



7. PEAK OUTPUT POWER TEST

7.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Output Power	1 watt or 30dBm	2400-2483.5	PASS

7.2 TEST PROCEDURE

One of the following procedures may be used to determine the maximum peak conducted output power of a DTS EUT.

RBW $\geq$ DTS bandwidth

The following procedure shall be used when an instrument with a resolution bandwidth that is greater than the DTS bandwidth is available to perform the measurement:

- Set the RBW $\geq$ DTS bandwidth.
- Set VBW $\geq [3 \times \text{RBW}]$.
- Set span $\geq [3 \times \text{RBW}]$.
- Sweep time = auto couple.
- Detector = peak.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use peak marker function to determine the peak amplitude level.

Integrated band power method:

The following procedure can be used when the maximum available RBW of the instrument is less than the

DTS bandwidth:

- Set the RBW = 1 MHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Set the span $\geq [1.5 \times \text{DTS bandwidth}]$.
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the instrument's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some instruments, this may require a manual override to select the peak detector). If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

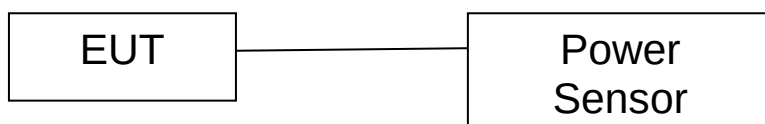
PKPM1 Peak power meter method:

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall use a fast-responding diode detector.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

7.6 TEST RESULTS

For the measurement records, refer to the appendix I.



8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2 EUT ANTENNA

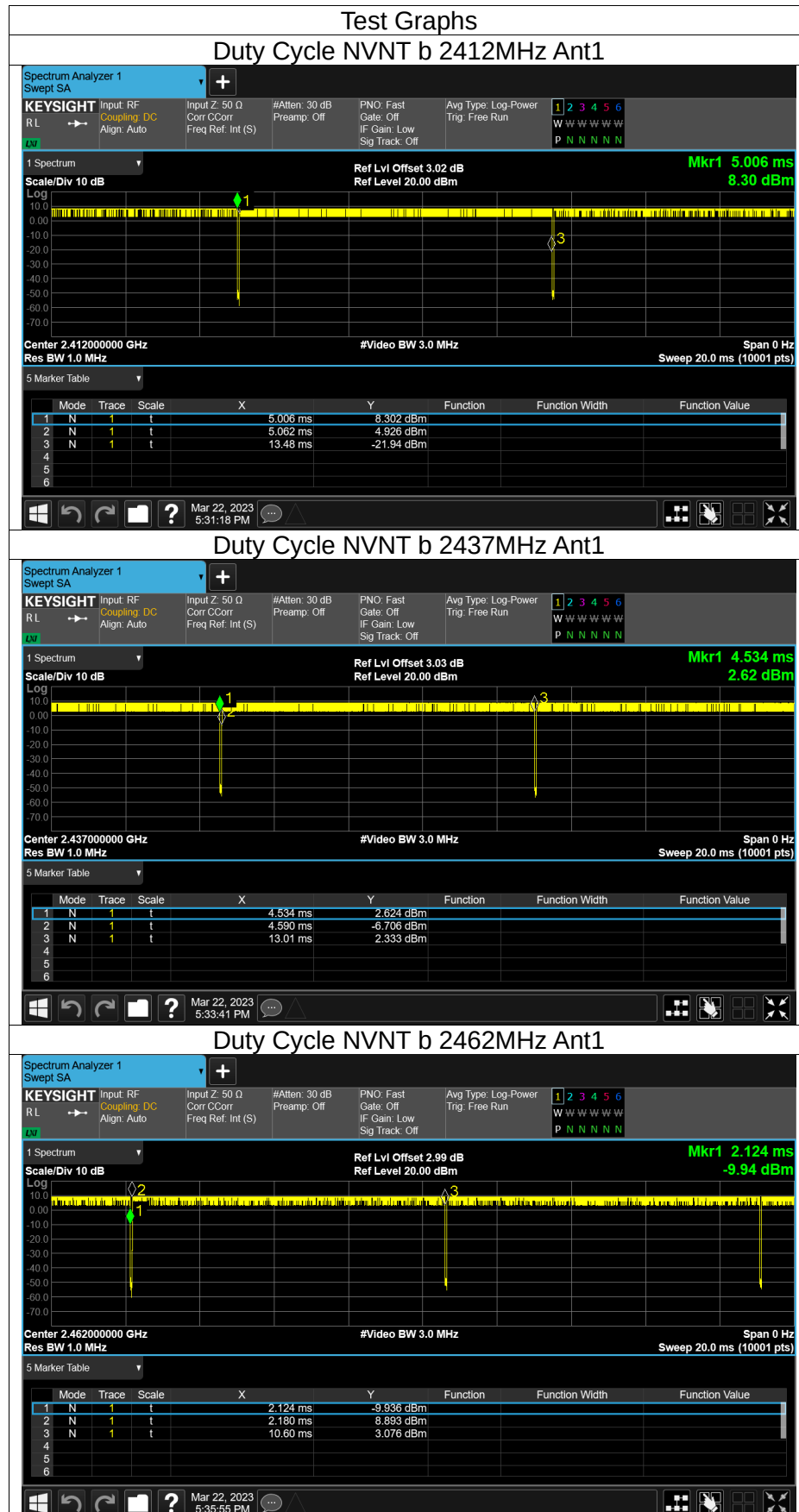
The EUT antenna is Omni-directional Antenna. It comply with the standard requirement.

