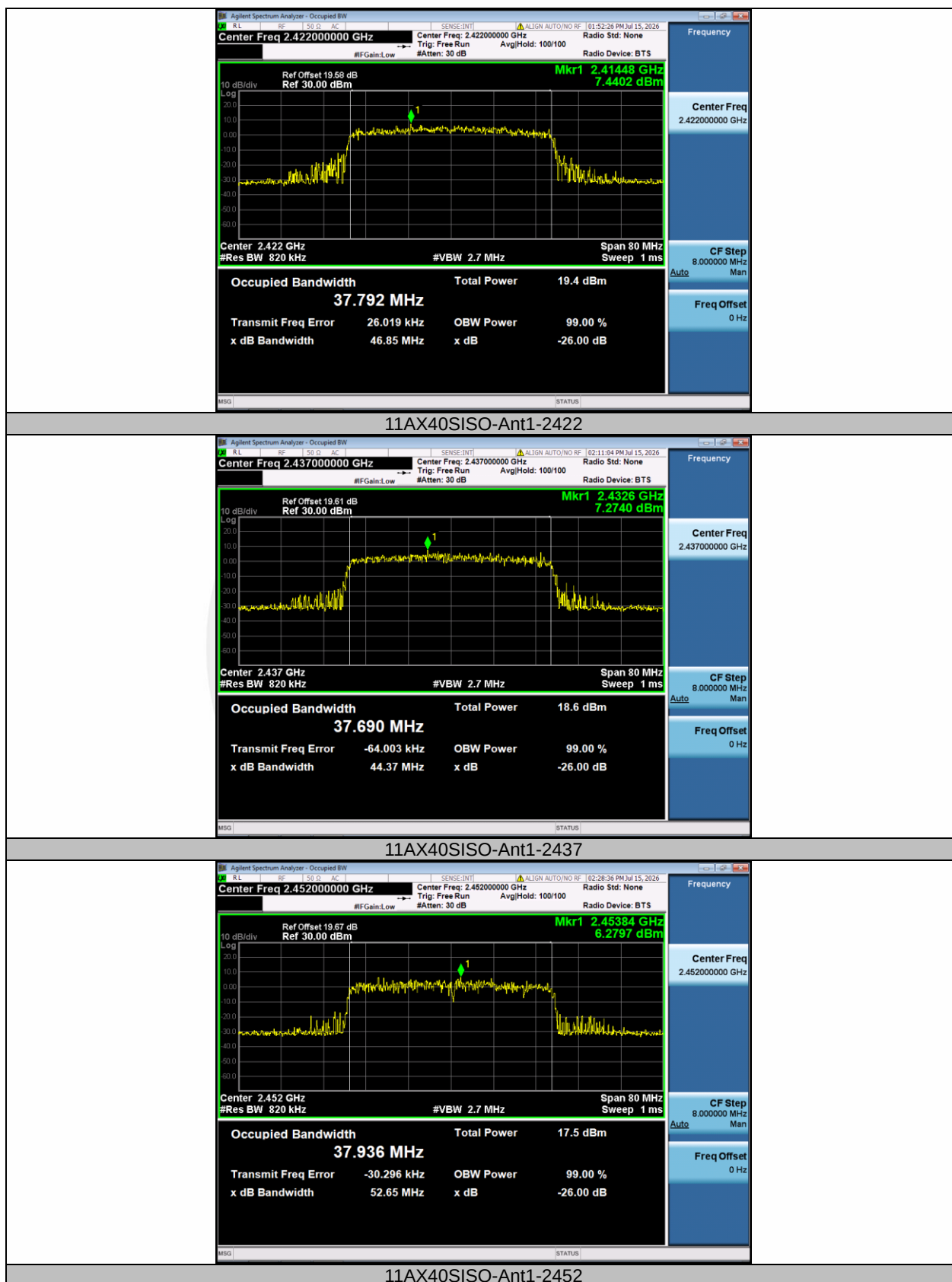
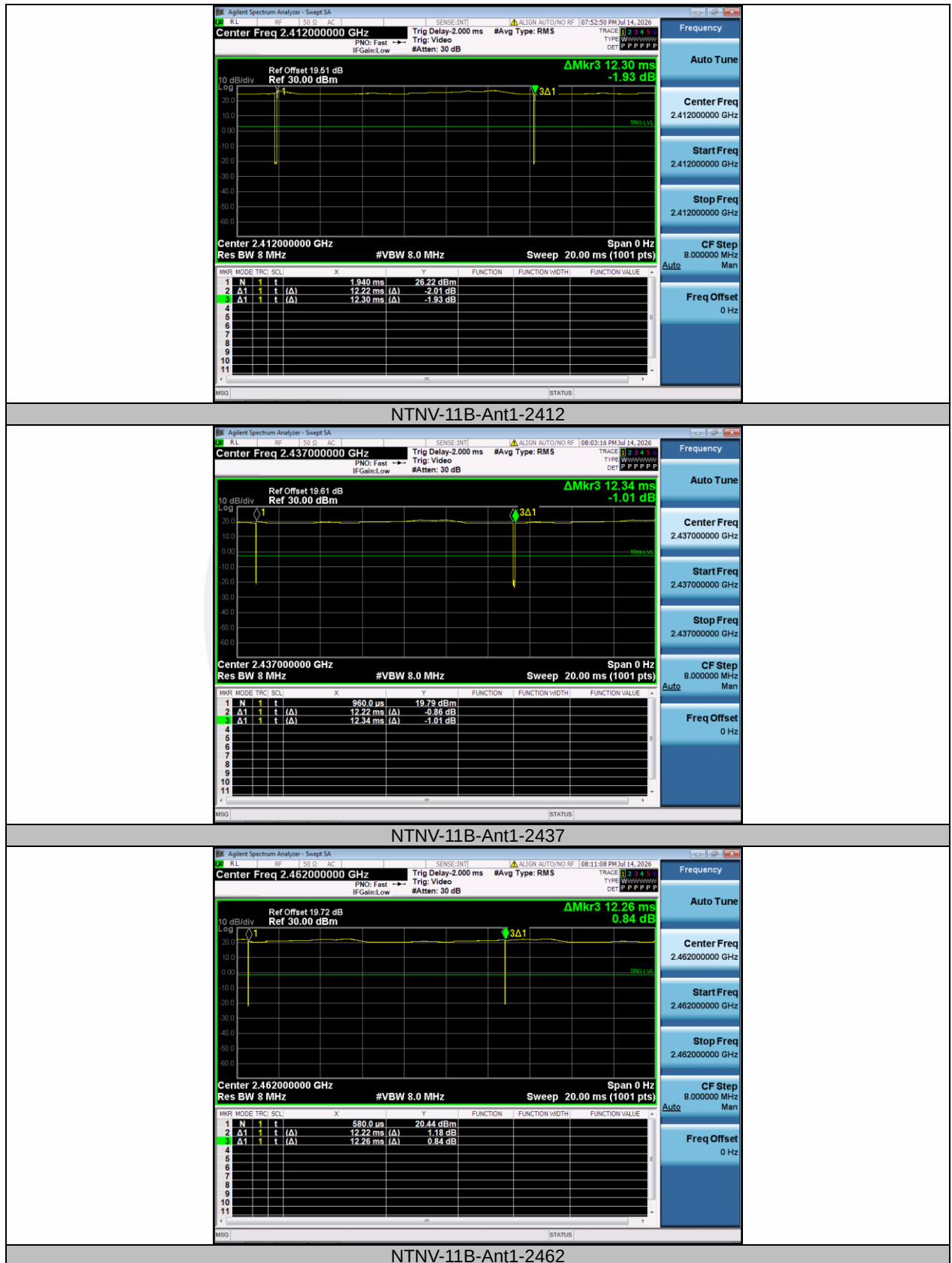
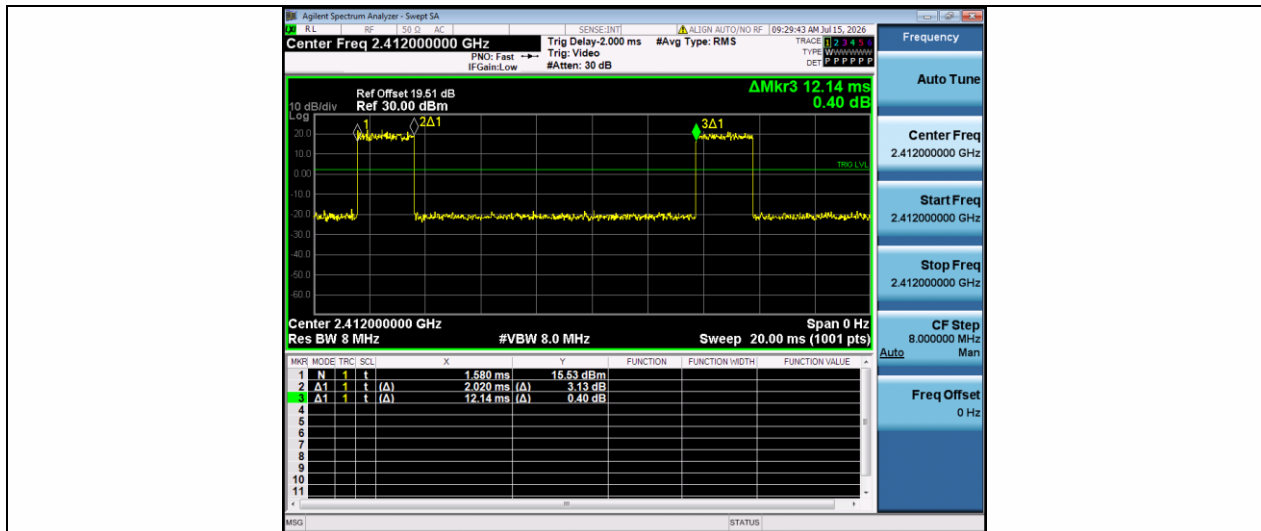




