



High Channel										
3264.73	61.73	44.70	6.70	28.20	-9.80	51.93	74.00	-22.07	PK	Vertical
3264.73	51.71	44.70	6.70	28.20	-9.80	41.91	54.00	-12.09	AV	Vertical
3264.65	62.06	44.70	6.70	28.20	-9.80	52.26	74.00	-21.74	PK	Horizontal
3264.65	49.84	44.70	6.70	28.20	-9.80	40.04	54.00	-13.96	AV	Horizontal
4924.41	59.13	44.20	9.04	31.60	-3.56	55.57	74.00	-18.43	PK	Vertical
4924.41	49.49	44.20	9.04	31.60	-3.56	45.93	54.00	-8.07	AV	Vertical
4924.32	58.40	44.20	9.04	31.60	-3.56	54.84	74.00	-19.16	PK	Horizontal
4924.32	49.85	44.20	9.04	31.60	-3.56	46.29	54.00	-7.71	AV	Horizontal
5359.70	48.51	44.20	9.86	32.00	-2.34	46.17	74.00	-27.83	PK	Vertical
5359.70	38.97	44.20	9.86	32.00	-2.34	36.63	54.00	-17.37	AV	Vertical
5359.76	48.16	44.20	9.86	32.00	-2.34	45.82	74.00	-28.18	PK	Horizontal
5359.76	38.64	44.20	9.86	32.00	-2.34	36.29	54.00	-17.71	AV	Horizontal
7385.75	54.25	43.50	11.40	35.50	3.40	57.65	74.00	-16.35	PK	Vertical
7385.75	44.13	43.50	11.40	35.50	3.40	47.53	54.00	-6.47	AV	Vertical
7385.73	54.58	43.50	11.40	35.50	3.40	57.98	74.00	-16.02	PK	Horizontal
7385.73	43.66	43.50	11.40	35.50	3.40	47.06	54.00	-6.94	AV	Horizontal

Remark:

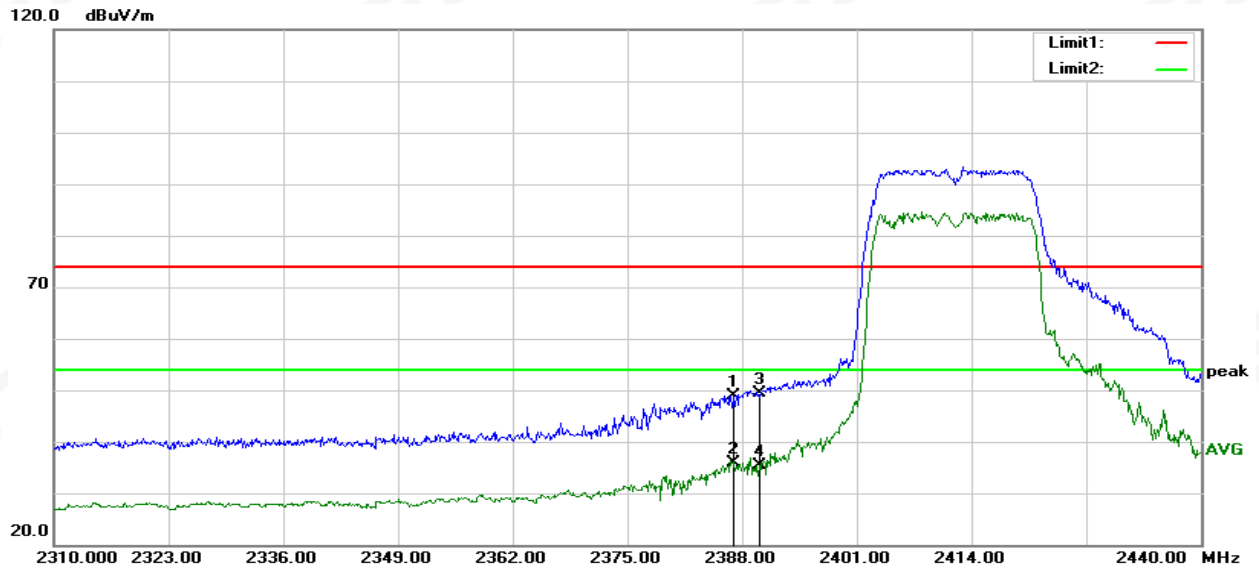
- Factor = Antenna Factor + Cable Loss – Pre-amplifier.
- All modes have been measured, only worst mode was reported.
Emission Level = Reading + Factor
Margin = Emission Level-Limit
- The frequency emission of peak points that did not show above the forms are at least 20dB below the limit, the frequency emission is mainly from the environment noise.



3.2.6 TEST RESULTS(Band edge Requirements)

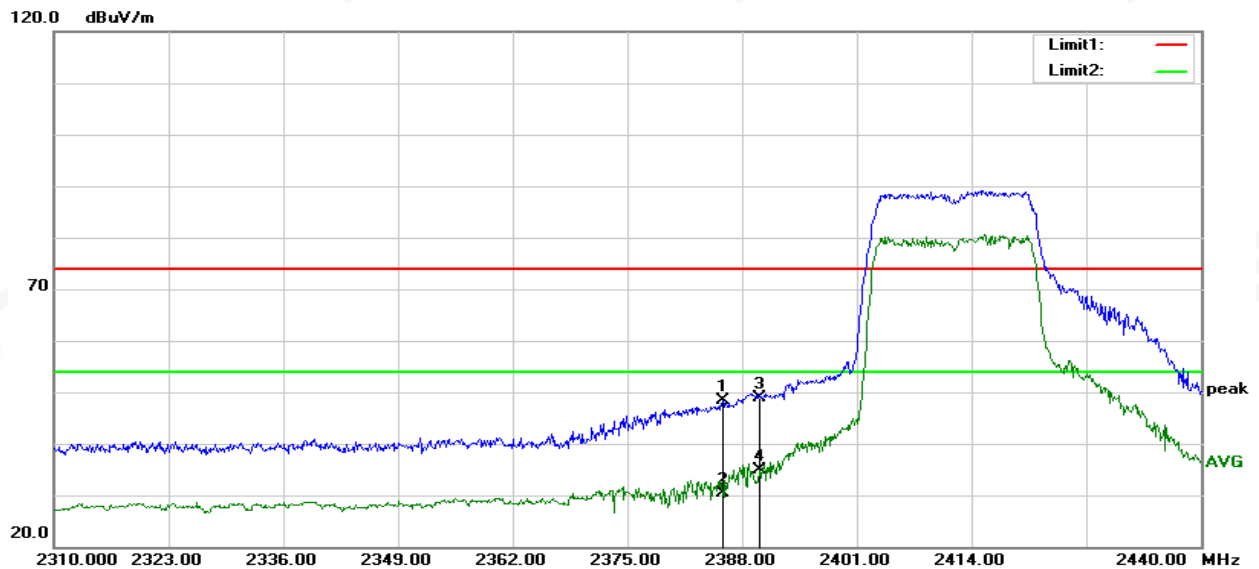
802.11 n20-Low

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2386.960	48.18	0.79	48.97	74.00	-25.03	peak
2	2386.960	34.98	0.79	35.77	54.00	-18.23	AVG
3	2390.000	48.50	0.81	49.31	74.00	-24.69	peak
4	2390.000	34.65	0.81	35.46	54.00	-18.54	AVG