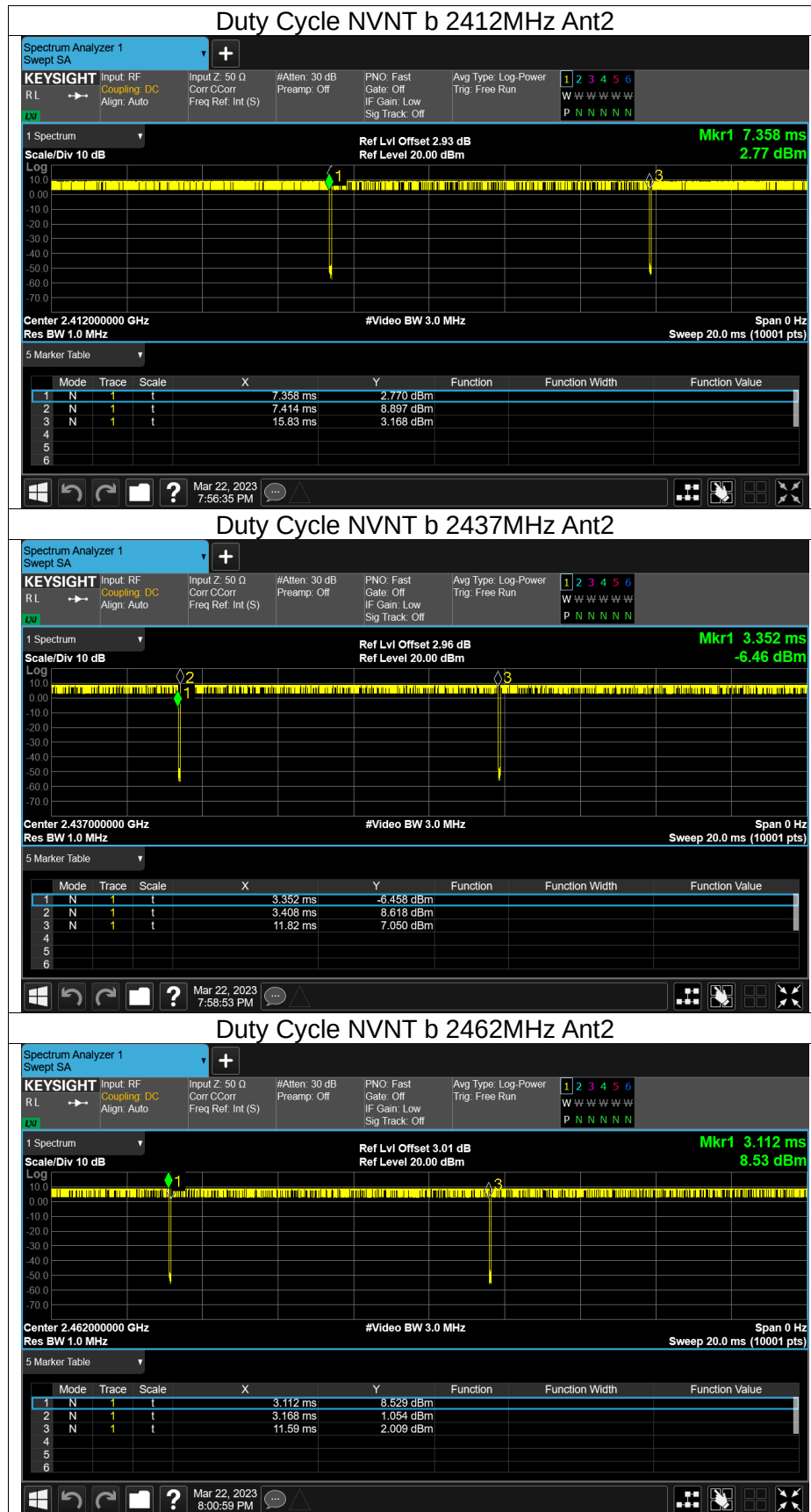


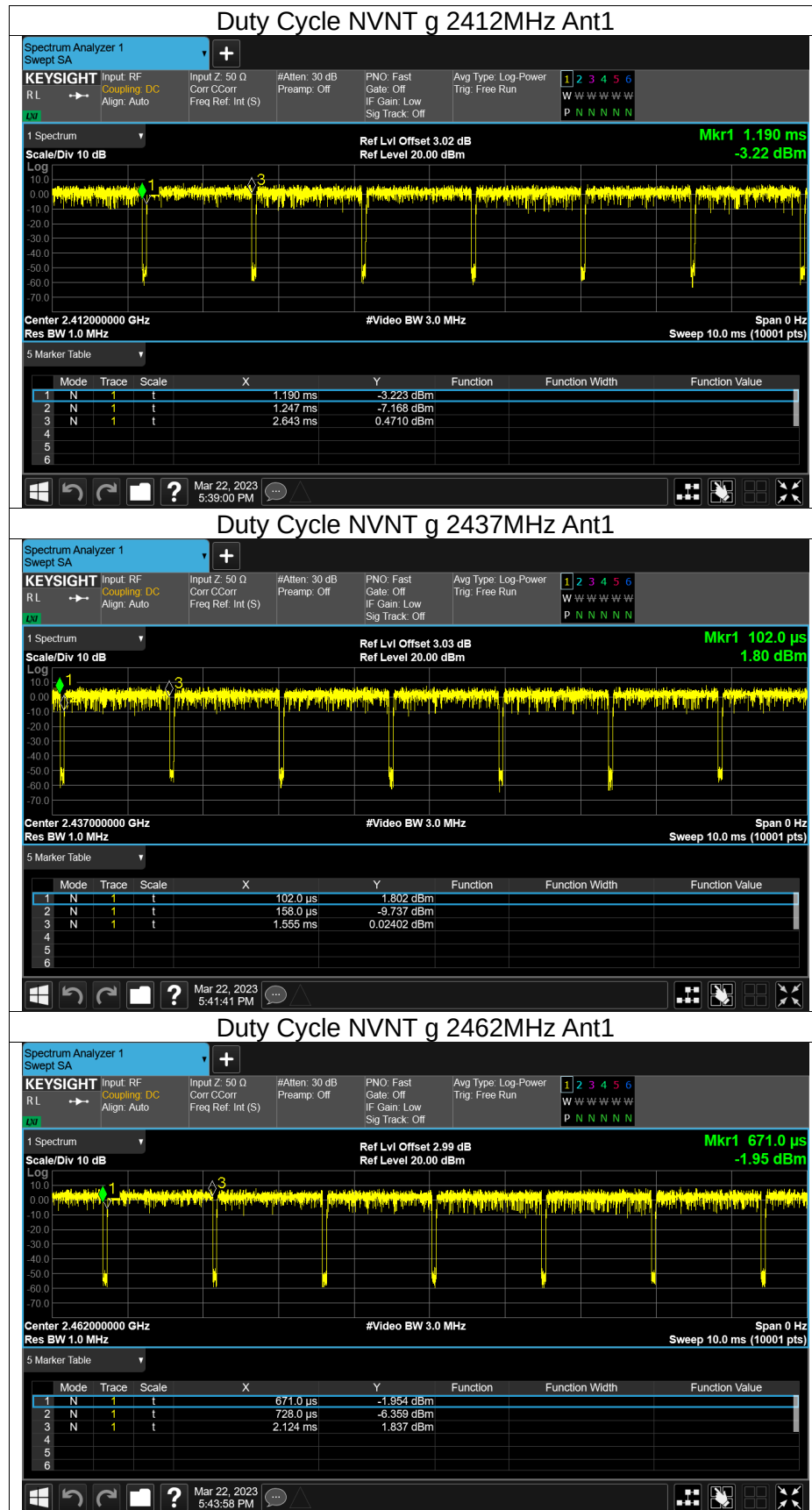
APPENDIX I:TEST RESULTS

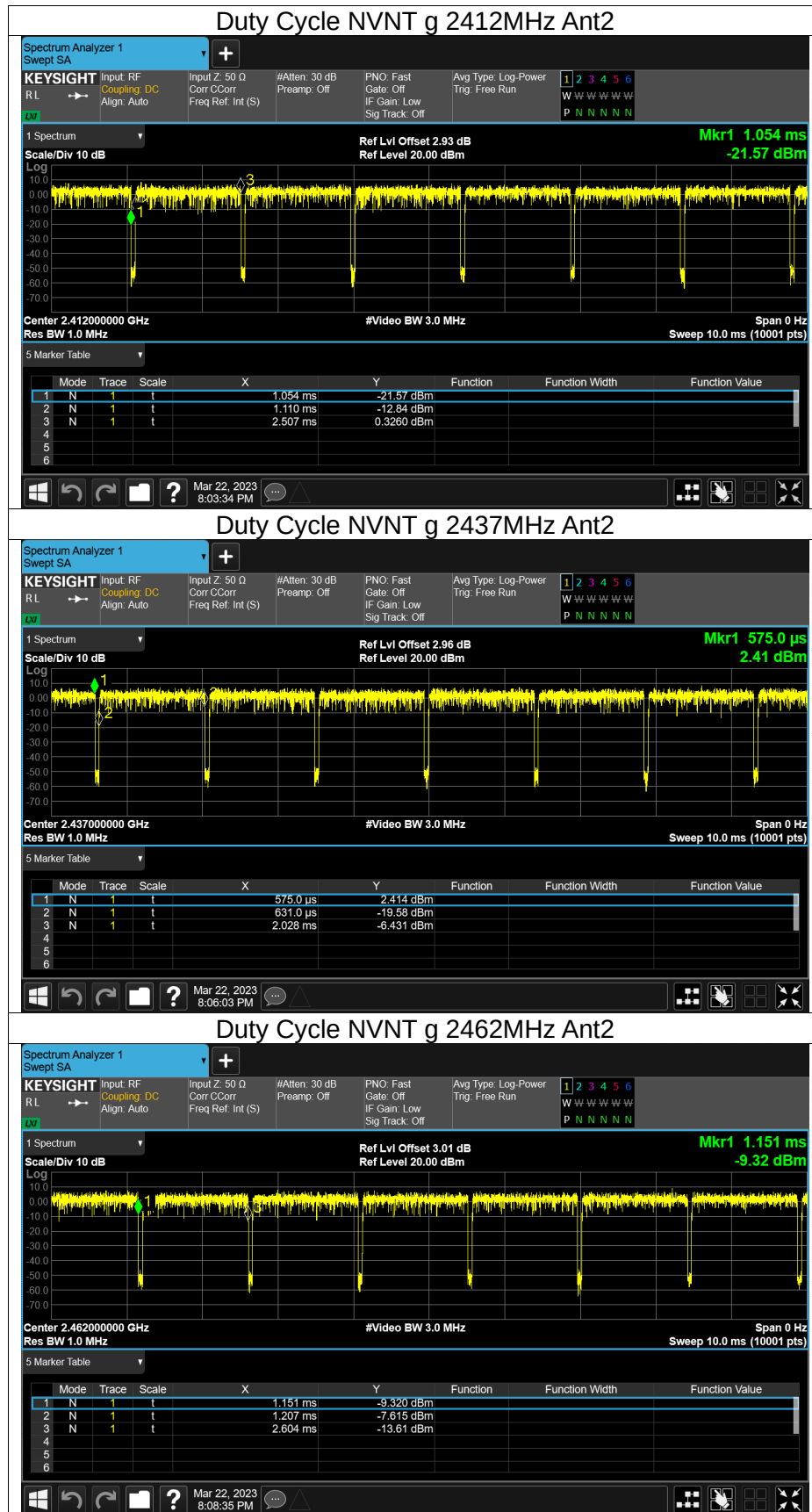
DUTY CYCLE

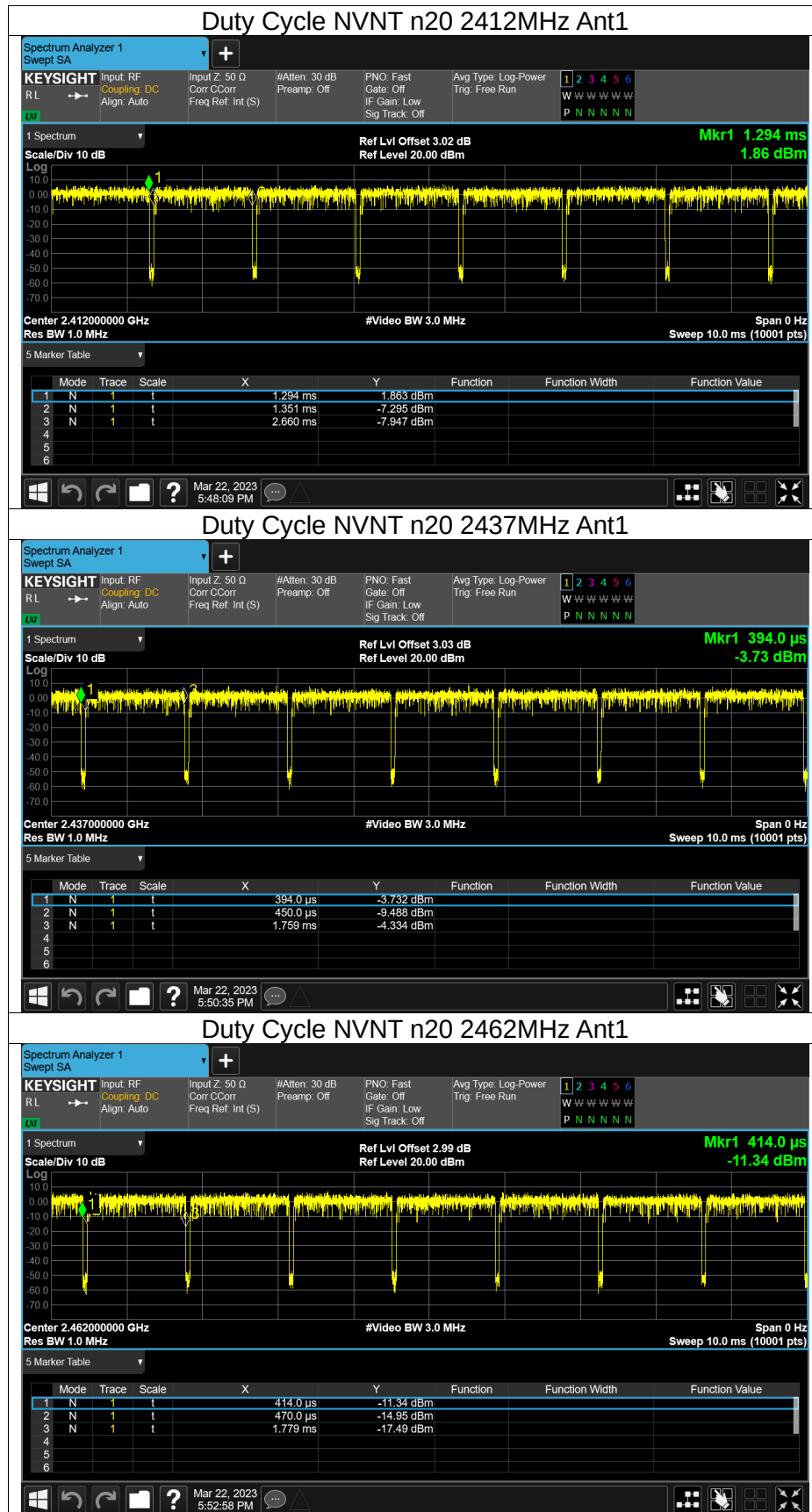
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.34	0	0.12
NVNT	b	2437	Ant1	99.34	0	0.12
NVNT	b	2462	Ant1	99.34	0	0.12
NVNT	b	2412	Ant2	99.34	0	0.12
NVNT	b	2437	Ant2	99.34	0	0.12
NVNT	b	2462	Ant2	99.34	0	0.12
NVNT	g	2412	Ant1	96.08	0.17	0.72
NVNT	g	2437	Ant1	96.15	0.17	0.72
NVNT	g	2462	Ant1	96.08	0.17	0.72
NVNT	g	2412	Ant2	96.15	0.17	0.72
NVNT	g	2437	Ant2	96.15	0.17	0.72
NVNT	g	2462	Ant2	96.15	0.17	0.72
NVNT	n20	2412	Ant1	95.83	0.18	0.76
NVNT	n20	2437	Ant1	95.9	0.18	0.76
NVNT	n20	2462	Ant1	95.9	0.18	0.76
NVNT	n20	2412	Ant2	95.9	0.18	0.76
NVNT	n20	2437	Ant2	95.89	0.18	0.76
NVNT	n20	2462	Ant2	95.9	0.18	0.76
NVNT	n20	2412	Sum	95.83	0.18	0.76
NVNT	n20	2437	Sum	95.9	0.18	0.76
NVNT	n20	2462	Sum	95.9	0.18	0.76
NVNT	n40	2422	Ant1	92.06	0.36	1.54
