



Appendix B

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Gateway

Test Model: KG04S

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Ling Zhu



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B.1 -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.532	≥ 0.5	Pass
NVNT	b	2437	Ant1	8.605	≥ 0.5	Pass
NVNT	b	2462	Ant1	9.031	≥ 0.5	Pass
NVNT	g	2412	Ant1	15.398	≥ 0.5	Pass
NVNT	g	2437	Ant1	15.988	≥ 0.5	Pass
NVNT	g	2462	Ant1	14.426	≥ 0.5	Pass
NVNT	n20	2412	Ant1	16.018	≥ 0.5	Pass
NVNT	n20	2437	Ant1	15.456	≥ 0.5	Pass
NVNT	n20	2462	Ant1	16.889	≥ 0.5	Pass



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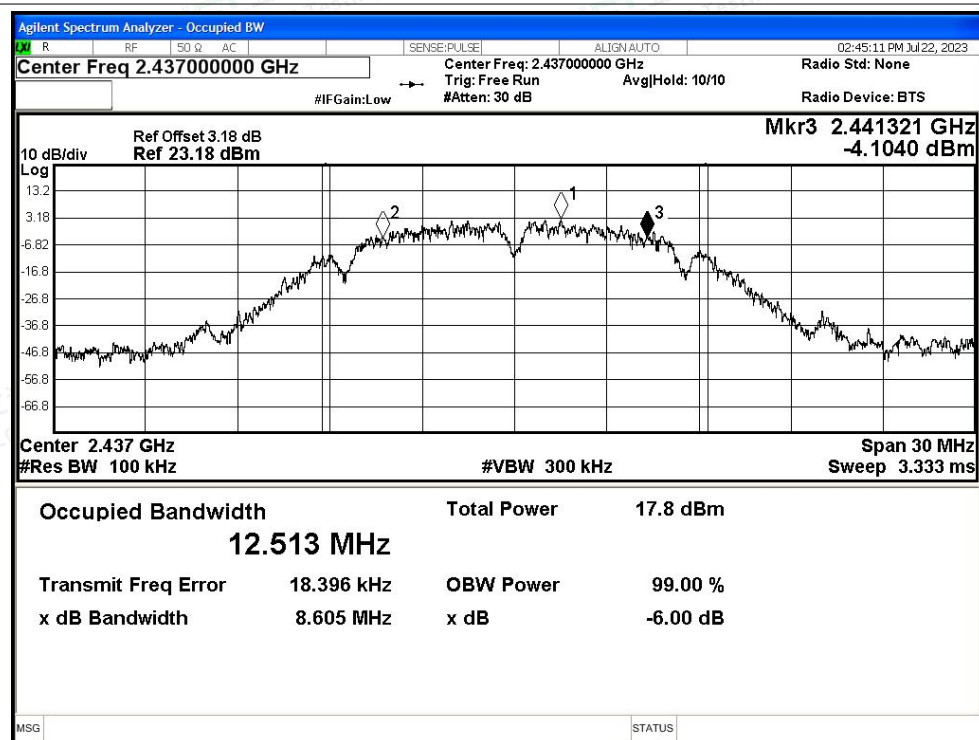


Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



-6dB Bandwidth NVNT b 2437MHz Ant1



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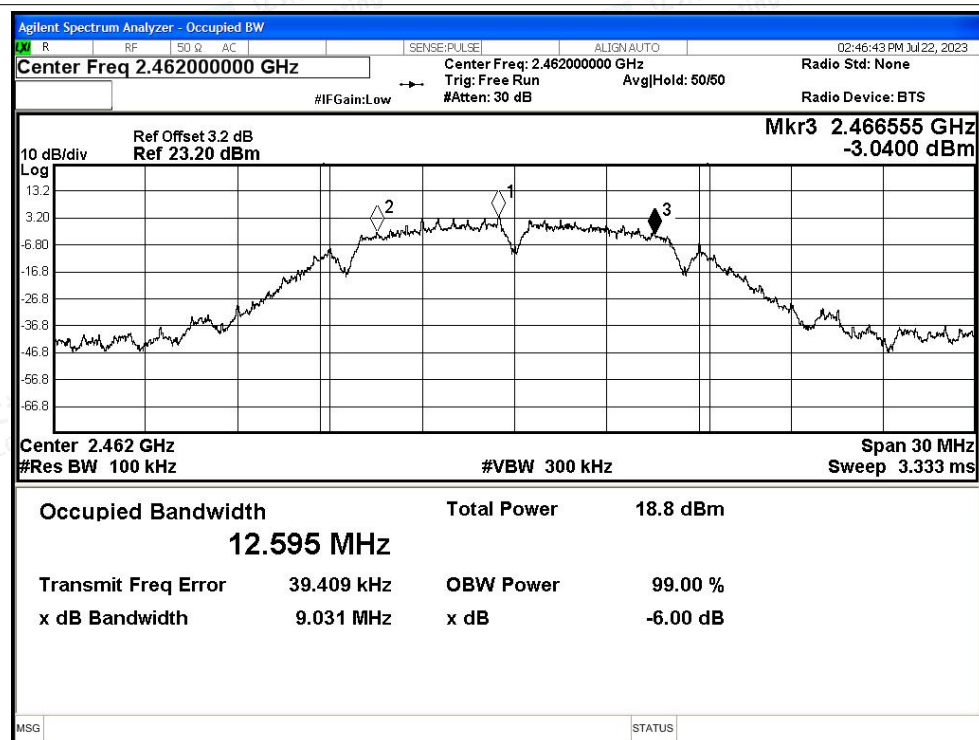
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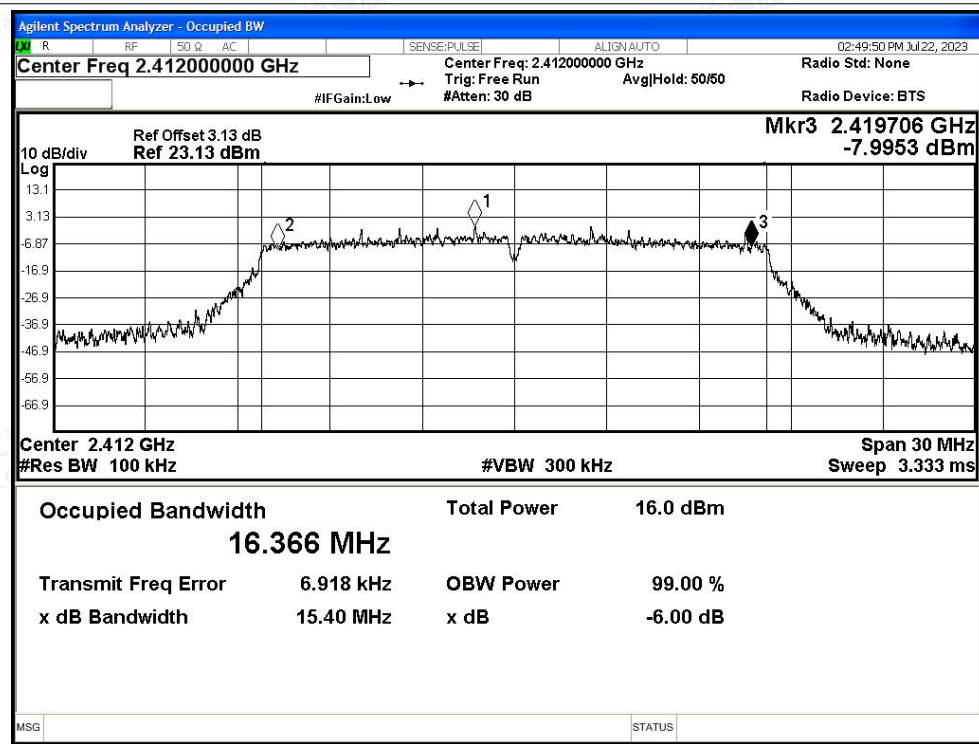
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-6dB Bandwidth NVNT b 2462MHz Ant1