Vertical

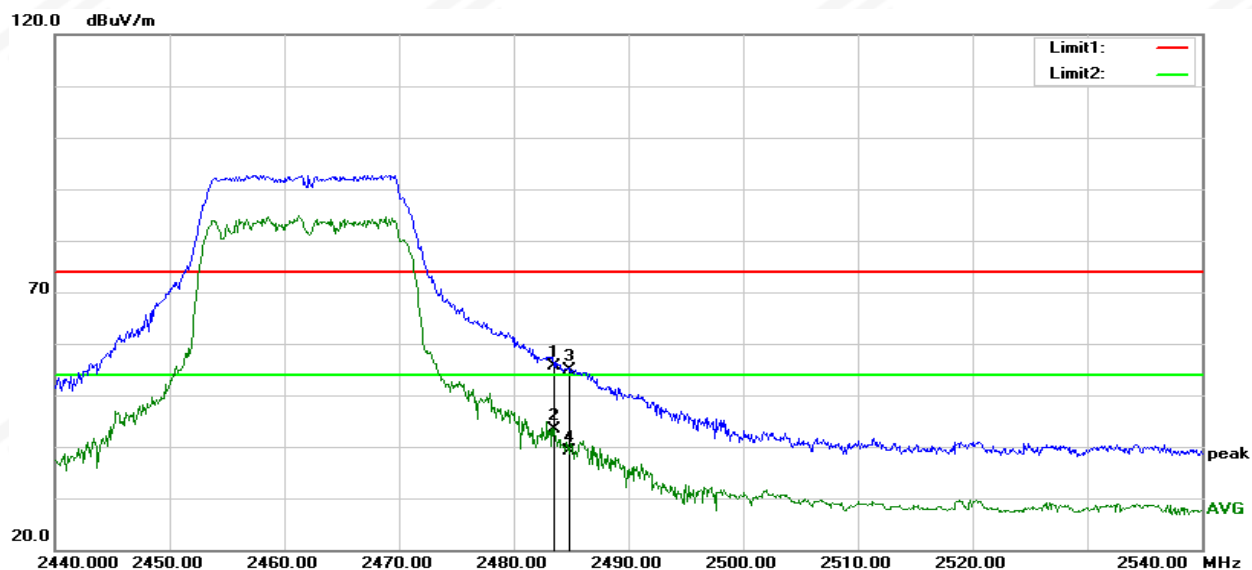


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2385.790	47.56	0.77	48.33	74.00	-25.67	peak
2	2385.790	29.67	0.77	30.44	54.00	-23.56	AVG
3	2390.000	48.12	0.81	48.93	74.00	-25.07	peak
4	2390.000	34.06	0.81	34.87	54.00	-19.13	AVG



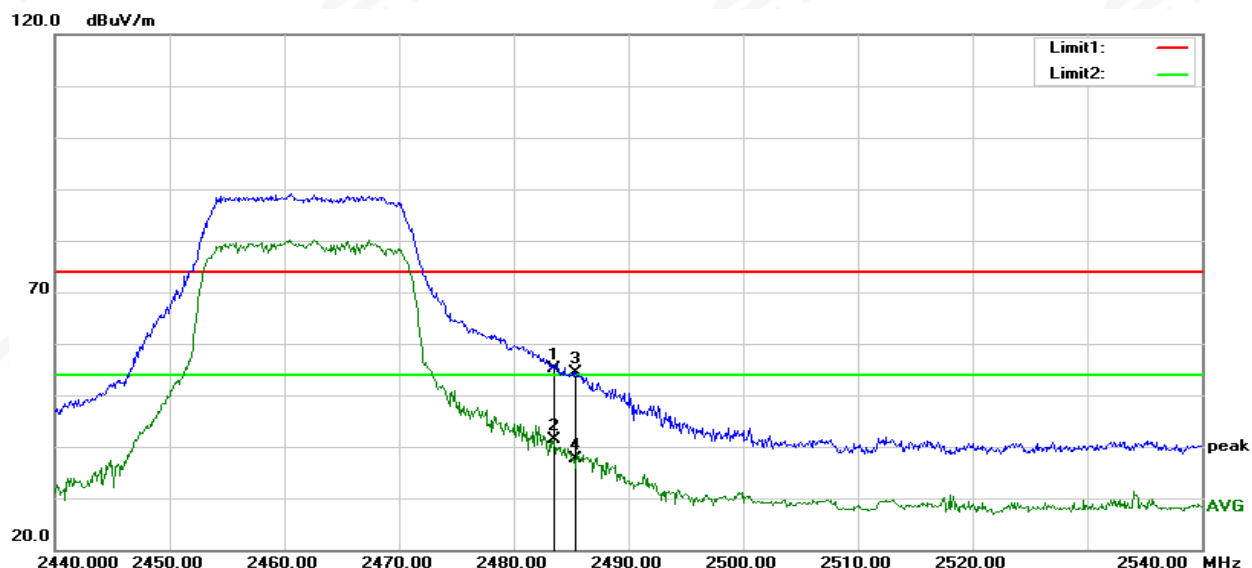
802.11 n20-High

Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	54.64	1.02	55.66	74.00	-18.34	peak
2	2483.500	42.29	1.02	43.31	54.00	-10.69	AVG
3	2484.900	53.87	1.03	54.90	74.00	-19.10	peak
4	2484.900	38.00	1.03	39.03	54.00	-14.97	AVG

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	54.21	1.02	55.23	74.00	-18.77	peak
2	2483.500	40.47	1.02	41.49	54.00	-12.51	AVG
3	2485.400	53.36	1.02	54.38	74.00	-19.62	peak
4	2485.400	36.66	1.02	37.68	54.00	-16.32	AVG

Note: All modes have been measured, only worst mode was reported.

4. DUTY CYCLE

4.1 TEST STANDARD

Please refer to ANSI C63.10-2020+Cor 1-2023 Section 11.6

4.2 TEST PROCEDURE

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Zero
RB	set RBW to the largest available value
VB	$VBW \geq RBW$.
Detector	Peak
Trace	Clear Write
Sweep Time	Auto

4.3 DEVIATION FROM STANDARD

No deviation.

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 5 Unless otherwise a special operating condition is specified in the follows during the testing.

4.6 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



5. CONDUCTED SPURIOUS & BAND EDGE EMISSION

5.1 LIMIT

According to FCC section 15.247(d), in any 100kHz 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 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

5.2 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	30 MHz to 10th carrier harmonic
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

For Band edge

Spectrum Parameter	Setting
Detector	Peak
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

5.3 DEVIATION FROM STANDARD

No deviation.

5.4 TEST SETUP



The EUT is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, set the span greater than RBW.