NVNT	n40	2437	Ant1	92.07	0.36	1.54
NVNT	n40	2452	Ant1	92.06	0.36	1.54
NVNT	n40	2422	Ant2	92.06	0.36	1.54
NVNT	n40	2437	Ant2	92.06	0.36	1.54
NVNT	n40	2452	Ant2	92.06	0.36	1.54
NVNT	n40	2422	Sum	92.06	0.36	1.54
NVNT	n40	2437	Sum	92.06	0.36	1.54
NVNT	n40	2452	Sum	92.06	0.36	1.54
NVNT	ax20	2412	Ant1	56.79	2.46	11.29
NVNT	ax20	2437	Ant1	57.07	2.44	11.16
NVNT	ax20	2462	Ant1	57.07	2.44	11.16
NVNT	ax20	2412	Ant2	56.92	2.45	11.26
NVNT	ax20	2437	Ant2	57.58	2.4	11.06
NVNT	ax20	2462	Ant2	57.58	2.4	11.06
NVNT	ax20	2412	Sum	56.73	2.46	11.3
NVNT	ax20	2437	Sum	57.07	2.44	11.16
NVNT	ax20	2462	Sum	57.07	2.44	11.16
NVNT	ax40	2422	Ant1	57.55	2.4	11.07
NVNT	ax40	2437	Ant1	57.55	2.4	11.07
NVNT	ax40	2452	Ant1	57.55	2.4	11.07
NVNT	ax40	2422	Ant2	57.55	2.4	11.07
NVNT	ax40	2437	Ant2	57.58	2.4	11.06
NVNT	ax40	2452	Ant2	57.58	2.4	11.06
NVNT	ax40	2422	Sum	85.15	0.7	3.12
NVNT	ax40	2437	Sum	85.21	0.7	3.11
NVNT	ax40	2452	Sum	85.21	0.7	3.11

