Limit (dBμV)	Margin (dB)	Detector
0.1860	45.31	10.02	55.33	64.21	-8.88	QP
0.2700	39.55	10.19	49.74	61.12	-11.38	QP
0.5260	27.55	10.70	38.25	56.00	-17.75	QP
1.3260	24.40	12.36	36.76	56.00	-19.24	QP
2.8500	23.23	15.42	38.65	56.00	-17.35	QP
13.4780	34.45	9.93	44.38	60.00	-15.62	QP

Limit and Margin AV

Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV)	Limit (dBμV)	Margin (dB)	Detector
0.1860	14.42	10.02	24.44	54.21	-29.77	AVG
0.2700	8.34	10.19	18.53	51.12	-32.59	AVG
0.5260	1.51	10.70	12.21	46.00	-33.79	AVG
1.3260	3.88	12.36	16.24	46.00	-29.76	AVG
2.8580	-6.90	15.44	8.54	46.00	-37.46	AVG
13.4780	24.09	9.93	34.02	50.00	-15.98	AVG

Remark:

1. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) = Limit (dBμV) – Level (dBμV)

Applicant: EcoFlow Inc.

Date of Test: 17 July 2025

Model: EF-HB-140-X

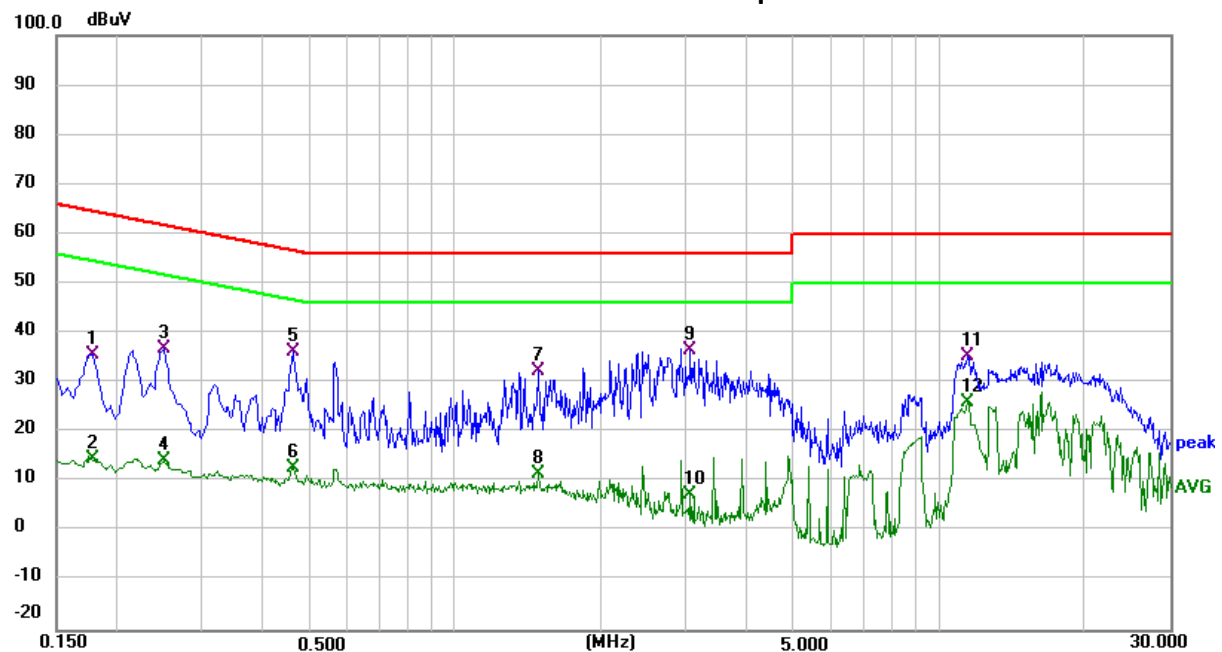
Worst Case Test Voltage: USB-C1 DC 28V powered by adapter from AC mains 120V60Hz

Worst Case Operating Mode: Transmitting (802.11b-Channel 01)

Phase: Neutral

Graphic / Data Table

Conducted Emissions Pursuant to FCC 15.207: Emissions Requirement



Limit and Margin QP

Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV)	Limit (dBμV)	Margin (dB)	Detector
0.1780	25.55	9.98	35.53	64.58	-29.05	QP
0.2500	26.80	10.13	36.93	61.76	-24.83	QP
0.4620	25.73	10.55	36.28	56.66	-20.38	QP
1.4860	19.66	12.66	32.32	56.00	-23.68	QP
3.0579	20.84	15.84	36.68	56.00	-19.32	QP
11.4900	25.61	9.88	35.49	60.00	-24.51	QP

Limit and Margin AV

Frequency (MHz)	Reading (dBμV)	Factor (dB)	Level (dBμV)	Limit (dBμV)	Margin (dB)	Detector
0.1780	4.64	9.98	14.62	54.58	-39.96	AVG
0.2500	4.14	10.13	14.27	51.76	-37.49	AVG
0.4620	2.21	10.55	12.76	46.66	-33.90	AVG
1.4860	-1.12	12.66	11.54	46.00	-34.46	AVG
3.0579	-8.33	15.84	7.51	46.00	-38.49	AVG
11.4900	16.04	9.88	25.92	50.00	-24.08	AVG

Remark:

1. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

2. Margin (dB) = Limit (dBμV) – Level (dBμV)

Applicant: EcoFlow Inc.