5.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

5.6 TEST RESULTS

Note:

1. The test data please refer to APPENDIX 1.



6. POWER SPECTRAL DENSITY TEST

6.1 LIMIT

FCC Part15.247 , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	≤ 8 dBm (RBW ≥ 3 KHz)	2400-2483.5	PASS

6.2 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the $100\text{ kHz} \geq \text{RBW} \geq 3\text{ kHz}$.
4. Set the $\text{VBW} \geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

6.6 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



7. BANDWIDTH TEST

7.1 LIMIT

FCC Part15.247,Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

7.2 TEST PROCEDURE

The automatic bandwidth measurement capability of an instrument may be employed using the X dB bandwidth mode with X set to 6 dB, if the functionality described above (i.e., RBW = 1% to 5% of the OBW but not less than 100 kHz., VBW $\geq$ 3RBW, peak detector with maximum hold) is implemented by the instrumentation function. When using this capability, care shall be taken so that the bandwidth measurement is not influenced by any intermediate power nulls in the fundamental emission that might be ≥ 6 dB.

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

Note: The test data please refer to APPENDIX 1.



8. 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

8.2 TEST PROCEDURE

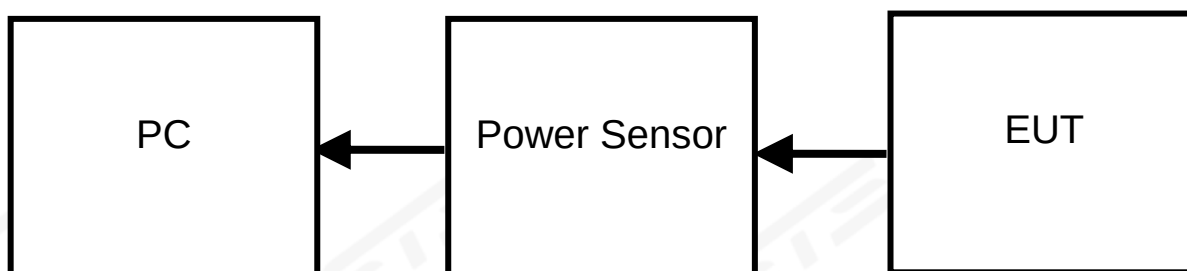
PKPM1 Peak power meter method:

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.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

8.6 TEST RESULTS

Note: The test data please refer to APPENDIX 1.



9. ANTENNA REQUIREMENT

9.1 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.

9.2 EUT ANTENNA

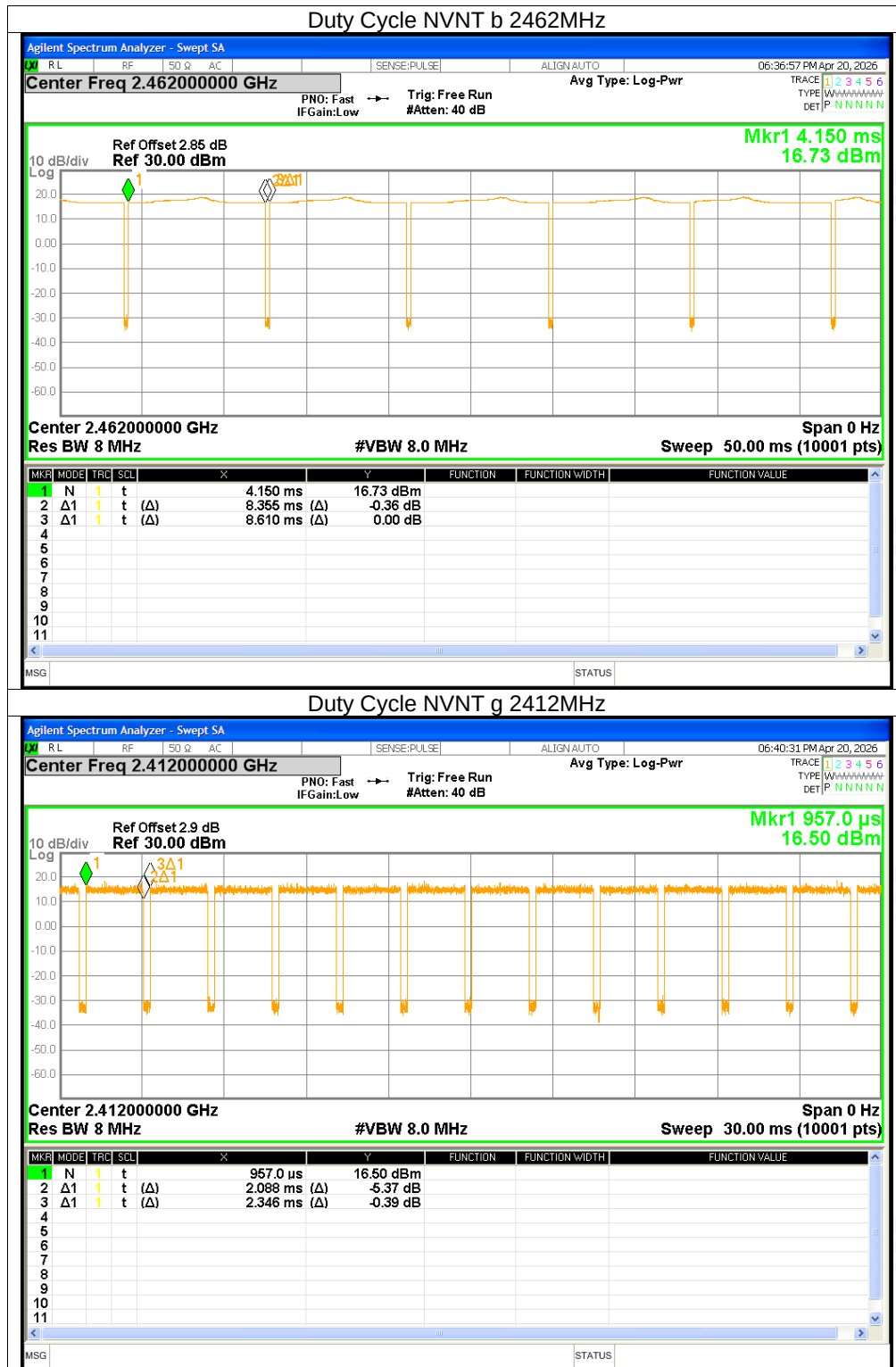
The EUT antenna is PIFA Antenna. It comply with the standard requirement.