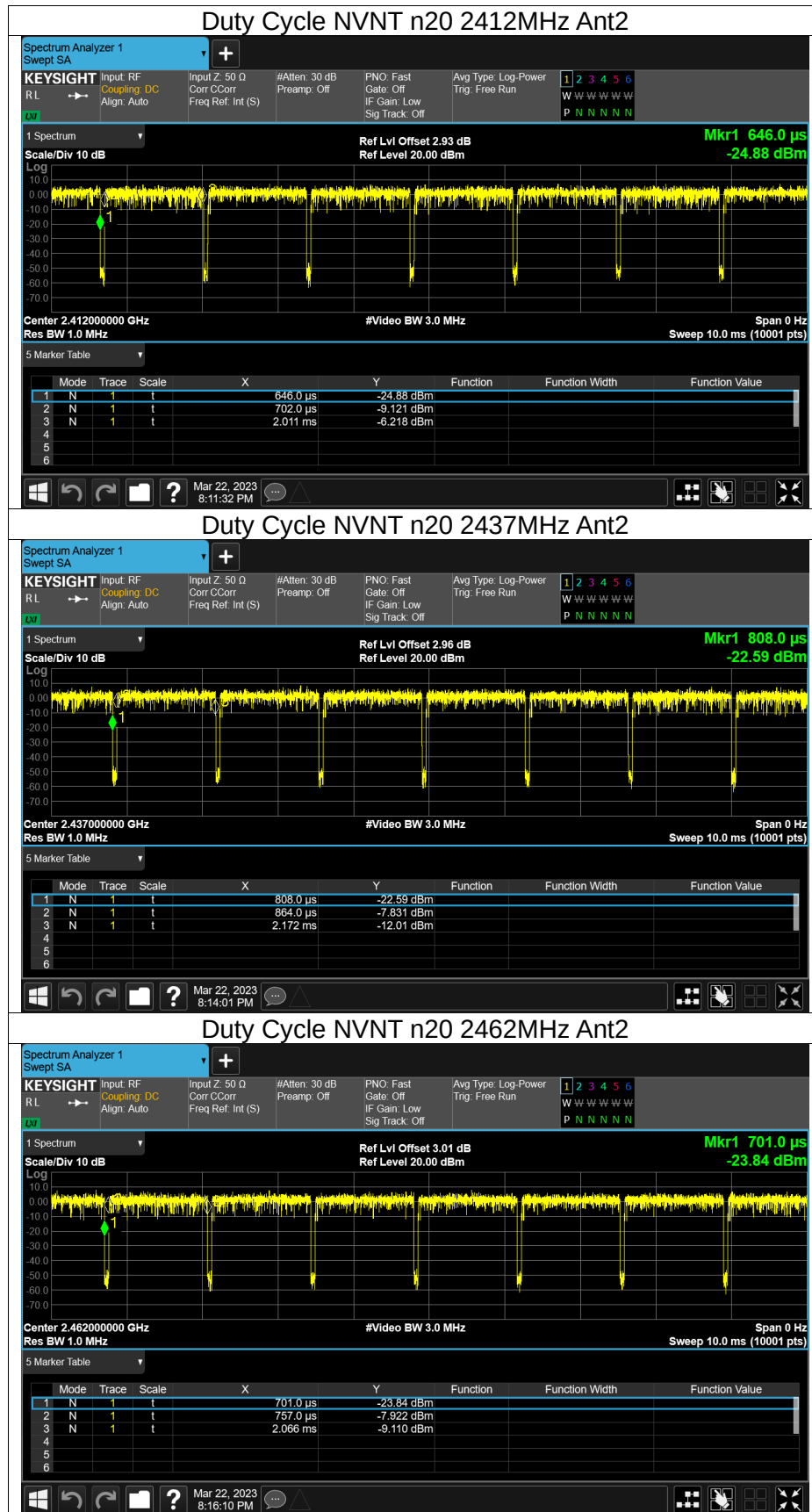


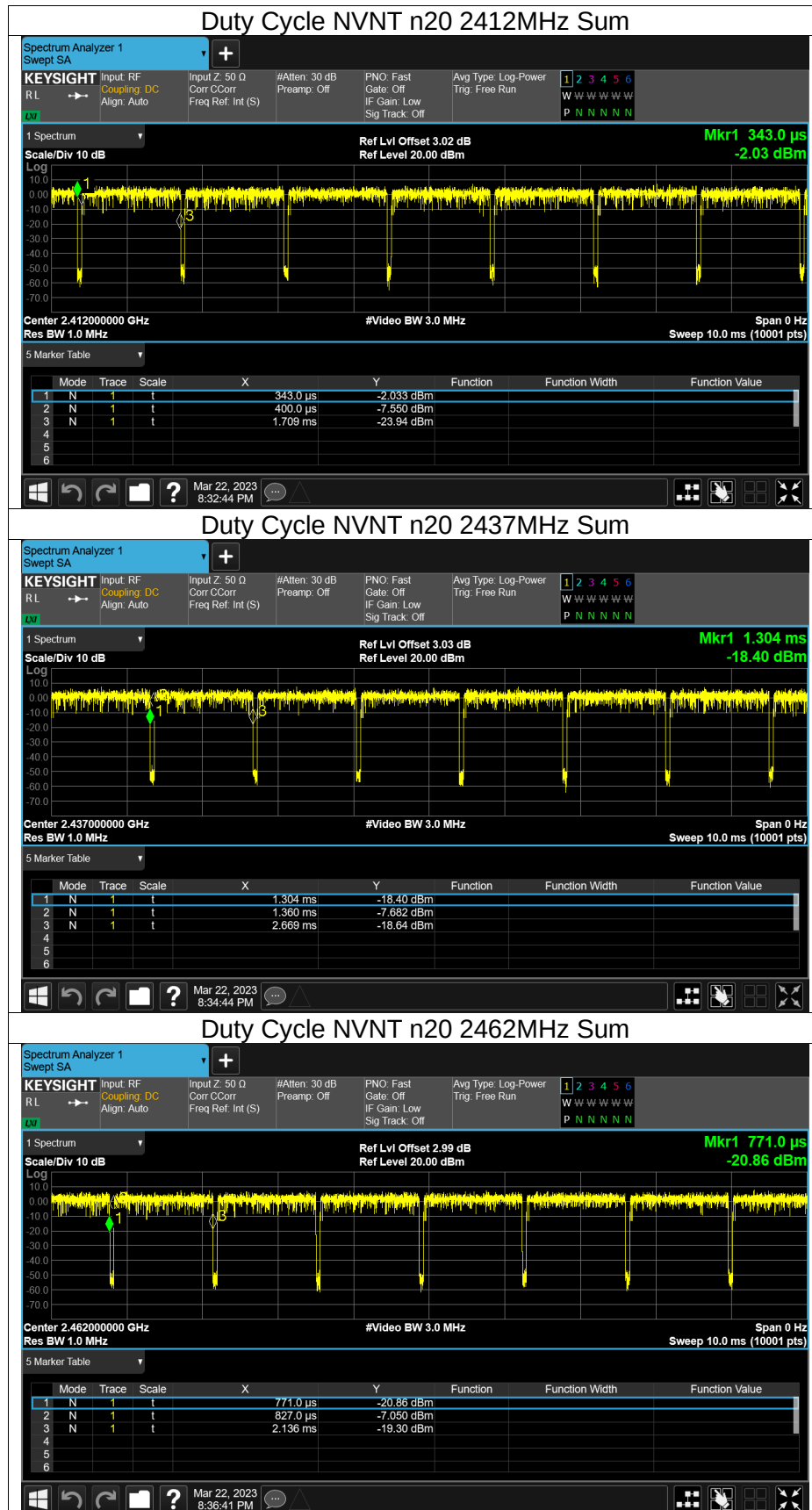






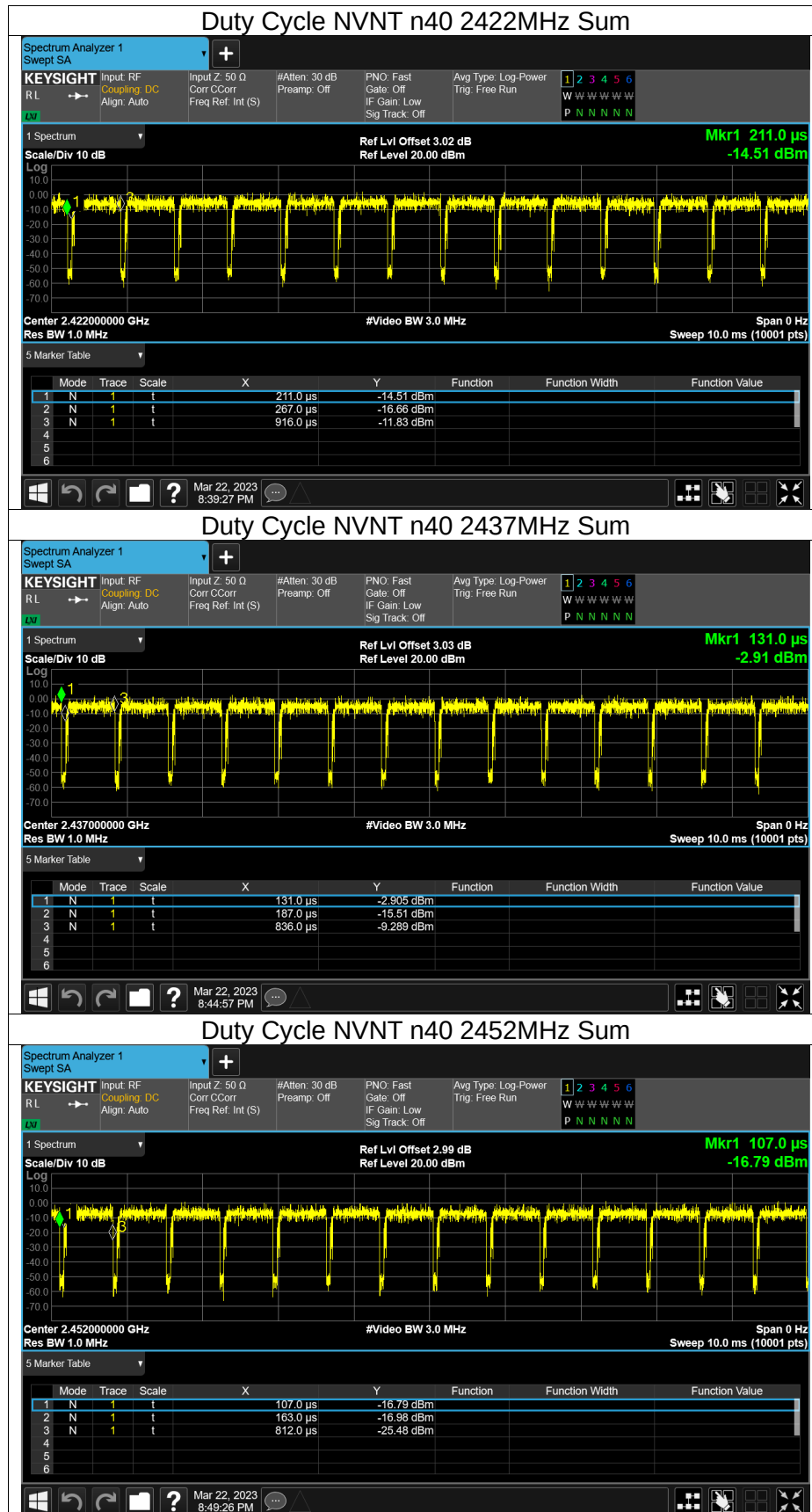






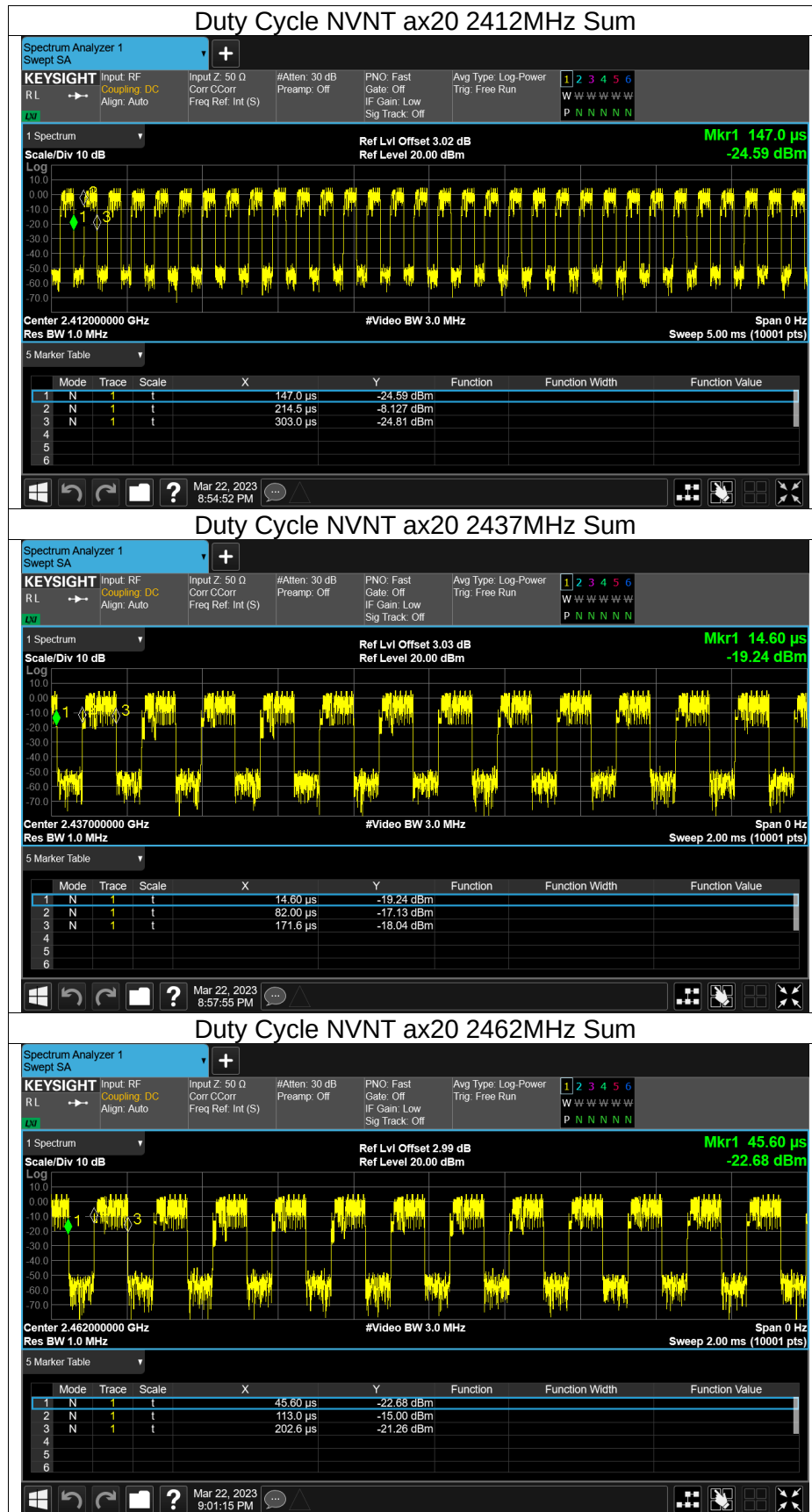


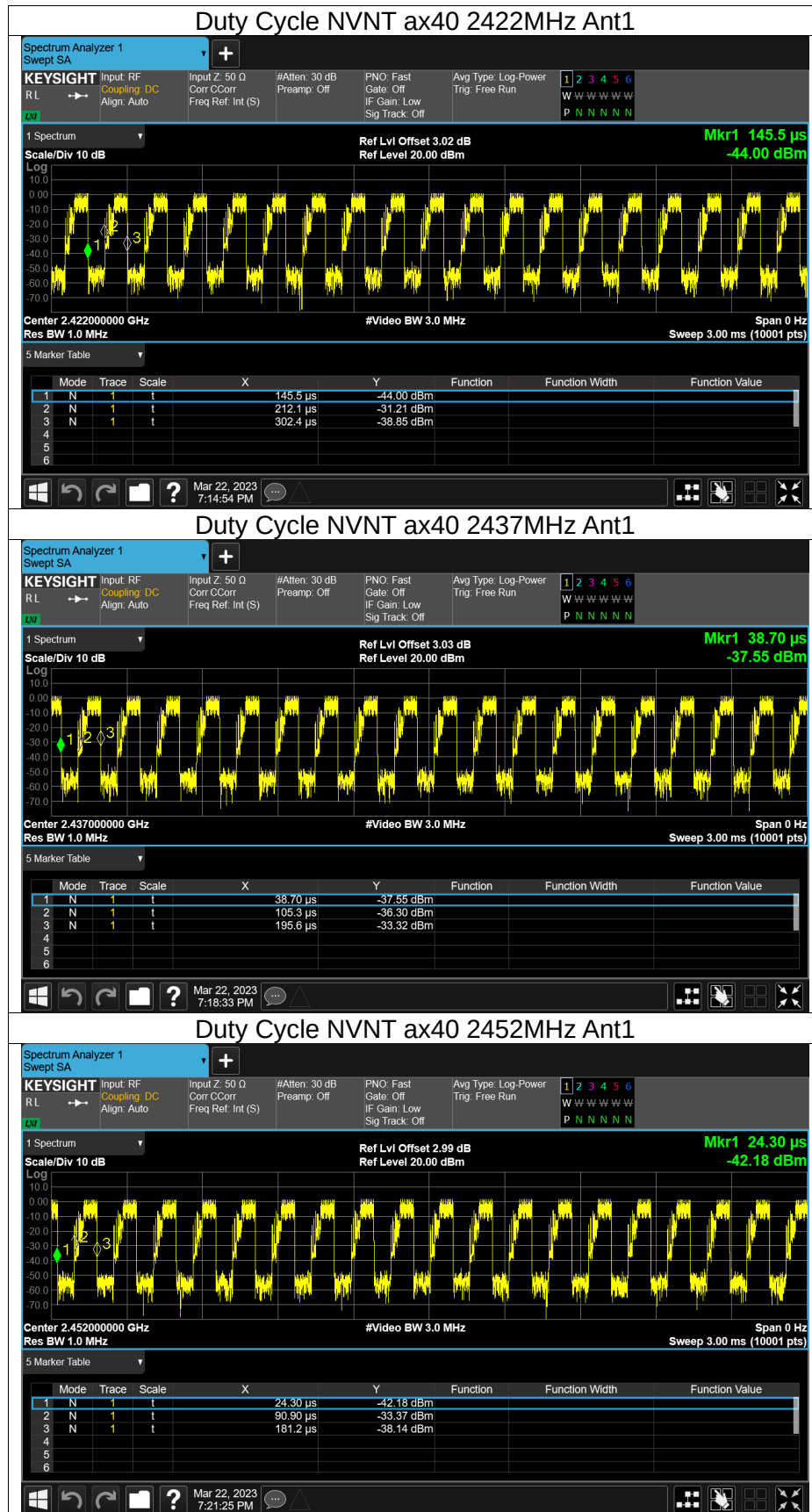


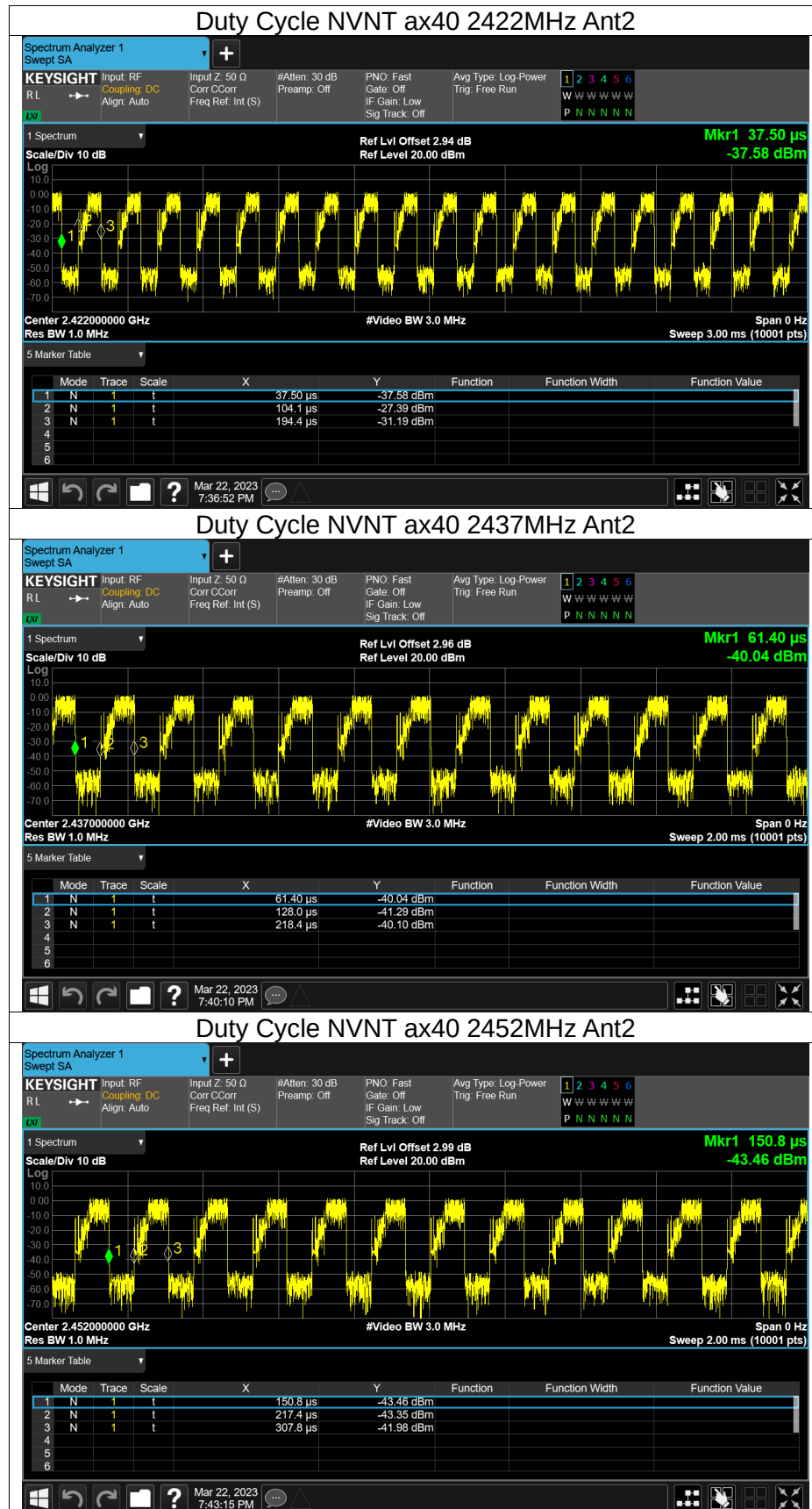


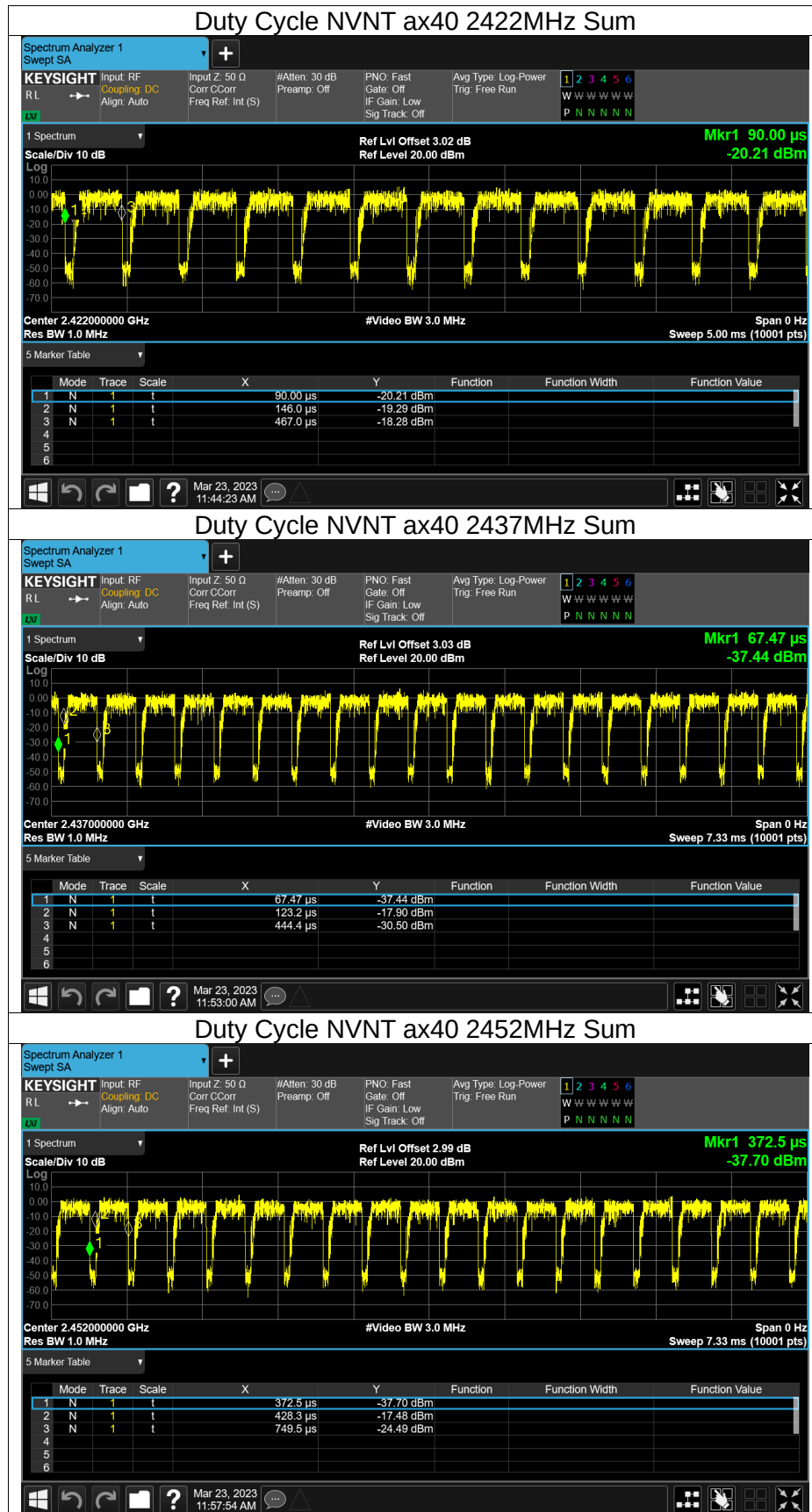














MAXIMUM PEAK CONDUCTED OUTPUT POWER

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	15.05	30	Pass
NVNT	b	2437	Ant1	15.08	30	Pass
NVNT	b	2462	Ant1	15.57	30	Pass
NVNT	b	2412	Ant2	15.63	30	Pass
NVNT	b	2437	Ant2	15.21	30	Pass
NVNT	b	2462	Ant2	15.13	30	Pass
NVNT	g	2412	Ant1	15.65	30	Pass
NVNT	g	2437	Ant1	15.78	30	Pass
NVNT	g	2462	Ant1	16.6	30	Pass
NVNT	g	2412	Ant2	15.96	30	Pass
NVNT	g	2437	Ant2	15.7	30	Pass
NVNT	g	2462	Ant2	15.68	30	Pass
NVNT	n20	2412	Ant1	15.38	30	Pass
