

Vertical Antenna

**Appendix A2: Duty Cycle**

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11B	11.83	12.37	0.9563	95.63	0.19	0.08	0.5
11G	1.965	2.185	0.8993	89.93	0.46	0.51	1
11N20MIMO	5.43	5.651	0.9609	96.09	0.17	0.18	0.5
11N40MIMO	5.429	5.658	0.9595	95.95	0.18	0.18	0.5
11AX20MIMO	5.446	5.675	0.9596	95.96	0.18	0.18	0.5
11AX40MIMO	5.443	5.671	0.9598	95.98	0.18	0.18	0.5

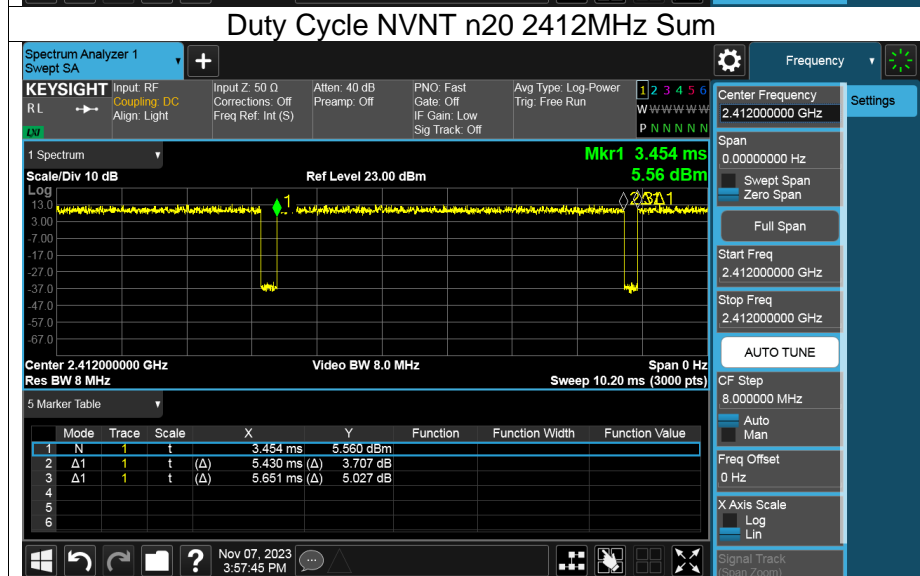
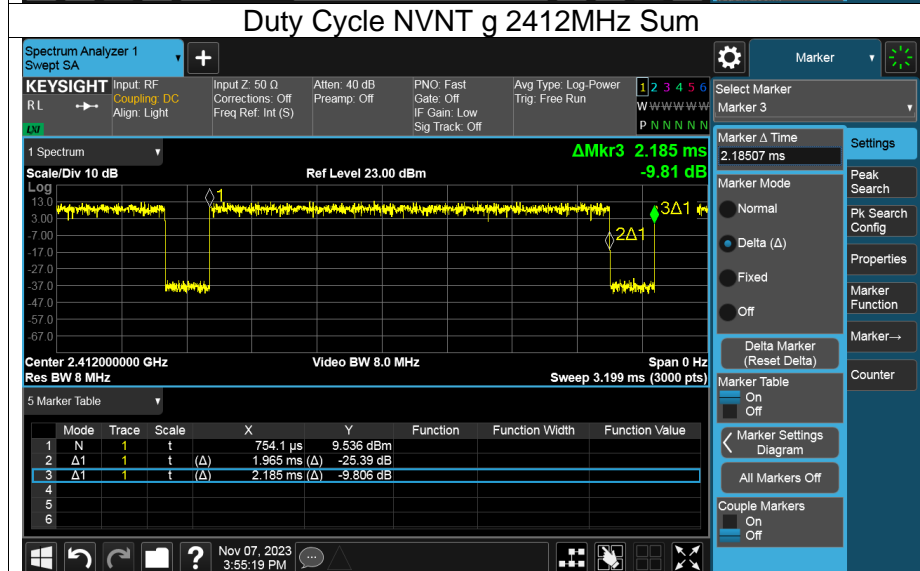
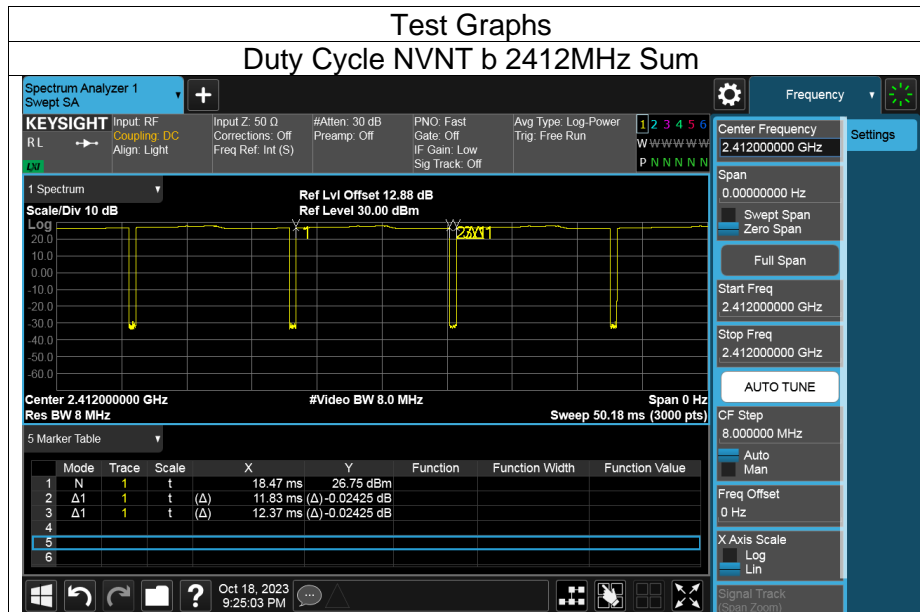
Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