-6dB Bandwidth NVNT g 2412MHz Ant1



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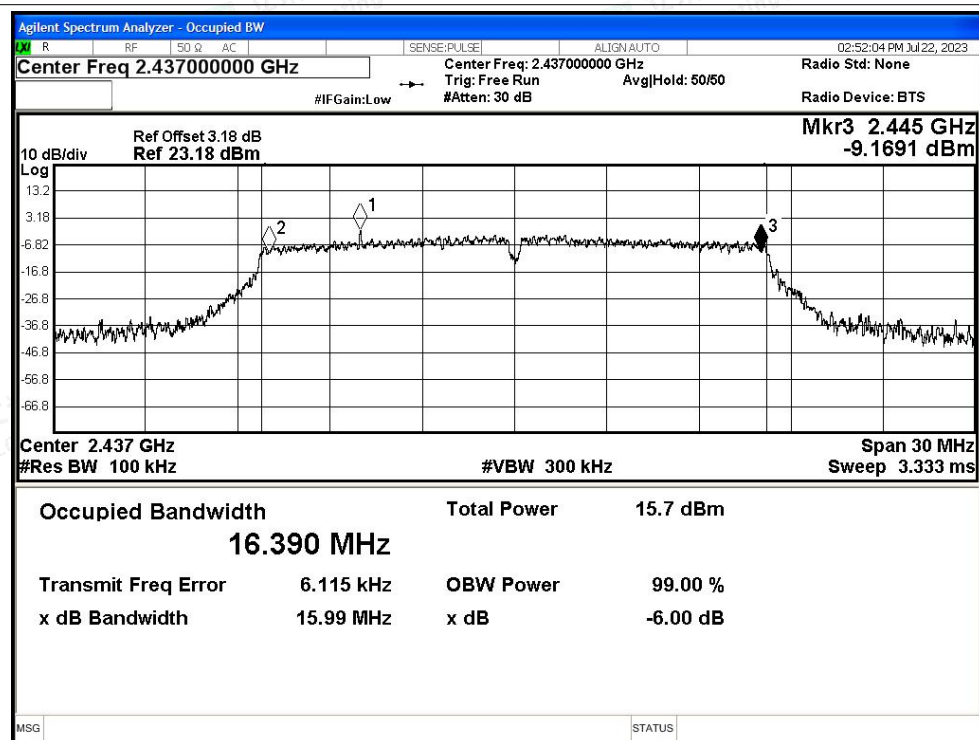
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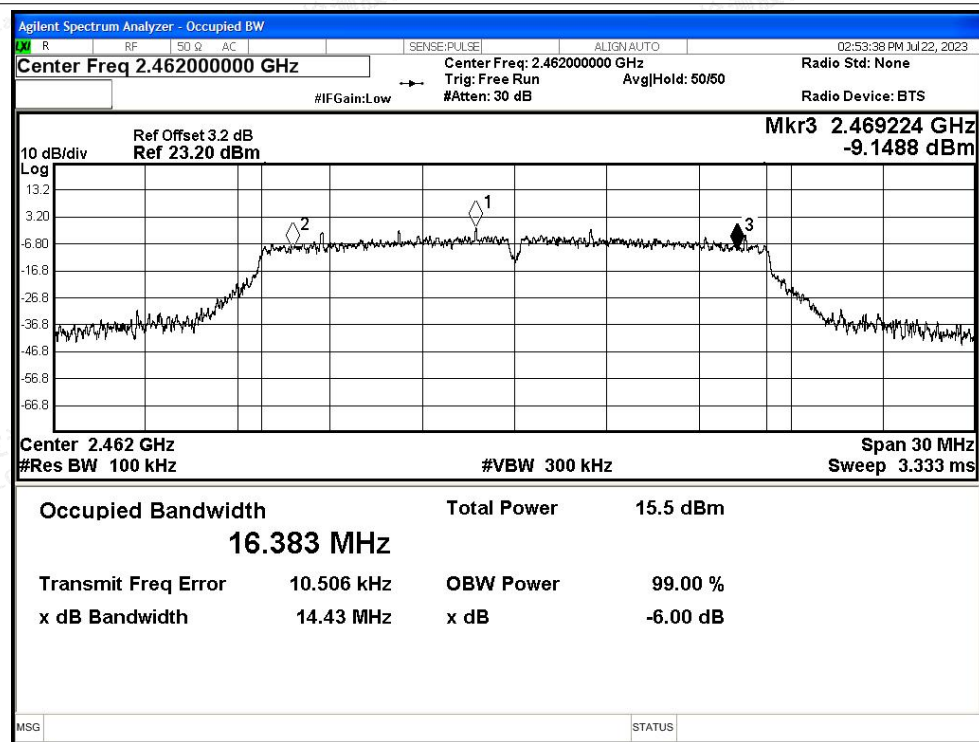
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-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1