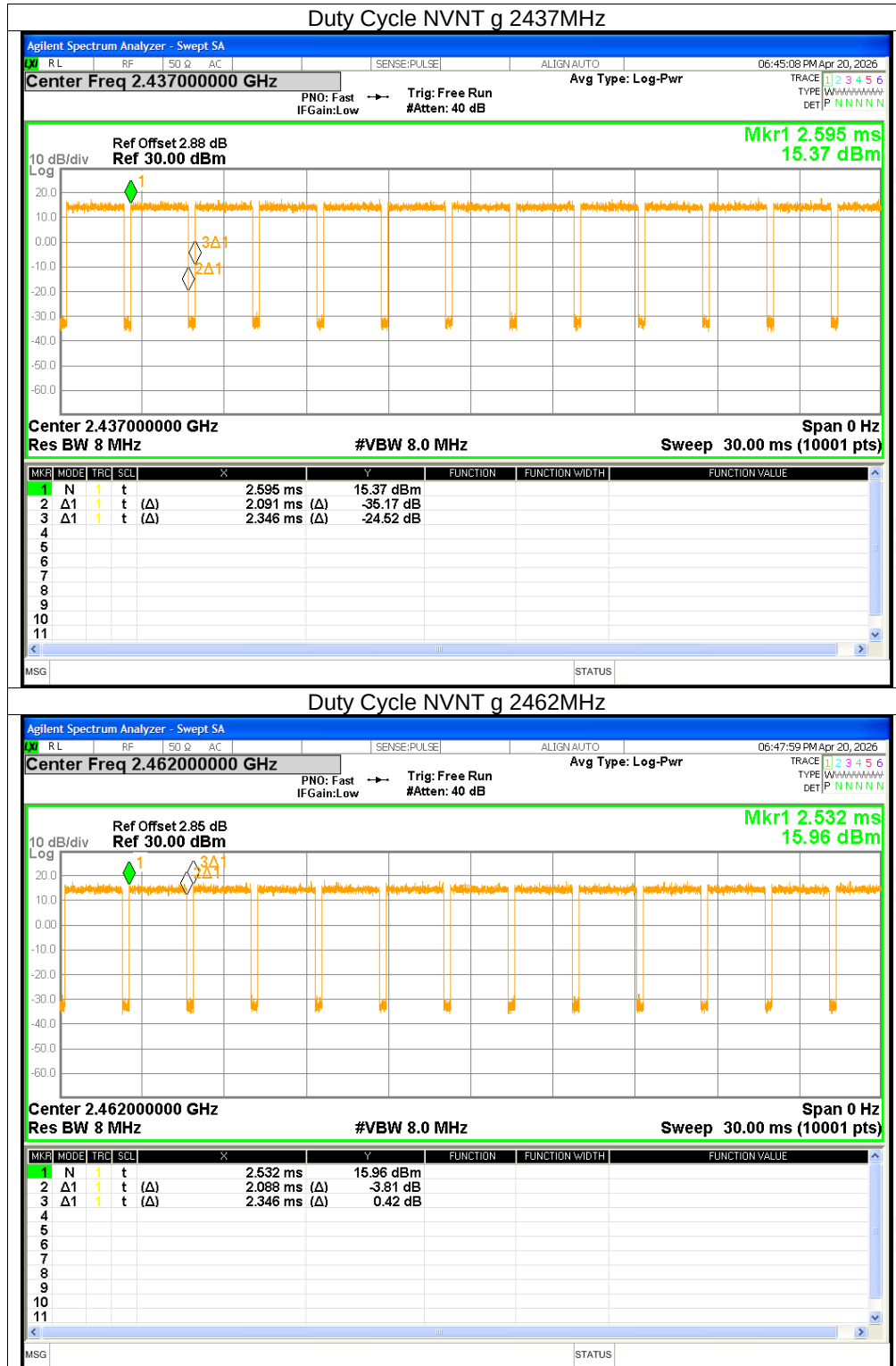


APPENDIX 1-TEST DATA

Duty Cycle

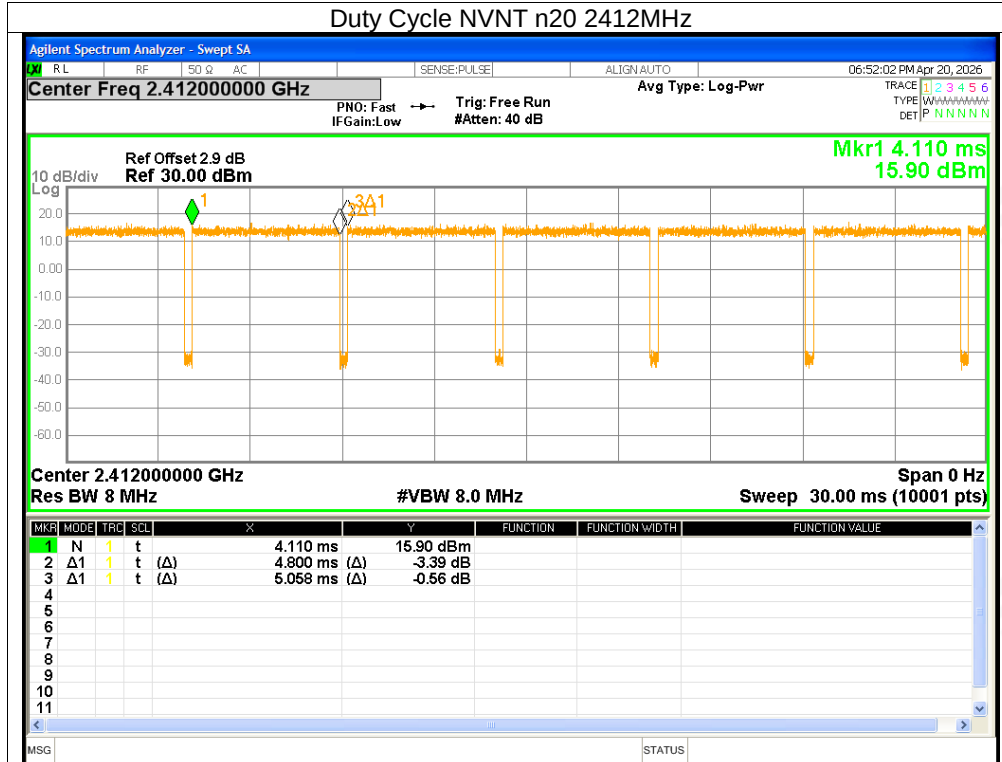
Condition	Mode	Frequency (MHz)	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	8.355	8.61	97.04	0.13	0.12
NVNT	b	2437	8.355	8.61	97.04	0.13	0.12
NVNT	b	2462	8.355	8.61	97.04	0.13	0.12
NVNT	g	2412	2.088	2.346	89	0.51	0.48
NVNT	g	2437	2.091	2.346	89.13	0.5	0.48
NVNT	g	2462	2.088	2.346	89	0.51	0.48
NVNT	n20	2412	4.8	5.058	94.9	0.23	0.21
NVNT	n20	2437	4.8	5.058	94.9	0.23	0.21
NVNT	n20	2462	4.8	5.058	94.9	0.23	0.21
NVNT	n40	2422	4.788	5.046	94.89	0.23	0.21
NVNT	n40	2437	4.788	5.046	94.89	0.23	0.21
NVNT	n40	2452	4.788	5.046	94.89	0.23	0.21
NVNT	ax20	2412	4.788	5.046	94.89	0.23	0.21
NVNT	ax20	2437	4.788	5.046	94.89	0.23	0.21
NVNT	ax20	2462	4.788	5.046	94.89	0.23	0.21
NVNT	ax40	2422	4.758	5.016	94.86	0.23	0.21
NVNT	ax40	2437	4.758	5.016	94.86	0.23	0.21
NVNT	ax40	2452	4.758	5.016	94.86	0.23	0.21