NVNT	n20	2437	Ant1	15.67	30	Pass
NVNT	n20	2462	Ant1	15.15	30	Pass
NVNT	n20	2412	Ant2	15.53	30	Pass
NVNT	n20	2437	Ant2	15.34	30	Pass
NVNT	n20	2462	Ant2	15.37	30	Pass
NVNT	n20	2412	Ant1	15.23	/	Pass
NVNT	n20	2412	Ant2	15.92	/	Pass
NVNT	n20	2412	Sum	18.6	27.73	Pass
NVNT	n20	2437	Ant1	15.37	/	Pass
NVNT	n20	2437	Ant2	15.69	/	Pass
NVNT	n20	2437	Sum	18.54	27.73	Pass
NVNT	n20	2462	Ant1	15.95	/	Pass
NVNT	n20	2462	Ant2	15.66	/	Pass
NVNT	n20	2462	Sum	18.82	27.73	Pass
NVNT	n40	2422	Ant1	14.11	30	Pass
NVNT	n40	2437	Ant1	14.46	30	Pass
NVNT	n40	2452	Ant1	13.72	30	Pass
NVNT	n40	2422	Ant2	15.3	30	Pass
NVNT	n40	2437	Ant2	15.27	30	Pass
NVNT	n40	2452	Ant2	15.25	30	Pass
NVNT	n40	2422	Ant1	15.05	/	Pass
NVNT	n40	2422	Ant2	15.68	/	Pass
NVNT	n40	2422	Sum	18.39	27.73	Pass
NVNT	n40	2437	Ant1	15.5	/	Pass
NVNT	n40	2437	Ant2	15.66	/	Pass