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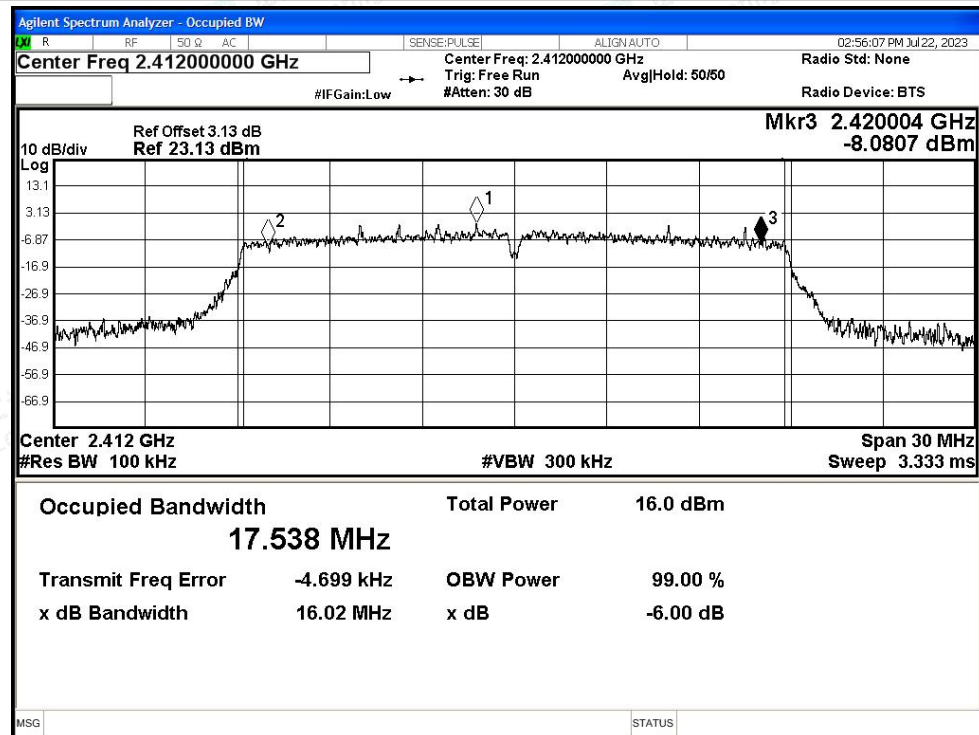
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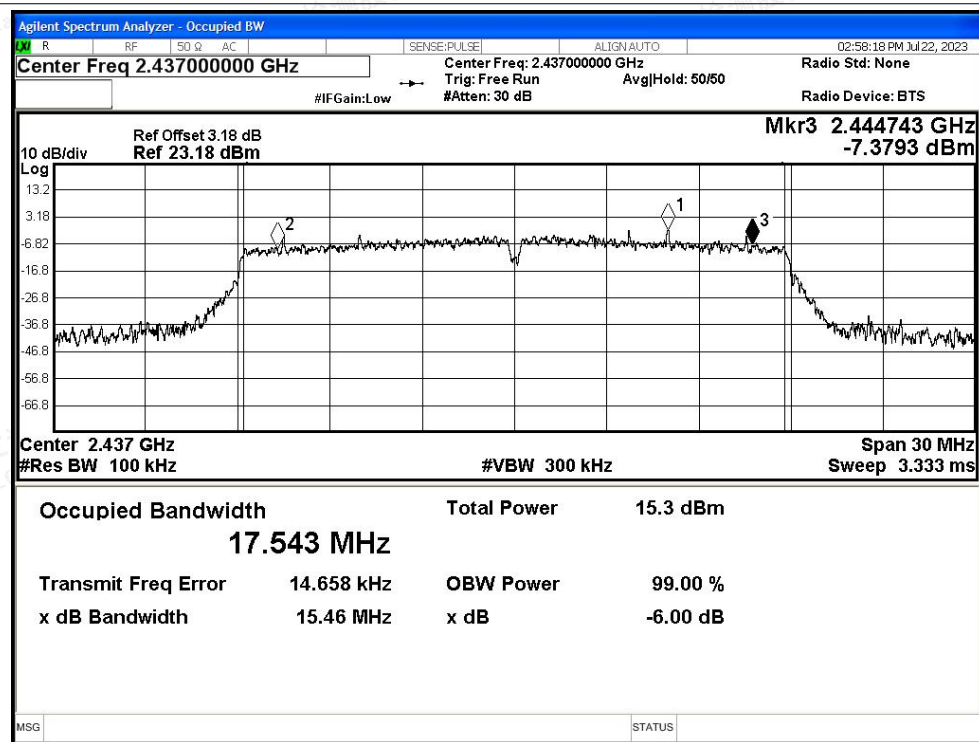
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-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2437MHz Ant1