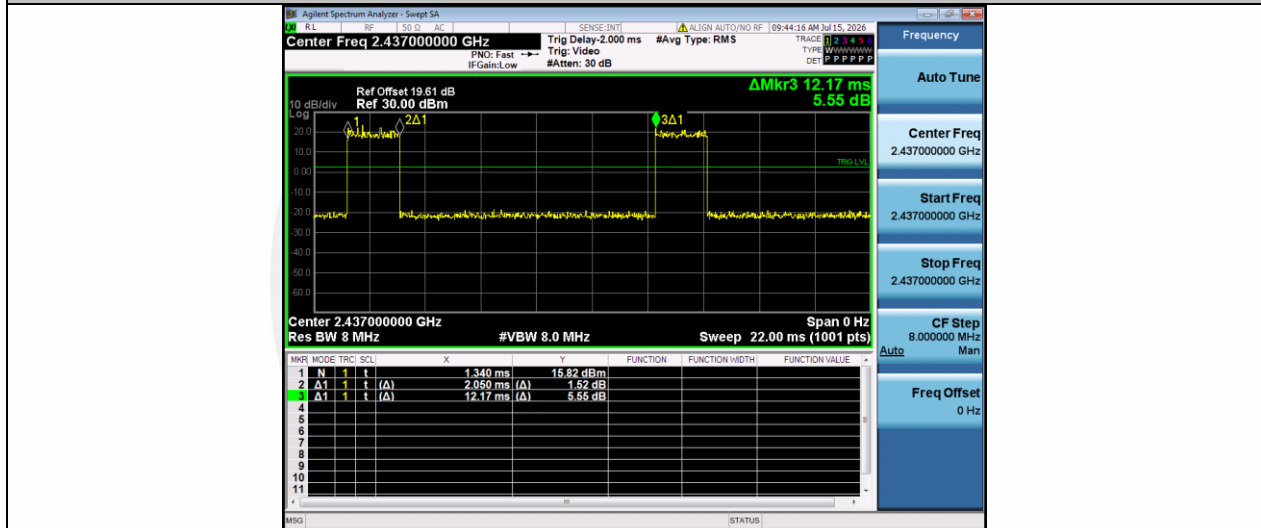
Duty Cycle

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	12.22	12.30	99.35	0.03
11B	Ant1	2437	12.22	12.34	99.03	0.04
11B	Ant1	2462	12.22	12.26	99.67	0.01
11G	Ant1	2412	2.02	12.14	16.64	7.79
11G	Ant1	2437	2.05	12.17	16.84	7.74
11G	Ant1	2462	2.04	12.14	16.80	7.75
11N20SISO	Ant1	2412	1.90	12.02	15.81	8.01
11N20SISO	Ant1	2437	1.90	12.02	15.81	8.01
11N20SISO	Ant1	2462	1.90	12.14	15.65	8.05
11N40SISO	Ant1	2422	0.94	11.42	8.23	10.85
11N40SISO	Ant1	2437	0.94	11.04	8.51	10.70
11N40SISO	Ant1	2452	0.94	11.16	8.42	10.75
11AX20SISO	Ant1	2412	1.46	11.58	12.61	8.99
11AX20SISO	Ant1	2437	1.46	11.58	12.61	8.99
11AX20SISO	Ant1	2462	1.46	11.58	12.61	8.99
11AX40SISO	Ant1	2422	0.74	10.86	6.81	11.67
11AX40SISO	Ant1	2437	0.76	10.88	6.99	11.56
11AX40SISO	Ant1	2452	0.76	11.22	6.77	11.69

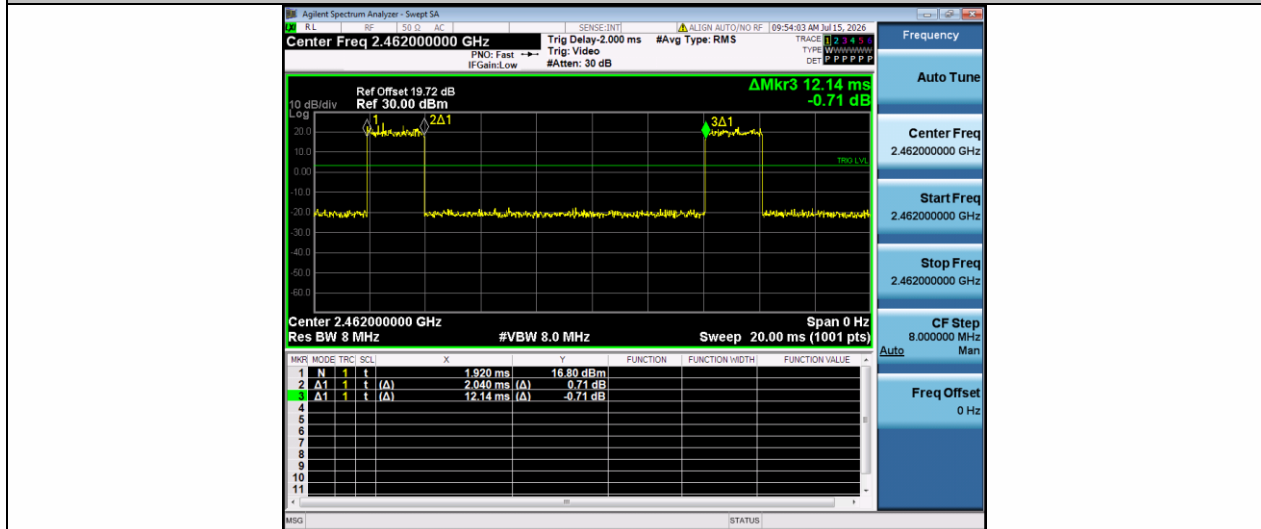




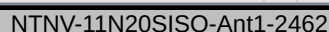
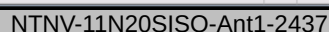
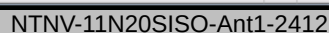
NTNV-11G-Ant1-2412