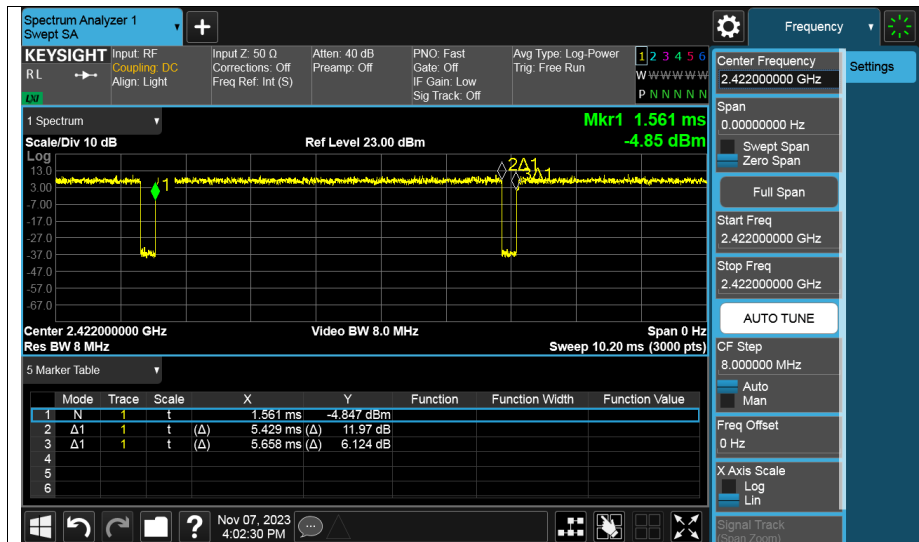
Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