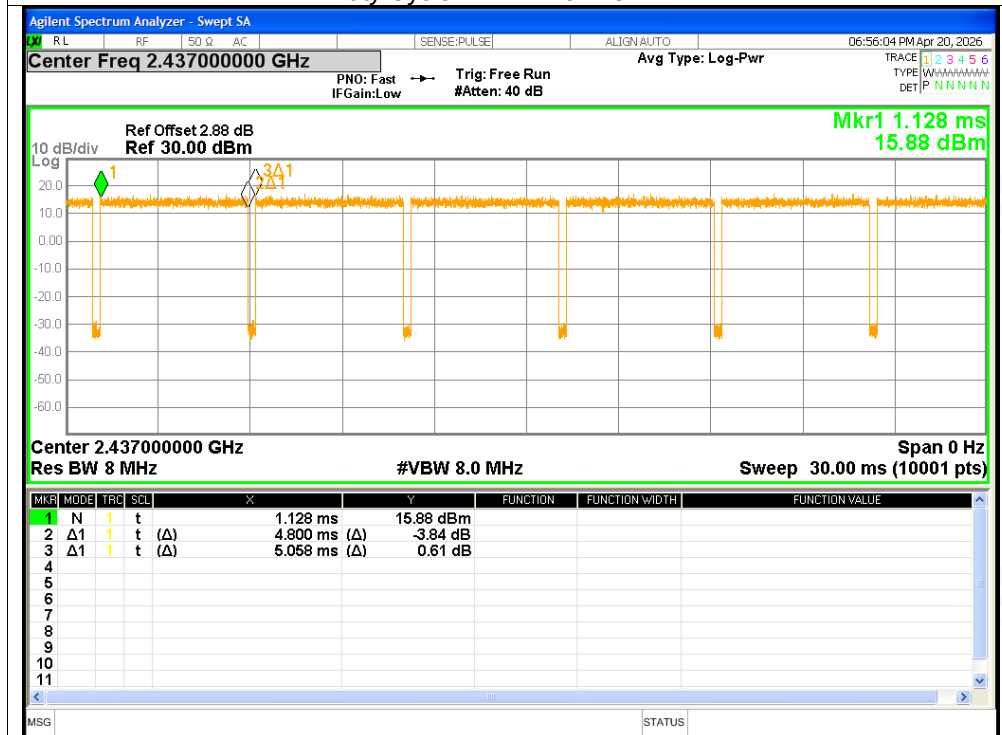




Duty Cycle NVNT n20 2412MHz

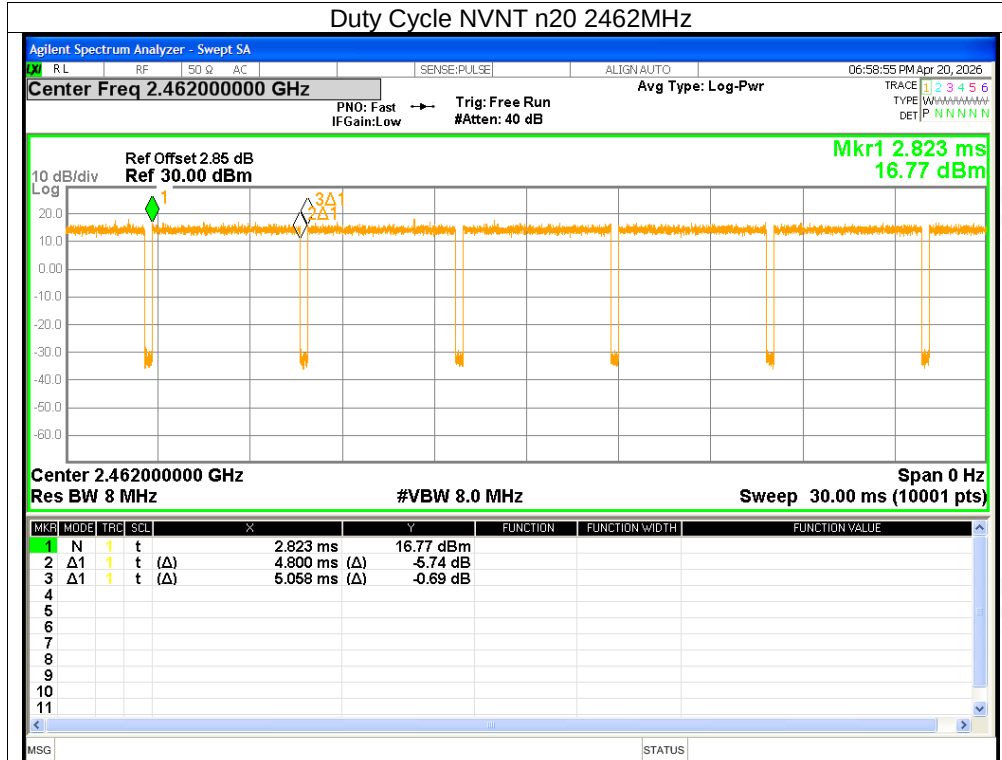


Duty Cycle NVNT n20 2437MHz

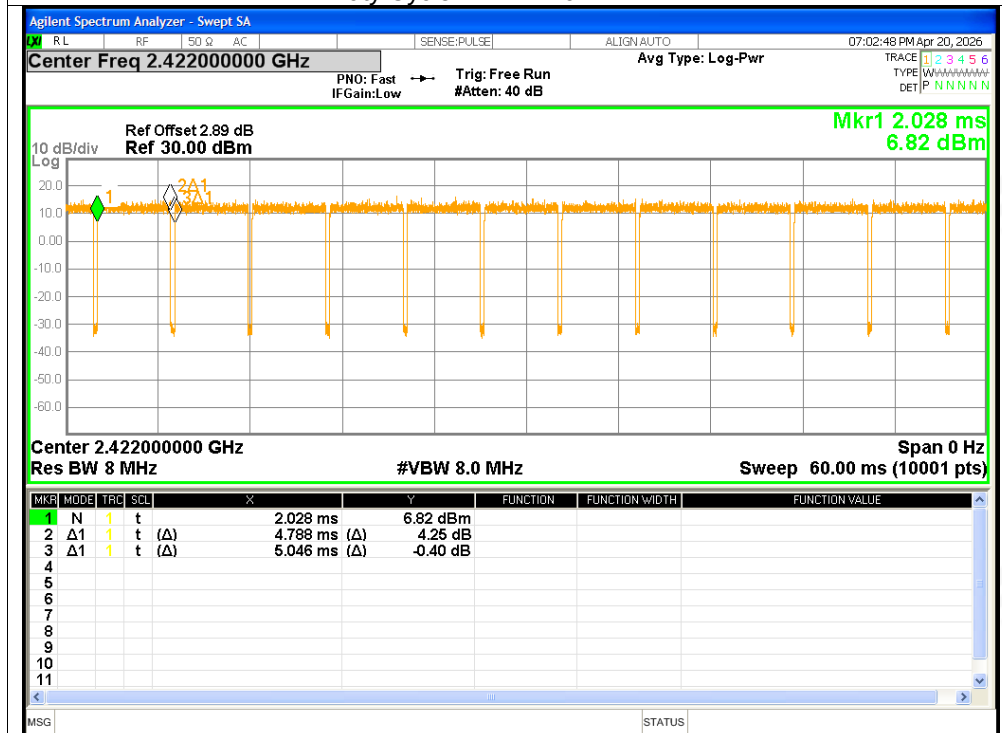




Duty Cycle NVNT n20 2462MHz

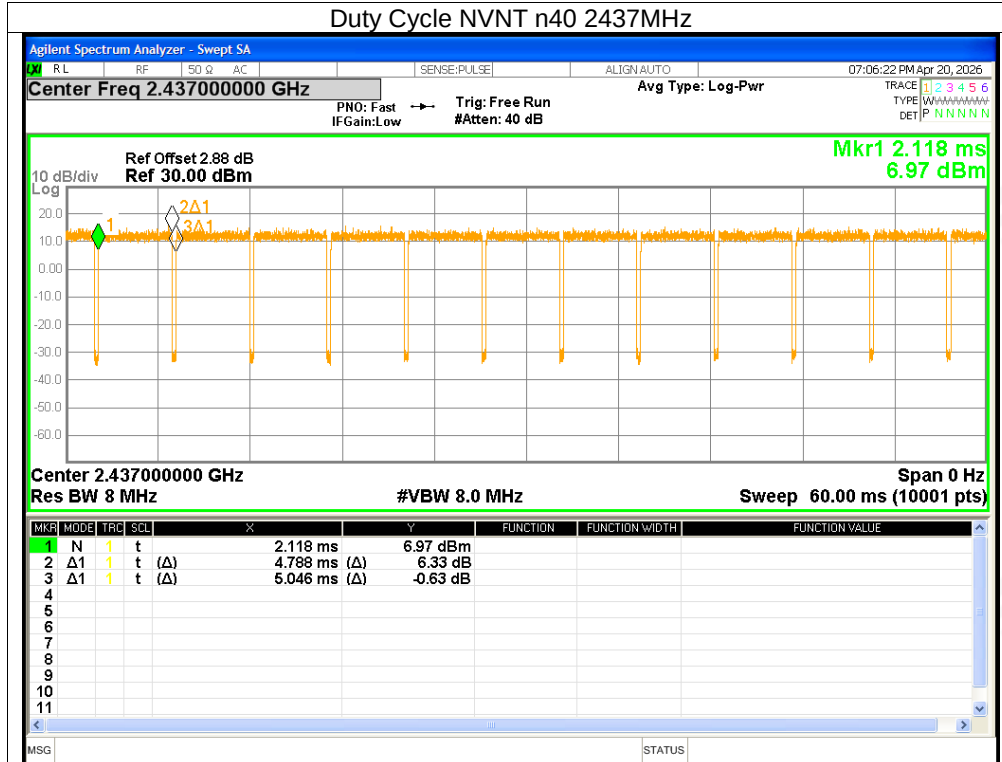


Duty Cycle NVNT n40 2422MHz

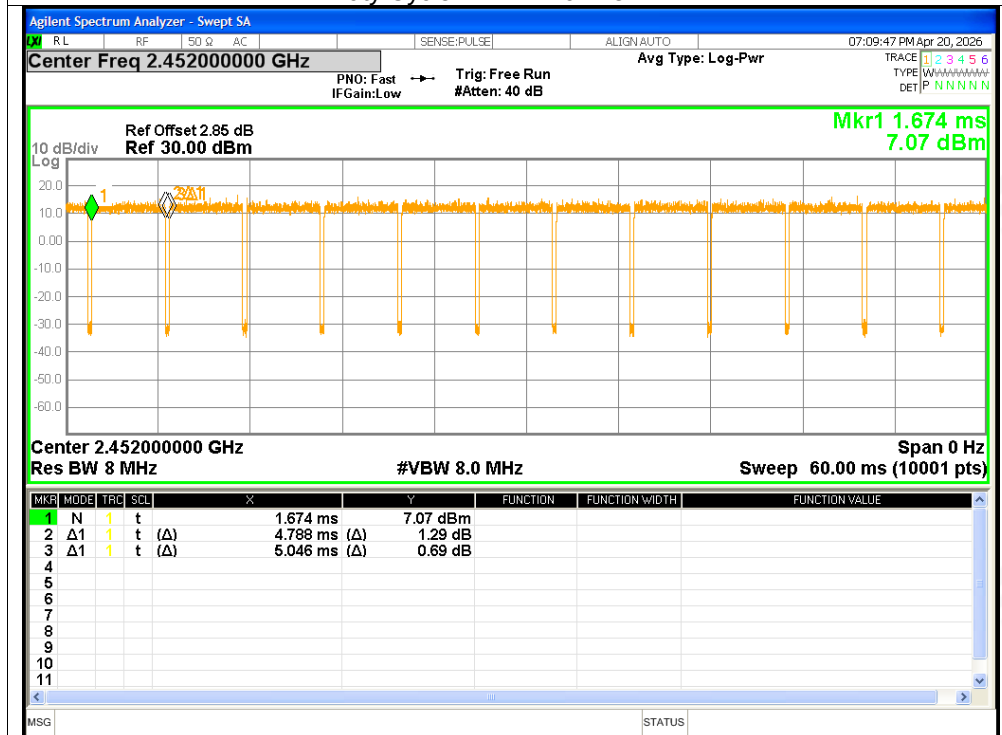


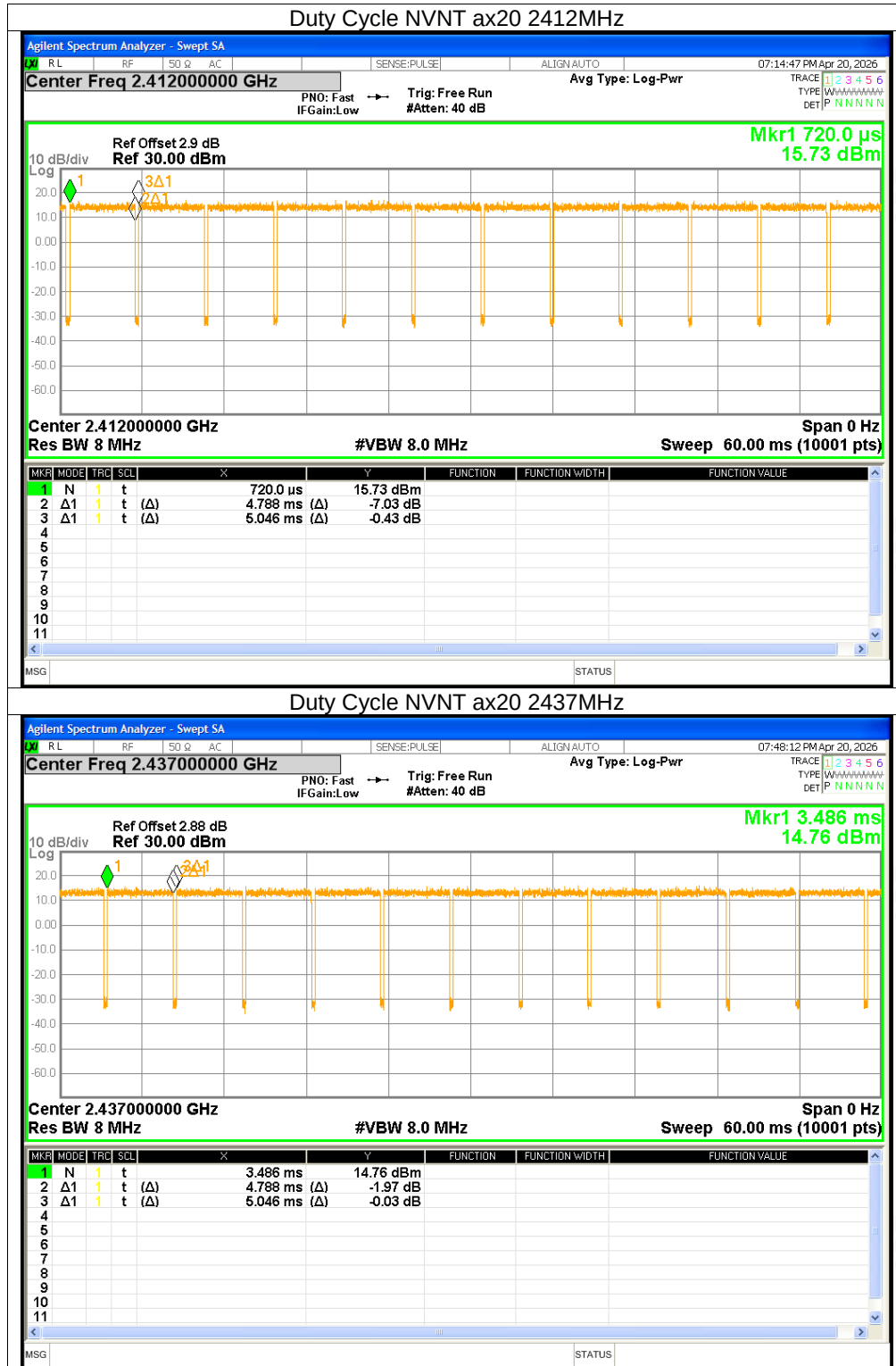


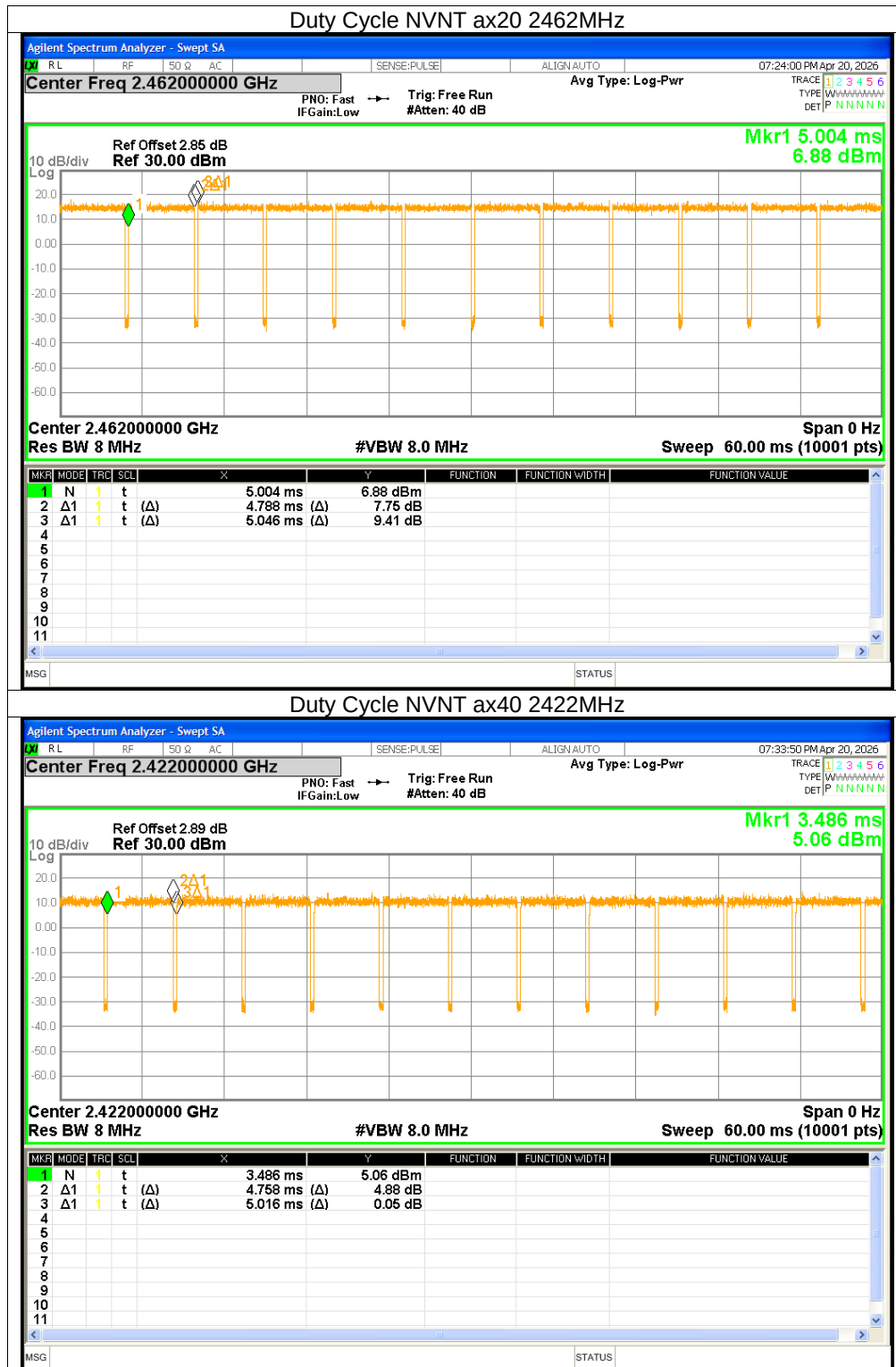
Duty Cycle NVNT n40 2437MHz