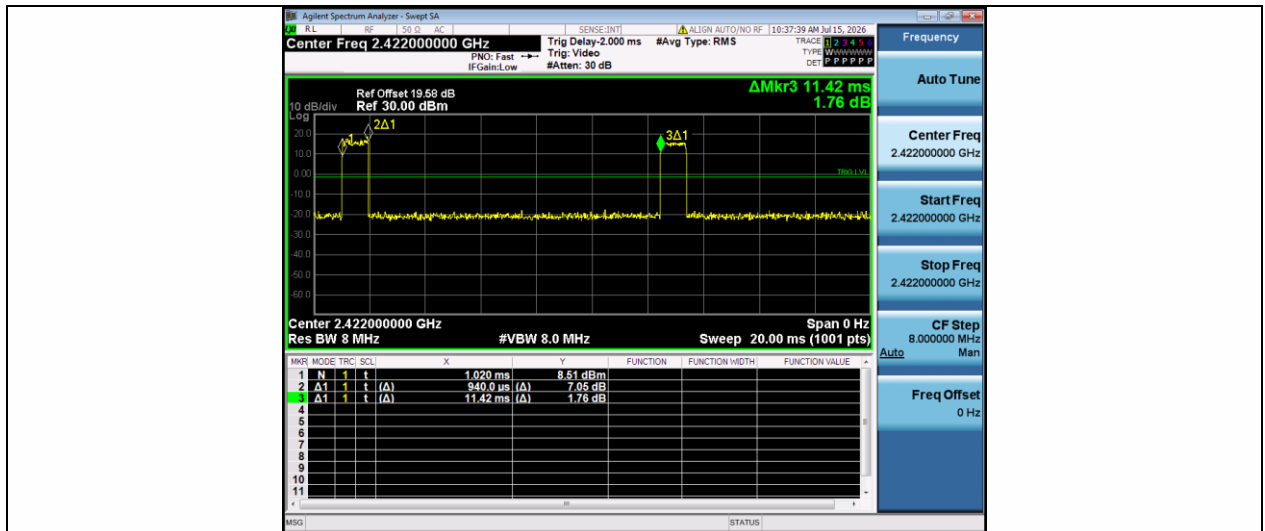


NTNV-11G-Ant1-2437

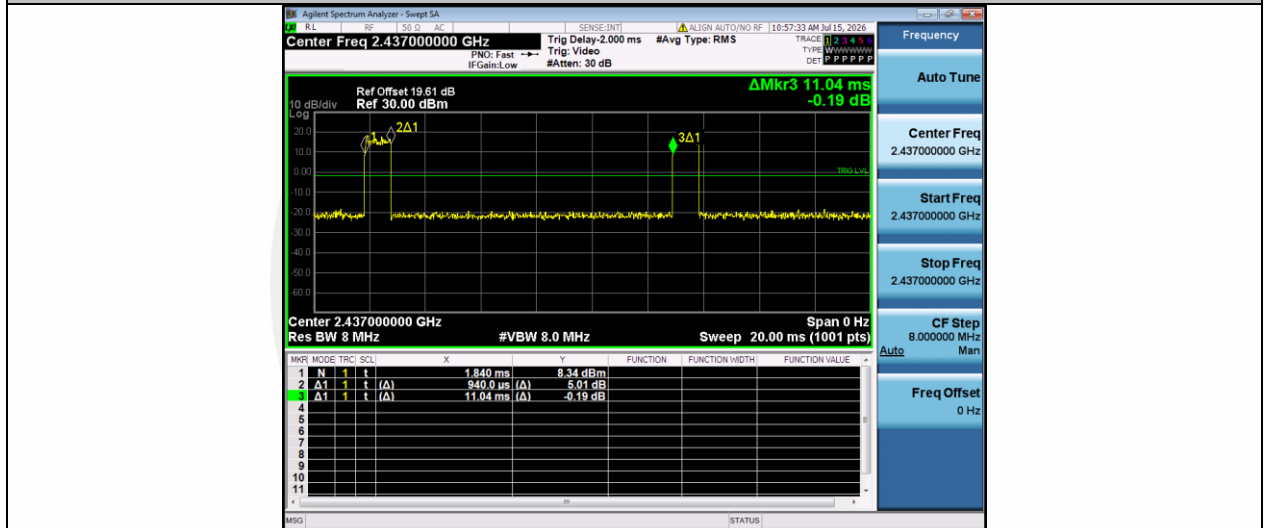


NTNV-11G-Ant1-2462

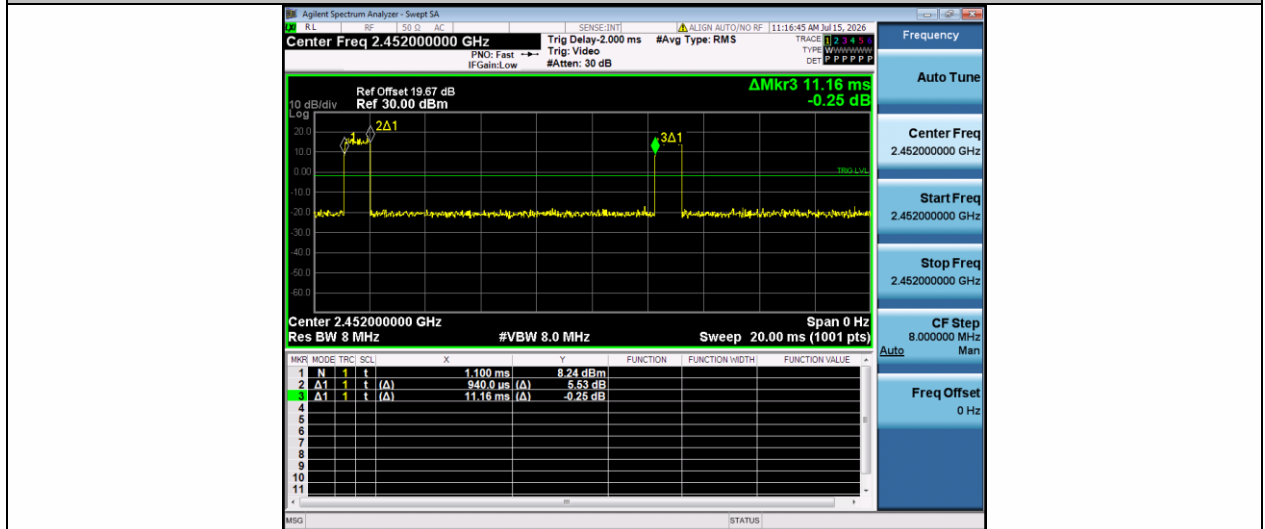




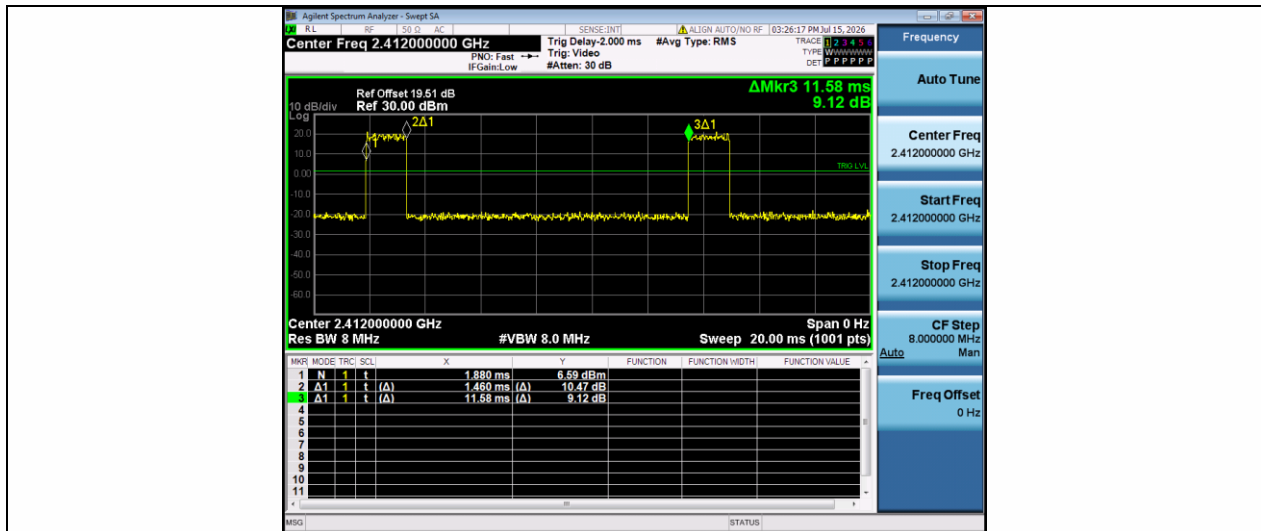
NTNV-11N40SISO-Ant1-2422



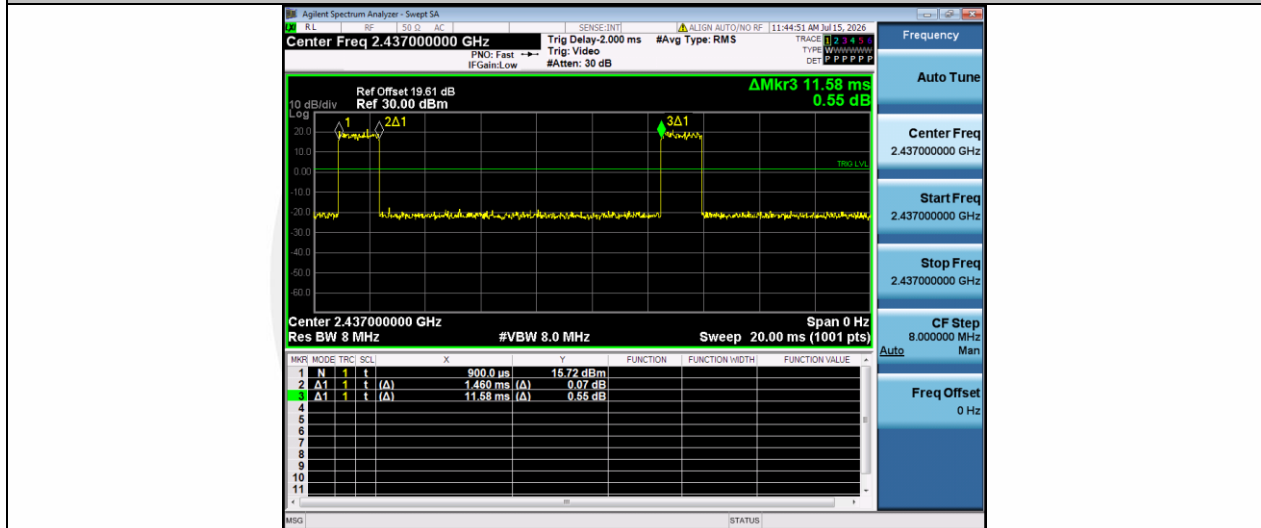
NTNV-11N40SISO-Ant1-2437



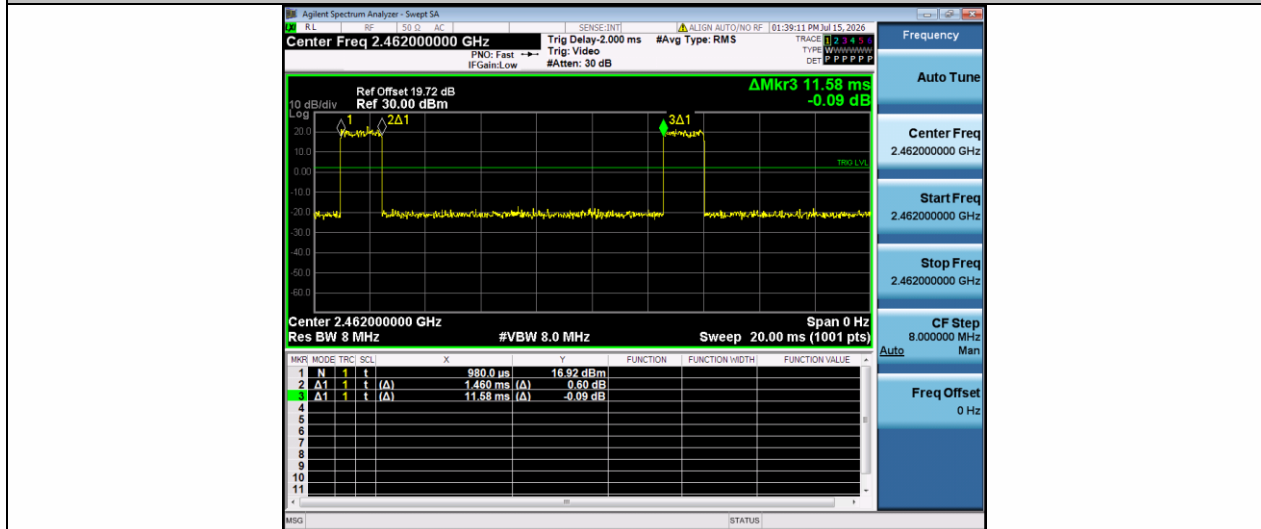
NTNV-11N40SISO-Ant1-2452



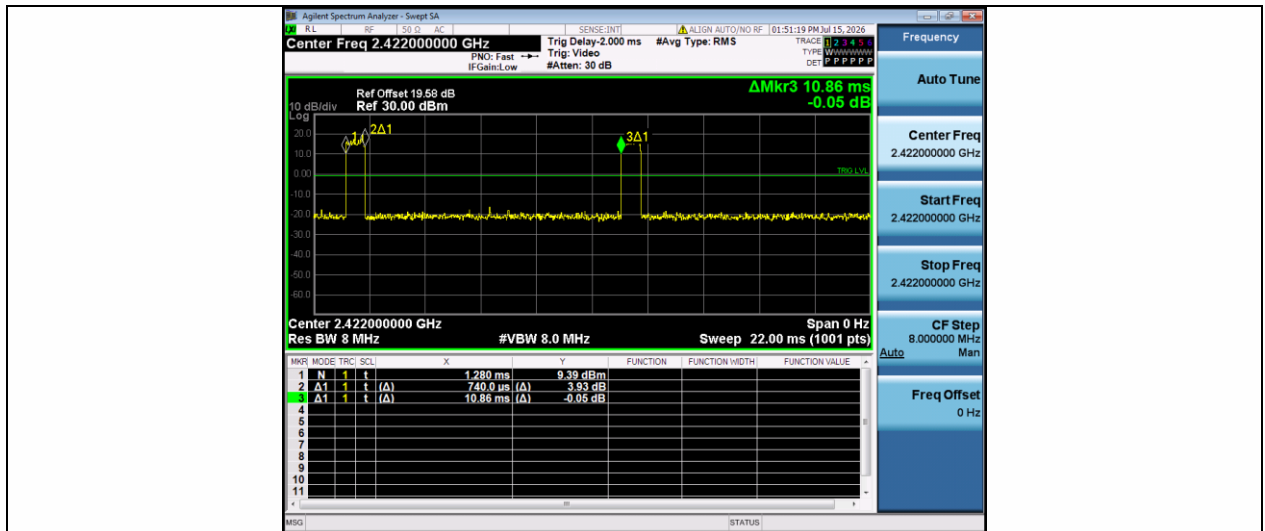
NTNV-11AX20SISO-Ant1-2412



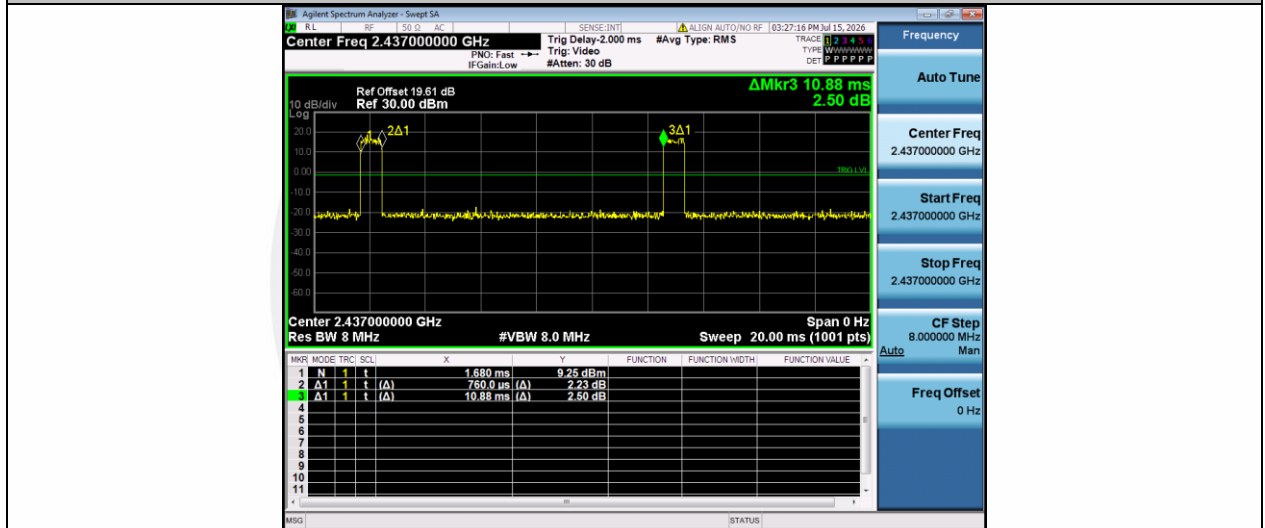
NTNV-11AX20SISO-Ant1-2437