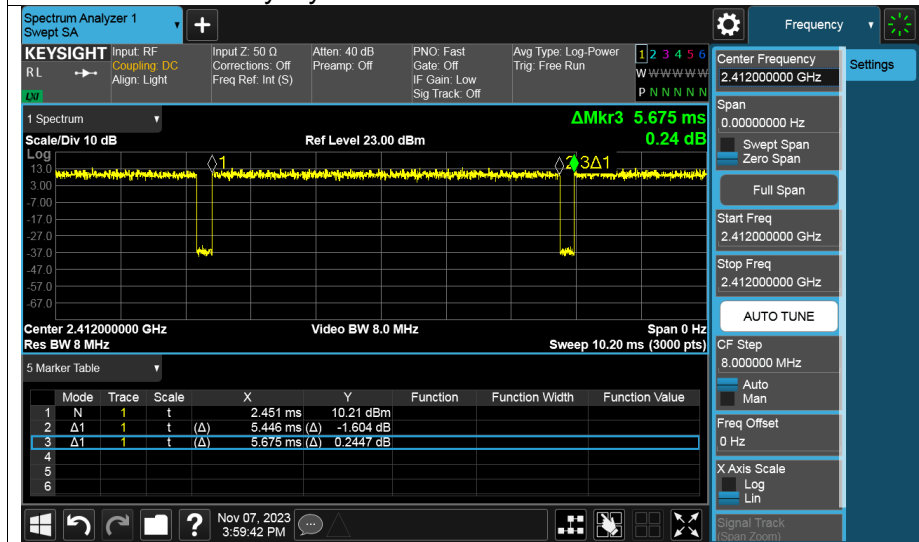


#### Duty Cycle NVNT n40 2422MHz Sum

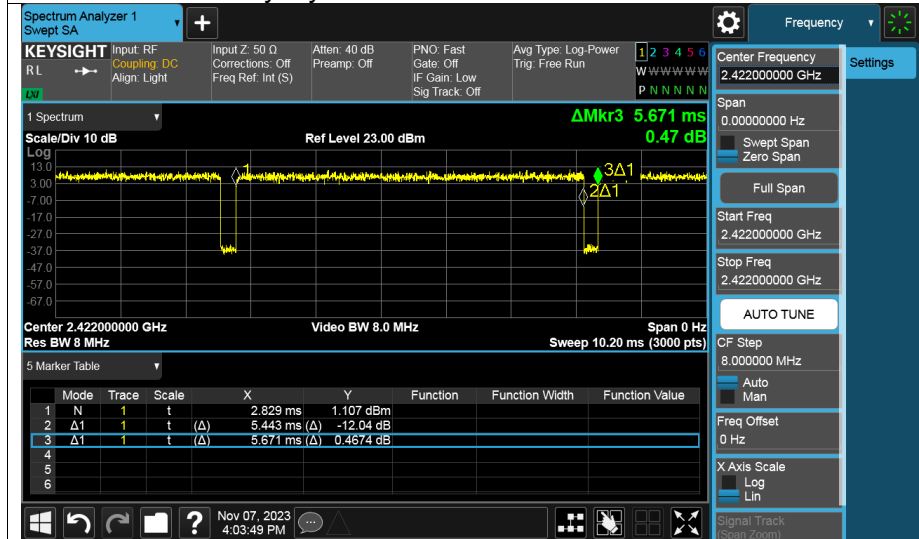




Duty Cycle NVNT ax20 2412MHz Sum



Duty Cycle NVNT ax40 2422MHz Sum



## Appendix B2: Maximum Conducted Output Power

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
b	2412	Ant3	24.14	≤30	Pass
b	2412	Ant4	23.98	≤30	Pass
b	2412	Sum	27.07	≤30	Pass
b	2417	Ant3	24.08	≤30	Pass
b	2417	Ant4	24.25	≤30	Pass
b	2417	Sum	27.18	≤30	Pass
b	2437	Ant3	24.53	≤30	Pass
b	2437	Ant4	24.55	≤30	Pass
b	2437	Sum	27.55	≤30	Pass
b	2457	Ant3	24.46	≤30	Pass
b	2457	Ant4	24.50	≤30	Pass
b	2457	Sum	27.49	≤30	Pass
b	2462	Ant3	24.10	≤30	Pass
b	2462	Ant4	24.19	≤30	Pass
b	2462	Sum	27.16	≤30	Pass
g	2412	Ant3	21.05	≤30	Pass
g	2412	Ant4	20.95	≤30	Pass
g	2412	Sum	24.01	≤30	Pass
g	2417	Ant3	21.90	≤30	Pass
g	2417	Ant4	22.05	≤30	Pass
g	2417	Sum	24.99	≤30	Pass
g	2437	Ant3	23.06	≤30	Pass
g	2437	Ant4	23.24	≤30	Pass
g	2437	Sum	26.16	≤30	Pass
g	2457	Ant3	22.62	≤30	Pass
g	2457	Ant4	22.54	≤30	Pass
g	2457	Sum	25.59	≤30	Pass
g	2462	Ant3	20.57	≤30	Pass
g	2462	Ant4	20.67	≤30	Pass
g	2462	Sum	23.63	≤30	Pass
n20	2412	Ant3	21.70	≤30	Pass
n20	2412	Ant4	21.86	≤30	Pass
n20	2412	Sum	24.79	≤30	Pass
n20	2417	Ant3	22.74	≤30	Pass
n20	2417	Ant4	22.77	≤30	Pass
n20	2417	Sum	25.77	≤30	Pass
n20	2437	Ant3	23.94	≤30	Pass
n20	2437	Ant4	24.12	≤30	Pass
n20	2437	Sum	27.04	≤30	Pass
n20	2457	Ant3	23.18	≤30	Pass
n20	2457	Ant4	23.18	≤30	Pass