NVNT	n40	2437	Sum	18.59	27.73	Pass
NVNT	n40	2452	Ant1	15.07	/	Pass
NVNT	n40	2452	Ant2	15.42	/	Pass
NVNT	n40	2452	Sum	18.26	27.73	Pass
NVNT	ax20	2412	Ant1	14.41	30	Pass
NVNT	ax20	2437	Ant1	14.51	30	Pass
NVNT	ax20	2462	Ant1	15.35	30	Pass
NVNT	ax20	2412	Ant2	15.06	30	Pass
NVNT	ax20	2437	Ant2	14.94	30	Pass
NVNT	ax20	2462	Ant2	14.94	30	Pass
NVNT	ax20	2412	Ant1	14.56	/	Pass
NVNT	ax20	2412	Ant2	14.94	/	Pass
NVNT	ax20	2412	Sum	17.76	27.73	Pass
NVNT	ax20	2437	Ant1	14.8	/	Pass



NVNT	ax20	2437	Ant2	14.64	/	Pass
NVNT	ax20	2437	Sum	17.73	27.73	Pass
NVNT	ax20	2462	Ant1	15.07	/	Pass
NVNT	ax20	2462	Ant2	14.48	/	Pass
NVNT	ax20	2462	Sum	17.8	27.73	Pass
NVNT	ax40	2422	Ant1	14.33	30	Pass
NVNT	ax40	2437	Ant1	14.68	30	Pass
NVNT	ax40	2452	Ant1	14.54	30	Pass
NVNT	ax40	2422	Ant2	14.89	30	Pass
NVNT	ax40	2437	Ant2	14.78	30	Pass