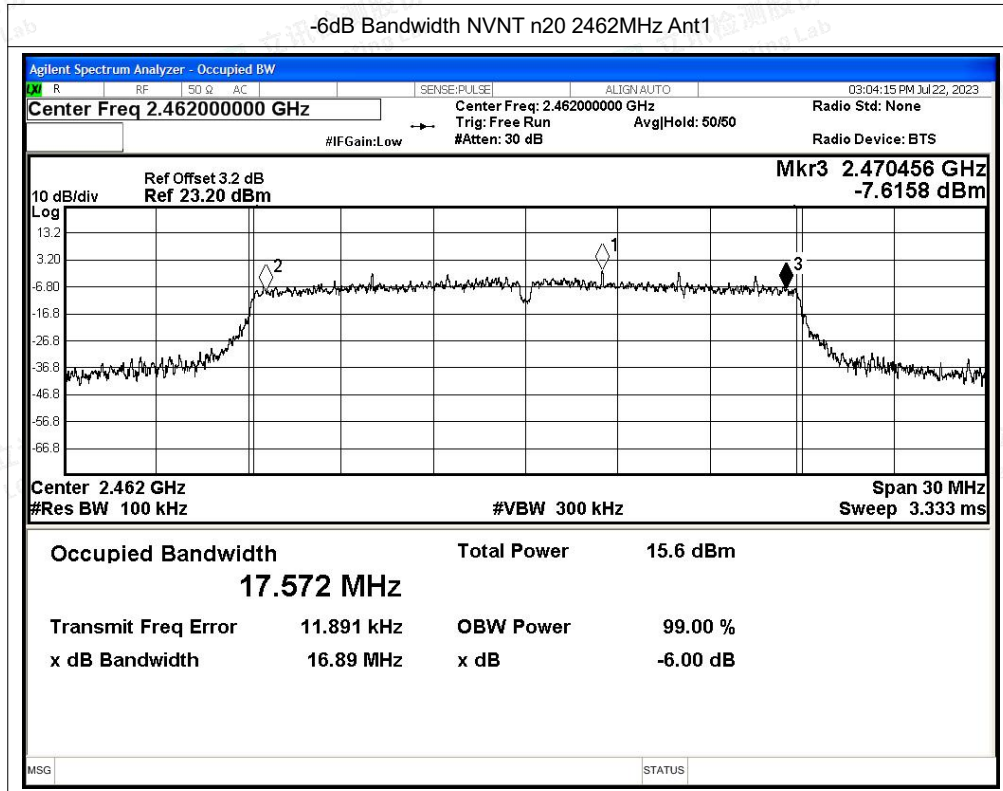


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B.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	8.52	30	Pass
NVNT	b	2437	Ant1	8.38	30	Pass
NVNT	b	2462	Ant1	8.27	30	Pass
NVNT	g	2412	Ant1	8.24	30	Pass
NVNT	g	2437	Ant1	8.17	30	Pass
NVNT	g	2462	Ant1	8.14	30	Pass
NVNT	n20	2412	Ant1	8.15	30	Pass
NVNT	n20	2437	Ant1	8.12	30	Pass
NVNT	n20	2462	Ant1	8.09	30	Pass