n20	2457	Sum	26.19	≤30	Pass
n20	2462	Ant3	20.30	≤30	Pass
n20	2462	Ant4	20.39	≤30	Pass
n20	2462	Sum	23.36	≤30	Pass
n40	2422	Ant3	20.60	≤30	Pass
n40	2422	Ant4	20.77	≤30	Pass
n40	2422	Sum	23.70	≤30	Pass
n40	2427	Ant3	20.48	≤30	Pass
n40	2427	Ant4	20.88	≤30	Pass

n40	2427	Sum	23.69	≤30	Pass
n40	2437	Ant3	21.83	≤30	Pass
n40	2437	Ant4	22.03	≤30	Pass
n40	2437	Sum	24.94	≤30	Pass
n40	2447	Ant3	19.43	≤30	Pass
n40	2447	Ant4	19.40	≤30	Pass
n40	2447	Sum	22.43	≤30	Pass
n40	2452	Ant3	18.18	≤30	Pass
n40	2452	Ant4	18.45	≤30	Pass
n40	2452	Sum	21.33	≤30	Pass
ax20	2412	Ant3	21.60	≤30	Pass
ax20	2412	Ant4	21.52	≤30	Pass
ax20	2412	Sum	24.57	≤30	Pass
ax20	2417	Ant3	22.49	≤30	Pass
ax20	2417	Ant4	22.57	≤30	Pass
ax20	2417	Sum	25.54	≤30	Pass
ax20	2437	Ant3	23.63	≤30	Pass
ax20	2437	Ant4	23.90	≤30	Pass
ax20	2437	Sum	26.78	≤30	Pass
ax20	2457	Ant3	22.33	≤30	Pass
ax20	2457	Ant4	22.55	≤30	Pass
ax20	2457	Sum	25.45	≤30	Pass
ax20	2462	Ant3	19.03	≤30	Pass
ax20	2462	Ant4	19.13	≤30	Pass
ax20	2462	Sum	22.09	≤30	Pass
ax40	2422	Ant3	20.16	≤30	Pass
ax40	2422	Ant4	20.30	≤30	Pass
ax40	2422	Sum	23.24	≤30	Pass
ax40	2427	Ant3	19.98	≤30	Pass
ax40	2427	Ant4	20.23	≤30	Pass
ax40	2427	Sum	23.12	≤30	Pass
ax40	2437	Ant3	21.35	≤30	Pass
ax40	2437	Ant4	21.47	≤30	Pass
ax40	2437	Sum	24.42	≤30	Pass
ax40	2447	Ant3	18.89	≤30	Pass
ax40	2447	Ant4	19.02	≤30	Pass
ax40	2447	Sum	21.97	≤30	Pass
ax40	2452	Ant3	18.39	≤30	Pass
ax40	2452	Ant4	18.52	≤30	Pass
ax40	2452	Sum	21.47	≤30	Pass