NVNT	ax40	2452	Ant2	14.79	30	Pass
NVNT	ax40	2422	Ant1	16.49	/	Pass
NVNT	ax40	2422	Ant2	16.9	/	Pass
NVNT	ax40	2422	Sum	19.71	27.73	Pass
NVNT	ax40	2437	Ant1	16.8	/	Pass
NVNT	ax40	2437	Ant2	16.71	/	Pass
NVNT	ax40	2437	Sum	19.77	27.73	Pass
NVNT	ax40	2452	Ant1	16.63	/	Pass
NVNT	ax40	2452	Ant2	16.79	/	Pass
NVNT	ax40	2452	Sum	19.72	27.73	Pass



-6DB BANDWIDTH

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.021	0.5	Pass
NVNT	b	2437	Ant1	7.58	0.5	Pass
NVNT	b	2462	Ant1	7.558	0.5	Pass
NVNT	b	2412	Ant2	8.063	0.5	Pass
NVNT	b	2437	Ant2	8.001	0.5	Pass
NVNT	b	2462	Ant2	7.034	0.5	Pass
NVNT	g	2412	Ant1	16.317	0.5	Pass
NVNT	g	2437	Ant1	16.077	0.5	Pass
NVNT	g	2462	Ant1	16.288	0.5	Pass
NVNT	g	2412	Ant2	16.306	0.5	Pass
NVNT	g	2437	Ant2	16.286	0.5	Pass
NVNT	g	2462	Ant2	15.802	0.5	Pass
NVNT	n20	2412	Ant1	17.169	0.5	Pass