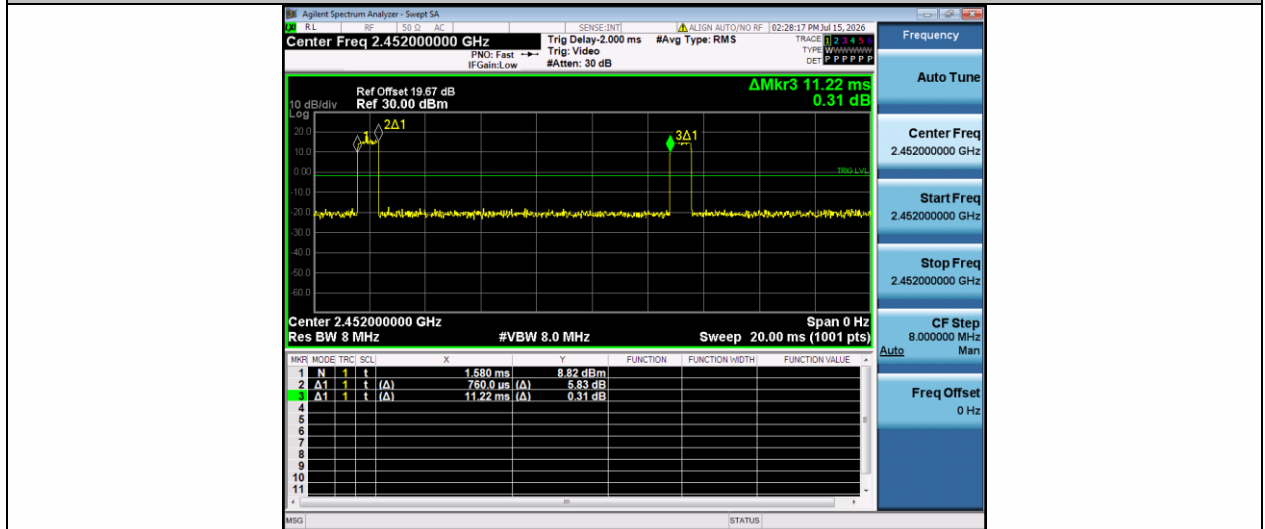
NTNV-11AX20SISO-Ant1-2462



NTNV-11AX40SISO-Ant1-2422



NTNV-11AX40SISO-Ant1-2437



NTNV-11AX40SISO-Ant1-2452

8.3 MAXIMUM POWER SPECTRAL DENSITY

8.3.1 Applicable Standard

According to FCC Part15.247(e) and KDB 558074 D01 15.247 Meas Guidance v05r02

8.3.2 Conformance Limit

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

8.3.3 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

8.3.4 Test Procedure

This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance

The transmitter output (antenna port) was connected to the spectrum analyzer

Set analyzer center frequency to DTS channel center frequency.

Set the span to 1.5 times the DTS bandwidth.

Set the RBW to: 3 kHz

Set the VBW to:10 kHz.

Set Detector = peak.

Set Sweep time = auto couple.

Set Trace mode = max hold.

Allow trace to fully stabilize.

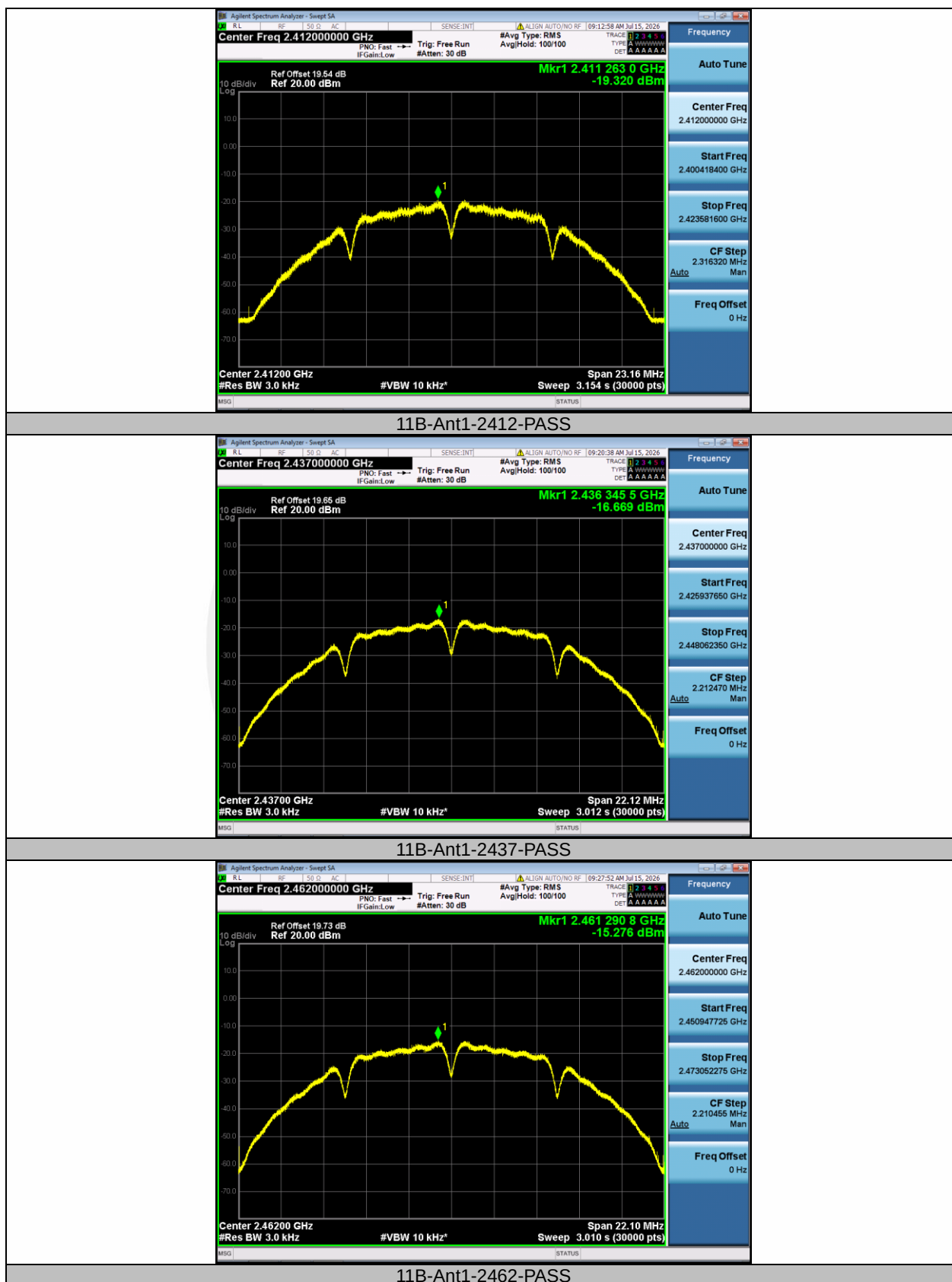
Use the peak marker function to determine the maximum amplitude level within the RBW.