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B.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-9.86	8	Pass
NVNT	b	2437	Ant1	-10.11	8	Pass
NVNT	b	2462	Ant1	-8.87	8	Pass
NVNT	g	2412	Ant1	-14.98	8	Pass
NVNT	g	2437	Ant1	-14.58	8	Pass
NVNT	g	2462	Ant1	-13.62	8	Pass
NVNT	n20	2412	Ant1	-14.23	8	Pass
NVNT	n20	2437	Ant1	-14.55	8	Pass
NVNT	n20	2462	Ant1	-16.3	8	Pass



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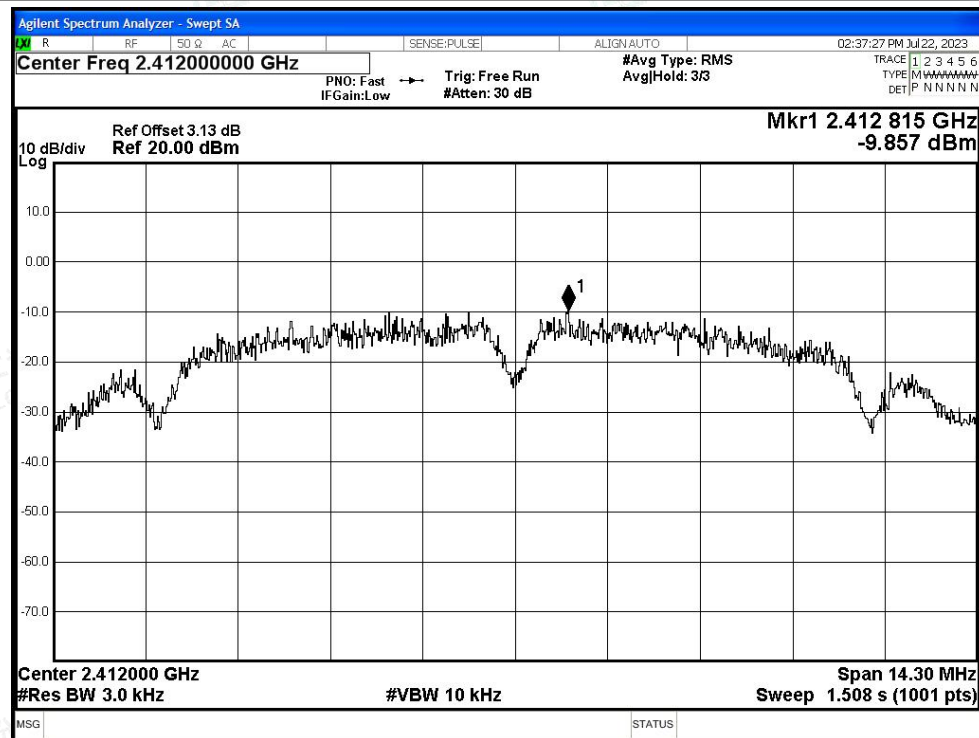
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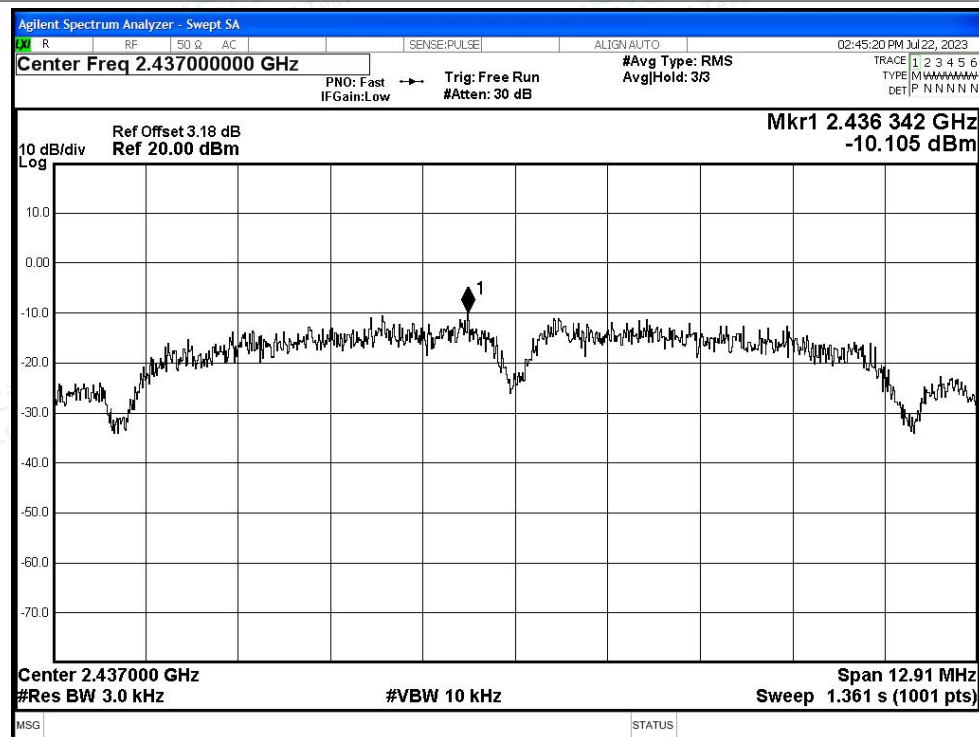