Note: 1. Conducted Power=Meas. Level+ Correction Factor

2. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.

**Appendix C2: -6dB Bandwidth**

Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
b	2412	Ant3	7.087	≥0.5	Pass
		Ant4	7.127	≥0.5	Pass
	2417	Ant3	7.096	≥0.5	Pass
		Ant4	7.075	≥0.5	Pass
	2437	Ant3	7.112	≥0.5	Pass
		Ant4	8.056	≥0.5	Pass
	2457	Ant3	8.056	≥0.5	Pass
		Ant4	7.605	≥0.5	Pass
g	2412	Ant3	15.527	≥0.5	Pass
		Ant4	16.03	≥0.5	Pass
	2417	Ant3	15.153	≥0.5	Pass
		Ant4	15.629	≥0.5	Pass
	2437	Ant3	15.621	≥0.5	Pass
		Ant4	15.889	≥0.5	Pass
	2457	Ant3	15.112	≥0.5	Pass
		Ant4	16.024	≥0.5	Pass
	2462	Ant3	15.662	≥0.5	Pass
		Ant4	16.282	≥0.5	Pass
n20	2412	Ant3	16.548	≥0.5	Pass
		Ant4	17.568	≥0.5	Pass
	2417	Ant3	16.803	≥0.5	Pass
		Ant4	16.786	≥0.5	Pass
	2437	Ant3	17.625	≥0.5	Pass
		Ant4	16.787	≥0.5	Pass
	2457	Ant3	14.98	≥0.5	Pass
		Ant4	17.166	≥0.5	Pass
	2462	Ant3	17.164	≥0.5	Pass
		Ant4	17.166	≥0.5	Pass
n40	2422	Ant3	36.301	≥0.5	Pass
		Ant4	36.348	≥0.5	Pass
	2427	Ant3	36.3	≥0.5	Pass
		Ant4	36.061	≥0.5	Pass
	2437	Ant3	35.878	≥0.5	Pass
		Ant4	35.641	≥0.5	Pass
	2447	Ant3	35.913	≥0.5	Pass
		Ant4	35.313	≥0.5	Pass
	2452	Ant3	35.387	≥0.5	Pass
		Ant4	35.772	≥0.5	Pass
ax20	2412	Ant3	18.92	≥0.5	Pass
		Ant4	17.638	≥0.5	Pass
	2417	Ant3	18.534	≥0.5	Pass
		Ant4	17.966	≥0.5	Pass
	2437	Ant3	17.557	≥0.5	Pass
		Ant4	18.694	≥0.5	Pass
	2457	Ant3	18.7	≥0.5	Pass
		Ant4	18.811	≥0.5	Pass
	2462	Ant3	17.701	≥0.5	Pass
		Ant4	17.766	≥0.5	Pass
ax40	2422	Ant3	37.926	≥0.5	Pass
		Ant4	36.205	≥0.5	Pass

2427	Ant3	37.182	$\geq 0.5$	Pass
	Ant4	37.054	$\geq 0.5$	Pass
2437	Ant3	37.65	$\geq 0.5$	Pass
	Ant4	36.625	$\geq 0.5$	Pass
2447	Ant3	37.742	$\geq 0.5$	Pass
	Ant4	37.858	$\geq 0.5$	Pass
2452	Ant3	37.026	$\geq 0.5$	Pass
	Ant4	37.631	$\geq 0.5$	Pass