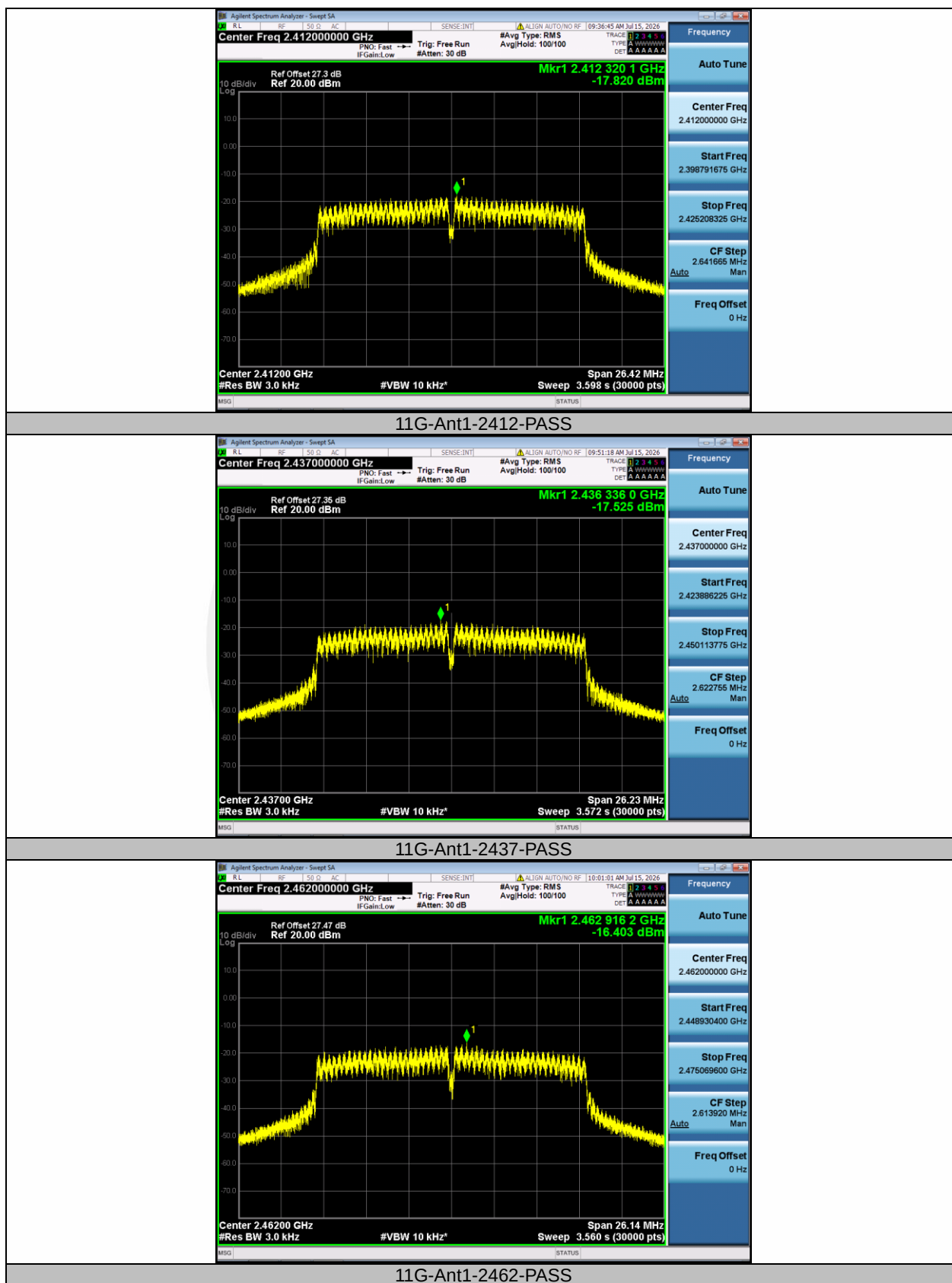
Note: If antenna Gain exceeds 6 dBi, then PSD Limit=8-(Gain- 6)