Test Graphs

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1



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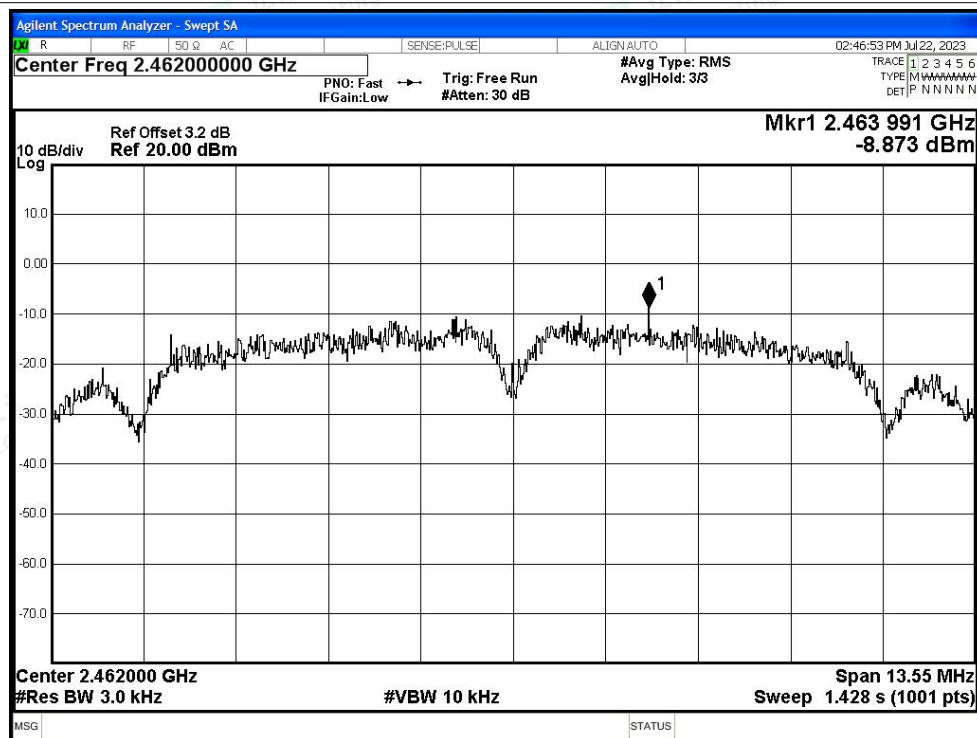
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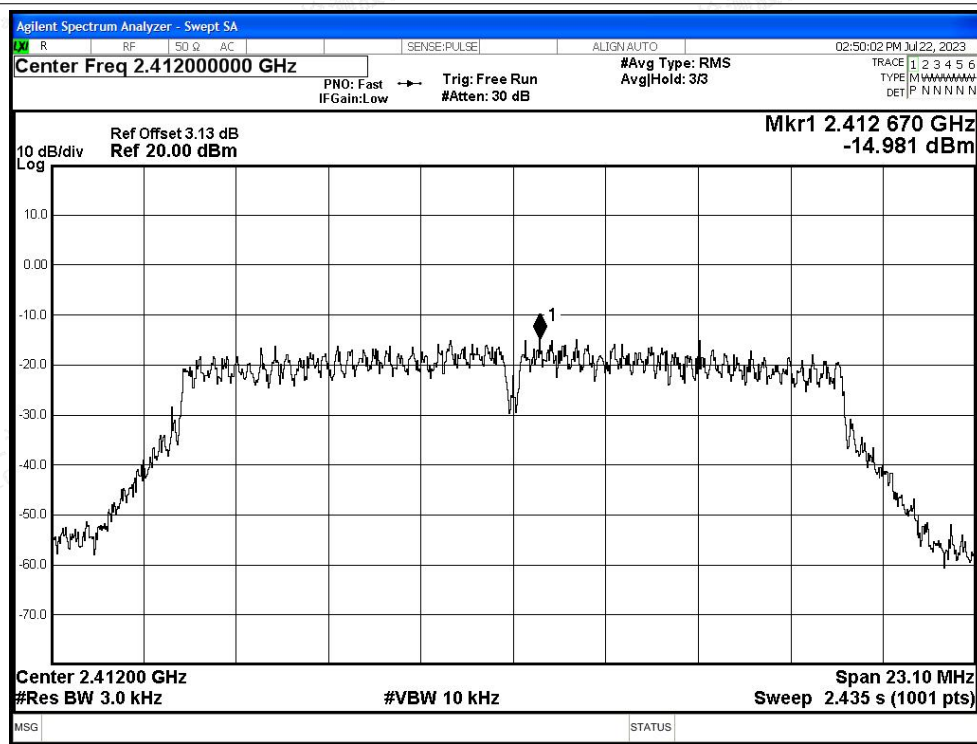
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PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