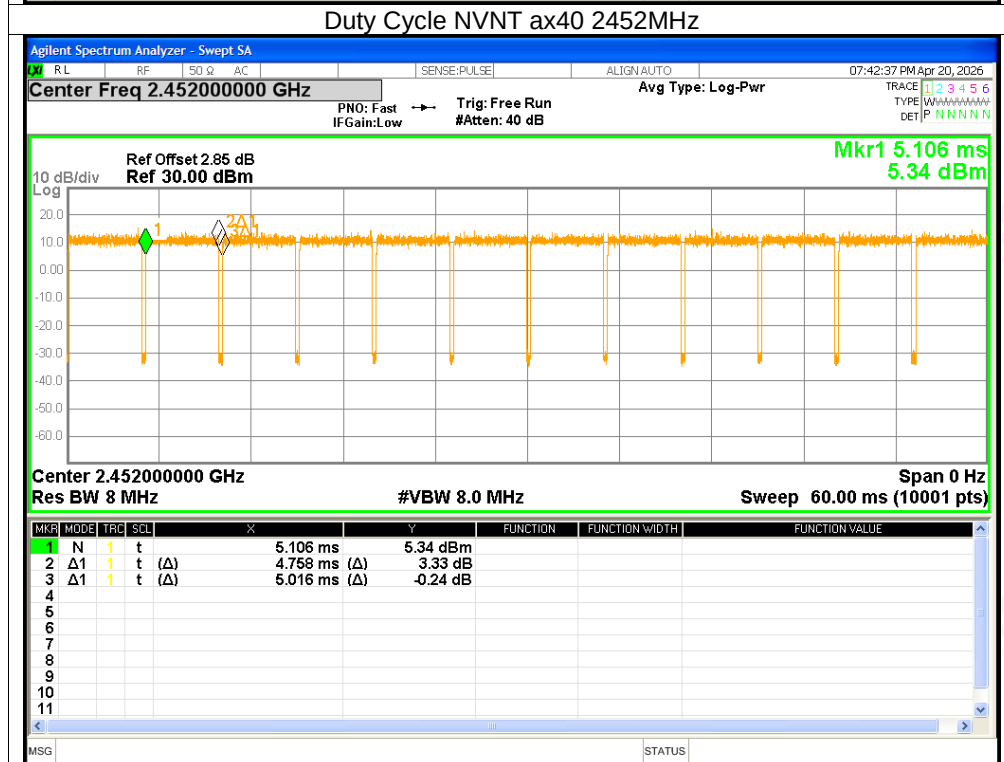
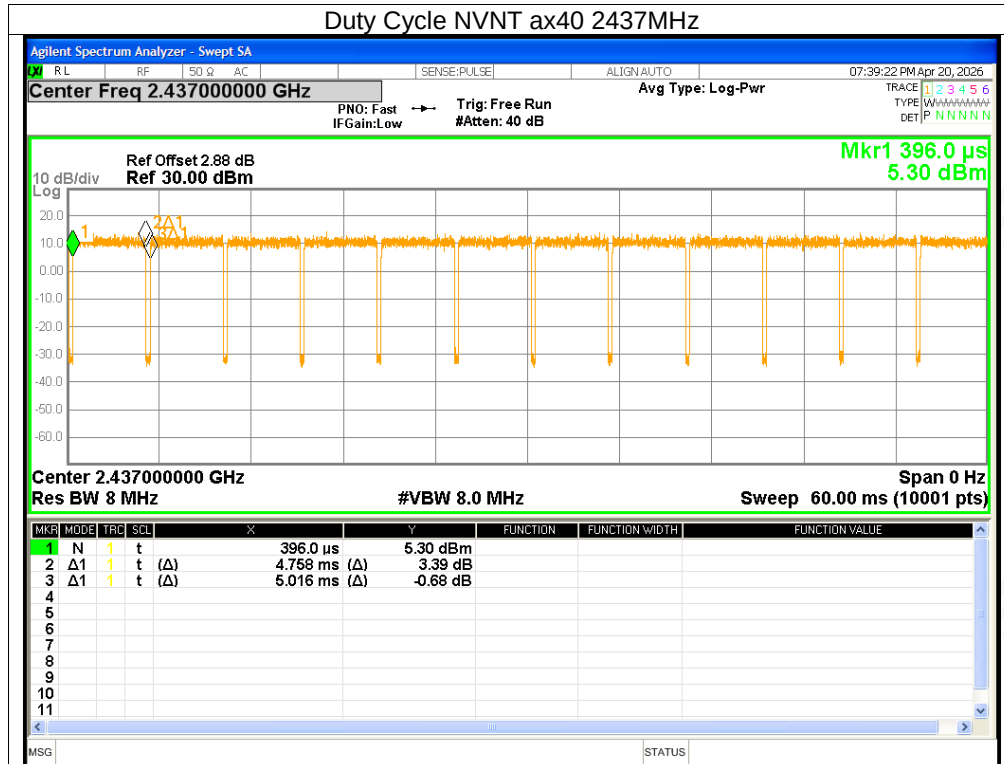


Duty Cycle NVNT n40 2452MHz











Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	18.44	≤ 30	Pass
NVNT	b	2437	18.75	≤ 30	Pass
NVNT	b	2462	18.94	≤ 30	Pass
NVNT	g	2412	17.43	≤ 30	Pass
NVNT	g	2437	17.76	≤ 30	Pass
NVNT	g	2462	18.06	≤ 30	Pass
NVNT	n20	2412	17.41	≤ 30	Pass
NVNT	n20	2437	17.71	≤ 30	Pass
NVNT	n20	2462	17.87	≤ 30	Pass