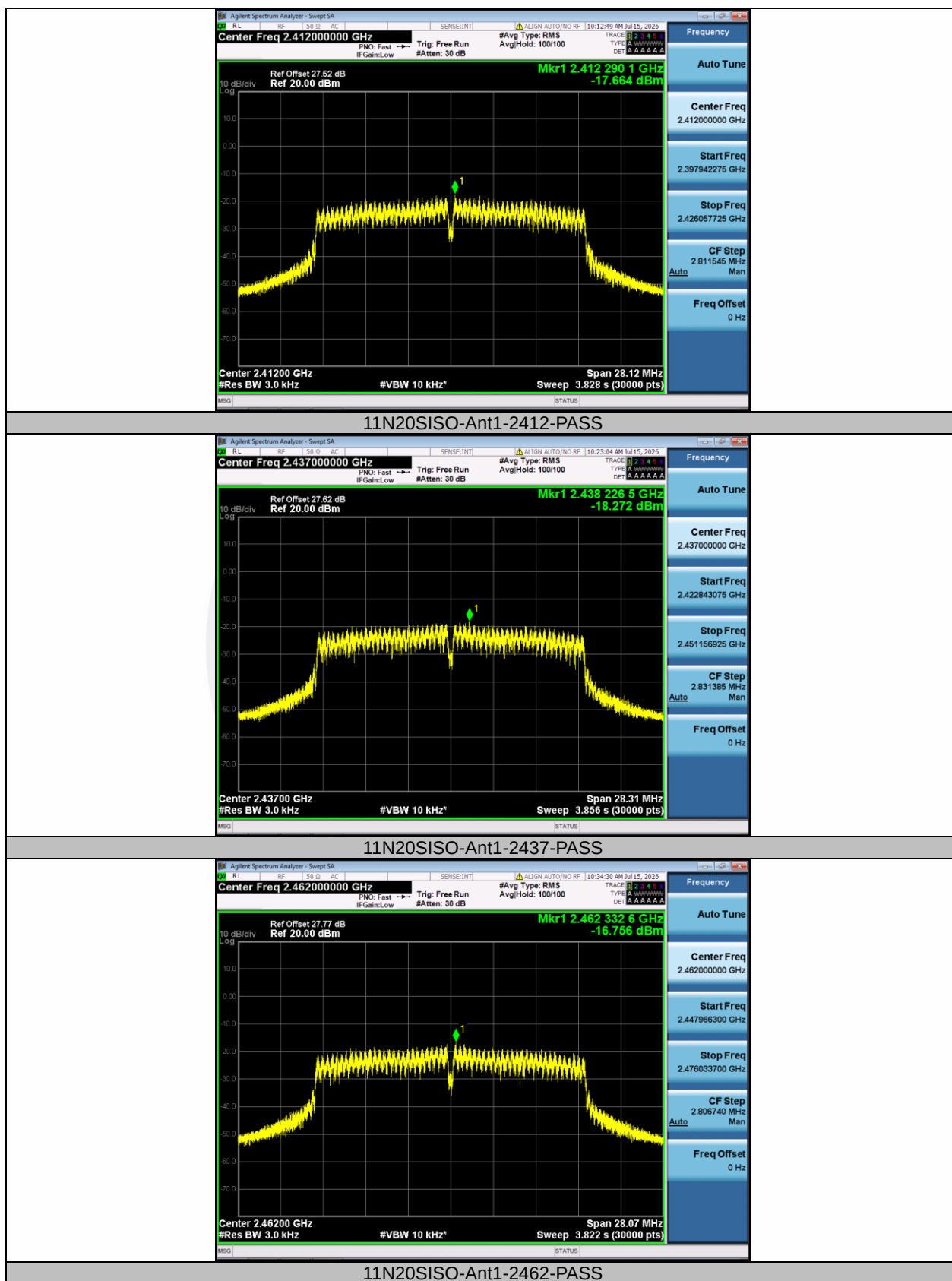
8.3.5 Test Results

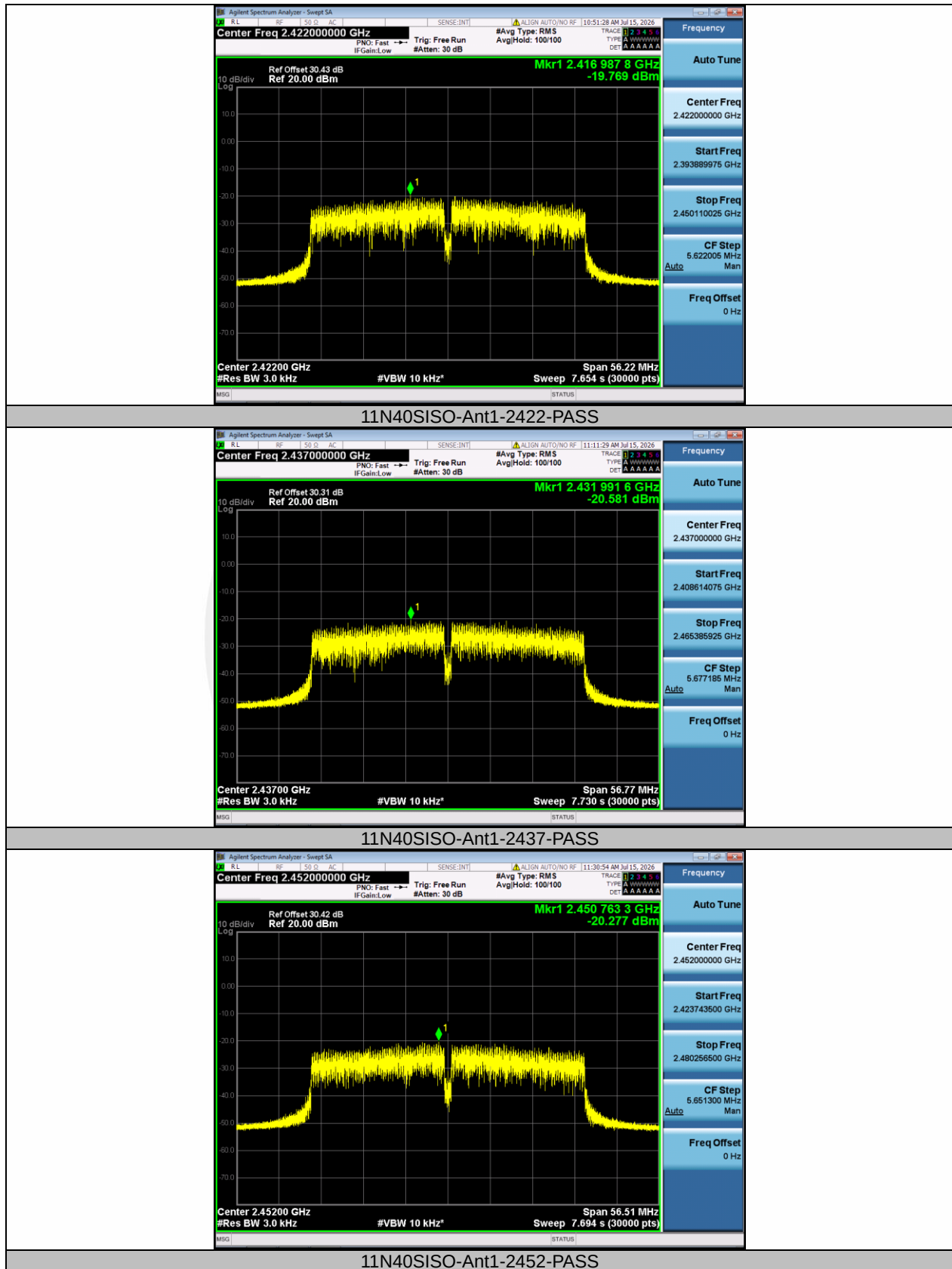
Temperature:	23.2° C
Relative Humidity:	52%
ATM Pressure:	1011 mbar

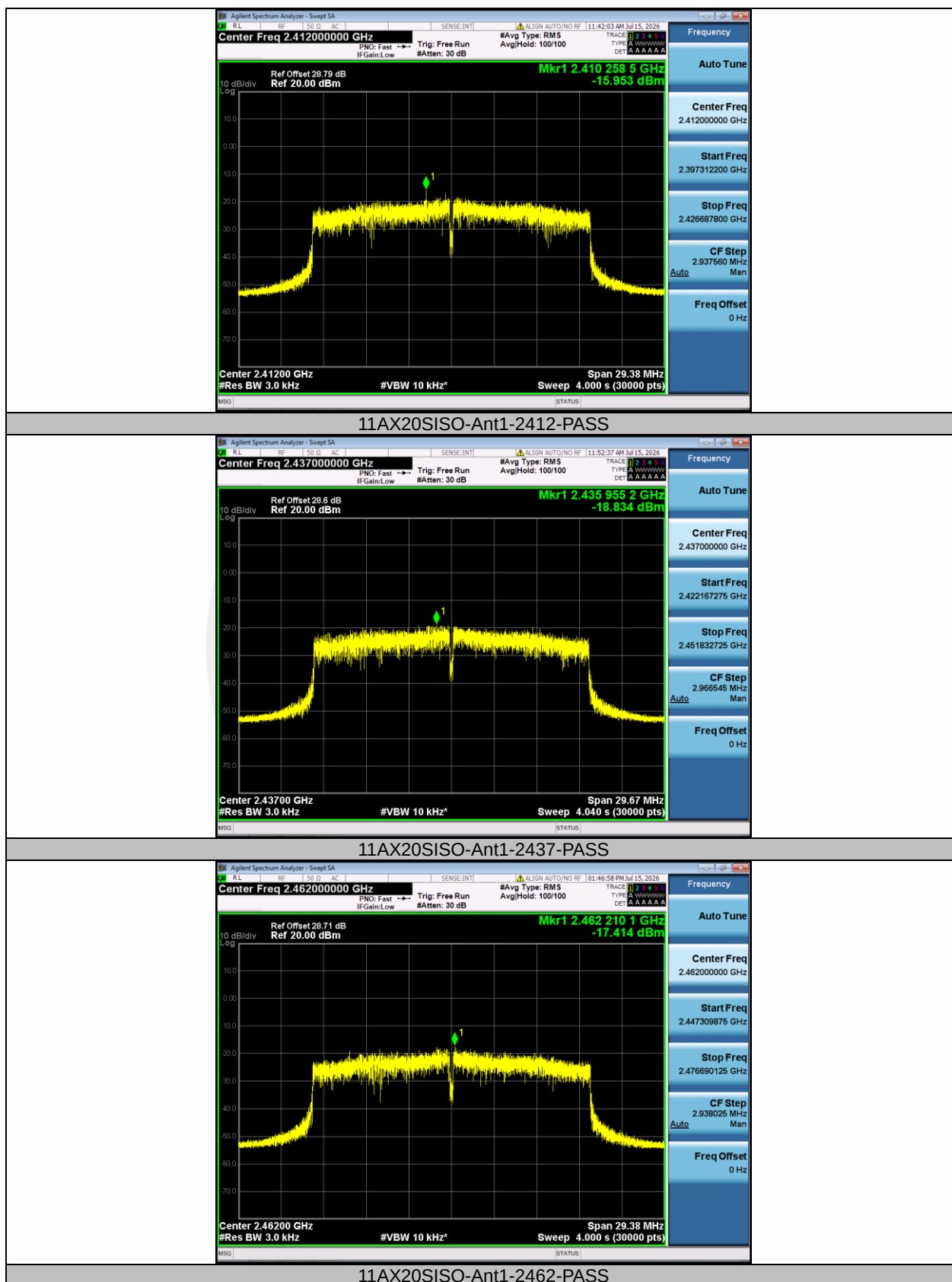
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-19.32	≤8.00	PASS
11B	Ant1	2437	-16.67	≤8.00	PASS
11B	Ant1	2462	-15.28	≤8.00	PASS
11G	Ant1	2412	-17.82	≤8.00	PASS
11G	Ant1	2437	-17.53	≤8.00	PASS
11G	Ant1	2462	-16.40	≤8.00	PASS
11N20SISO	Ant1	2412	-17.66	≤8.00	PASS
11N20SISO	Ant1	2437	-18.27	≤8.00	PASS
11N20SISO	Ant1	2462	-16.76	≤8.00	PASS
11N40SISO	Ant1	2422	-19.77	≤8.00	PASS
11N40SISO	Ant1	2437	-20.58	≤8.00	PASS
11N40SISO	Ant1	2452	-20.28	≤8.00	PASS
11AX20SISO	Ant1	2412	-15.95	≤8.00	PASS
11AX20SISO	Ant1	2437	-18.83	≤8.00	PASS
11AX20SISO	Ant1	2462	-17.41	≤8.00	PASS
11AX40SISO	Ant1	2422	-19.54	≤8.00	PASS
11AX40SISO	Ant1	2437	-20.56	≤8.00	PASS
11AX40SISO	Ant1	2452	-19.34	≤8.00	PASS