NVNT	n20	2437	Ant1	16.726	0.5	Pass
NVNT	n20	2462	Ant1	15.091	0.5	Pass
NVNT	n20	2412	Ant2	16.533	0.5	Pass
NVNT	n20	2437	Ant2	17.031	0.5	Pass
NVNT	n20	2462	Ant2	16.798	0.5	Pass
NVNT	n40	2422	Ant1	35	0.5	Pass
NVNT	n40	2437	Ant1	35.108	0.5	Pass
NVNT	n40	2452	Ant1	35.09	0.5	Pass
NVNT	n40	2422	Ant2	35.091	0.5	Pass
NVNT	n40	2437	Ant2	35.102	0.5	Pass
NVNT	n40	2452	Ant2	35.077	0.5	Pass
NVNT	ax20	2412	Ant1	15.794	0.5	Pass
NVNT	ax20	2437	Ant1	15.168	0.5	Pass
NVNT	ax20	2462	Ant1	15.166	0.5	Pass
NVNT	ax20	2412	Ant2	16.45	0.5	Pass
NVNT	ax20	2437	Ant2	16.458	0.5	Pass
NVNT	ax20	2462	Ant2	16.448	0.5	Pass
NVNT	ax40	2422	Ant1	36.312	0.5	Pass
NVNT	ax40	2437	Ant1	36.311	0.5	Pass
NVNT	ax40	2452	Ant1	36.304	0.5	Pass
NVNT	ax40	2422	Ant2	35.101	0.5	Pass
NVNT	ax40	2437	Ant2	35.1	0.5	Pass
NVNT	ax40	2452	Ant2	35.102	0.5	Pass