NVNT	n40	2422	18.45	≤ 30	Pass
NVNT	n40	2437	18.3	≤ 30	Pass
NVNT	n40	2452	18.41	≤ 30	Pass
NVNT	ax20	2412	16.91	≤ 30	Pass
NVNT	ax20	2437	17.39	≤ 30	Pass
NVNT	ax20	2462	17.53	≤ 30	Pass
NVNT	ax40	2422	17.69	≤ 30	Pass
NVNT	ax40	2437	17.68	≤ 30	Pass
NVNT	ax40	2452	17.78	≤ 30	Pass



-6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	10.18	≥ 0.5	Pass
NVNT	b	2437	10.18	≥ 0.5	Pass
NVNT	b	2462	10.18	≥ 0.5	Pass
NVNT	g	2412	14.98	≥ 0.5	Pass
NVNT	g	2437	15.88	≥ 0.5	Pass
NVNT	g	2462	15.89	≥ 0.5	Pass
NVNT	n20	2412	17.22	≥ 0.5	Pass
NVNT	n20	2437	15.73	≥ 0.5	Pass
NVNT	n20	2462	16.93	≥ 0.5	Pass
NVNT	n40	2422	36.07	≥ 0.5	Pass
NVNT	n40	2437	35.98	≥ 0.5	Pass
NVNT	n40	2452	35.83	≥ 0.5	Pass
NVNT	ax20	2412	18.31	≥ 0.5	Pass
NVNT	ax20	2437	18.76	≥ 0.5	Pass
NVNT	ax20	2462	18	≥ 0.5	Pass
NVNT	ax40	2422	36.92	≥ 0.5	Pass
NVNT	ax40	2437	36.27	≥ 0.5	Pass
NVNT	ax40	2452	36.86	≥ 0.5	Pass