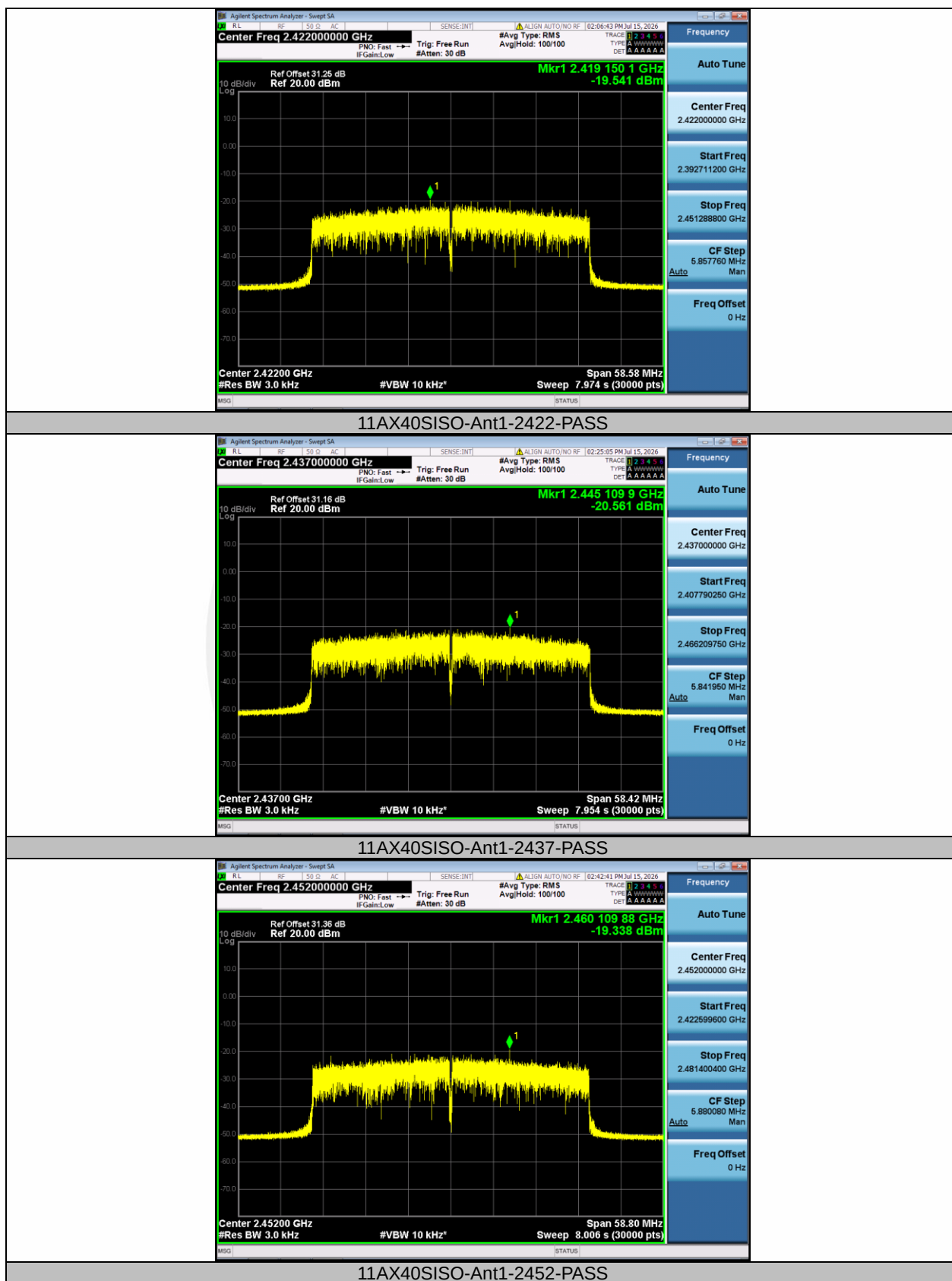












8.4 UNWANTED EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

8.4.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 D01 15.247 Meas Guidance v05r02

8.4.2 Conformance Limit

According to FCC Part 15.247(d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

8.4.3 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

8.4.4 Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

■ Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Set Detector = peak.

Set Sweep time = auto couple.

Set Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

■ Emission level measurement

Set the center frequency and span to encompass frequency range to be measured.

Set the RBW = 100 kHz.

Set the VBW = 300 kHz.

Set Detector = peak

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements. Report the three highest emissions relative to the limit.

8.4.5 Test Results

All modes 2.4G 802.11b/g/n/ax have been tested, and the worst result 802.11b recorded was report as below:

Band edge measurements

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	5.71	-32.21	≤-24.29	PASS
11B	Ant1	High	2462	7.45	-46.27	≤-22.55	PASS
11G	Ant1	Low	2412	1.23	-28.9	≤-28.77	PASS
11G	Ant1	High	2462	1.38	-45.99	≤-28.62	PASS
11N20SISO	Ant1	Low	2412	2.84	-28.69	≤-27.16	PASS
11N20SISO	Ant1	High	2462	0.11	-46.58	≤-29.9	PASS
11N40SISO	Ant1	Low	2422	-0.24	-31.27	≤-30.24	PASS
11N40SISO	Ant1	High	2452	-2.00	-43.05	≤-32	PASS
11AX20SISO	Ant1	Low	2412	1.66	-30.51	≤-28.34	PASS
11AX20SISO	Ant1	High	2462	1.08	-45.6	≤-28.92	PASS
11AX40SISO	Ant1	Low	2422	0.24	-32.51	≤-29.76	PASS
11AX40SISO	Ant1	High	2452	-0.15	-42.56	≤-30.15	PASS