Model: EF-HB-140-X

4.10 Radiated Emissions from Digital Section of Transceiver, FCC Ref: 15.109

- ☐ Not required - No digital part
- ☐ Test results are attached
- ☒ Included in the separated report.

Applicant: EcoFlow Inc.

Model: EF-HB-140-X

4.11 Transmitter Duty Cycle Calculation and Measurements, FCC Rule 15.35(b), (c)

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The Transmitter ON time was determined from the resultant time-amplitude display:

	See attached spectrum analyzer chart (s) for Transmitter timing
	See Transmitter timing diagram provided by manufacturer
x	Not applicable, duty cycle was not used.

5.0 Equipment Photographs

For electronic filing, the photographs are saved with filename: external photos.pdf & internal photos.pdf.

6.0 Product Labeling

For electronic filing, the FCC ID label artwork and location is saved with filename: label.pdf.

7.0 Technical Specifications

For electronic filing, the block diagram and circuit diagram are saved with filename: block.pdf and circuit.pdf respectively.

8.0 Instruction Manual

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

This manual will be provided to the end-user with each unit sold/leased in the United States.

9.0 Confidentiality Request

For electronic filing, the confidentiality request of the tested EUT is saved with filename: request.pdf.

10.0 Discussion of Pulse Desensitization

The determination of pulse desensitivity was made in accordance with Hewlett Packard Application Note 150-2, *Spectrum Analysis ... Pulsed RF*.

Pulse desensitivity is not applicable for this device since the transmitter transmits the RF signal continuously.

11.0 Test Equipment List

Radiated Emissions & RF Conducted Test equipment

Equip No.	Description	Manufacturer	Model No.	Cal. Date	Due Date
LES-411-C	3m Anechoic Chamber	N/A	9*6*6	2024/6/18	2027/6/17
LES-342-C	EMI Test Receiver	R&S	ESPI3	2025/7/23	2026/7/22
LES-398-C	Log-Periodic Antenna	SCHWARZBECK	VULB 9162	2025/4/29	2026/4/28
LES-345-C	Cable	Talent Microwave	A81-NMNM-8.5M	2024/4/26	2027/4/25
LES-351-C	Cable	Talent Microwave	A81-NMNM-2M	2024/4/26	2027/4/25
LES-039-C	Pre-Amplifier	EMC	EMC051835SE	2025/4/17	2026/4/16
LES-332-C	Broadband Horn Antenna	SCHWARZBECK	BBHA 9120 D	2024/5/18	2027/5/17
LES-046-C	Spectrum Analyzer	Agilent	E4440A	2025/4/24	2026/4/23
LES-063-C	Filter	TRILTHIC	2400MHz	2024/4/26	2027/4/25
LES-236-C	Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	2024/5/12	2027/5/11
LES-235-C	Cable	Keysight	A40-KMKM-8M	2024/4/26	2027/4/25
LES-234-C	Cable	Keysight	A40-2/92M2/92M-2M	2024/4/26	2027/4/25
LES-332-C	Broadband Horn Antenna	SCHWARZBECK	BBHA 9120 D	2024/5/18	2027/5/17
LES-175-C	Spectrum Analyzer	R&S	FSV40	2025/4/17	2026/4/16
LES-045-C	MXG Vector Signal Generator	Agilent	N5182A	2025/4/17	2026/4/16
LES-486-C	Wideband Radio Communication Tester Specifications	R&S	CMW500	2025/5/6	2026/5/5
LES-037-C	USB RF Power Sensor	DARE	RPR3006W	2025/4/17	2026/4/16
LES-448-C	Filter	COM-MW	k6-2496-2690-10s60100-004	2025/1/2	2028/1/1

AC Conducted Test equipment

Equip No.	Description	Manufacturer	Model No.	Cal. Date	Due Date
LES-021-C	Single Phase LISN	R&S	ENV216	2025/4/17	2026/4/16
LES-008-C	Single Phase LISN	R&S	ENV216	2024/4/25	2027/4/24
LES-076-C	Low Frequency Cable	N/A	R-03	2024/4/25	2027/4/24
LES-075-C	50Ω Coaxial Switch	Anritsu	MP59B	2024/4/26	2027/4/25
LES-001-C	EMI Test Receiver	R&S	ESCI	2025/4/17	2026/4/16

***** End of Report *****