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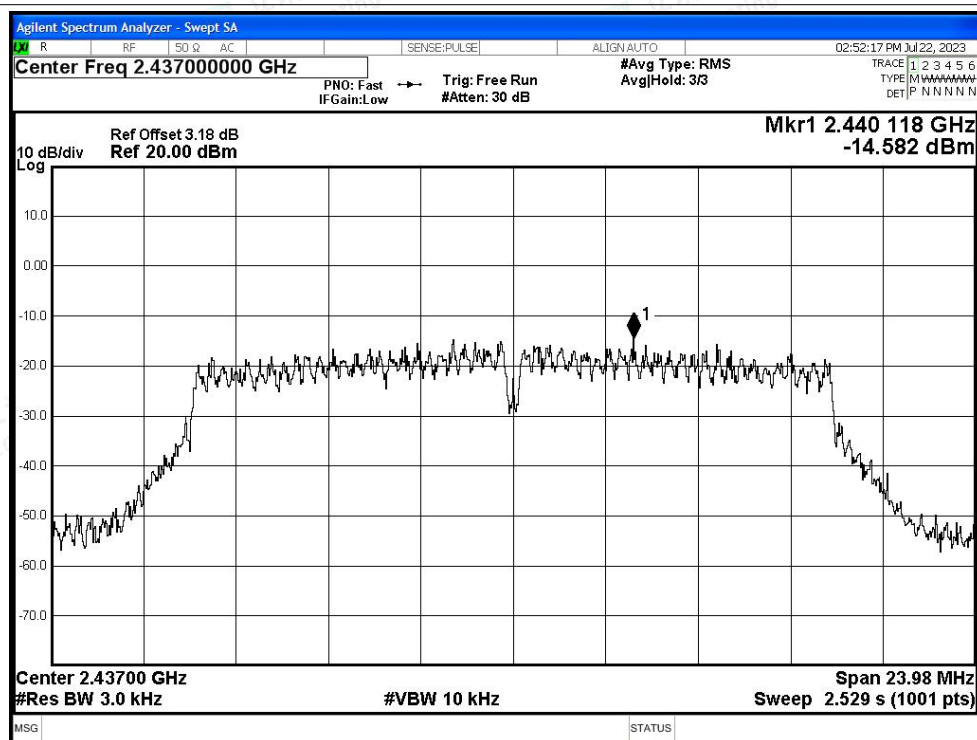
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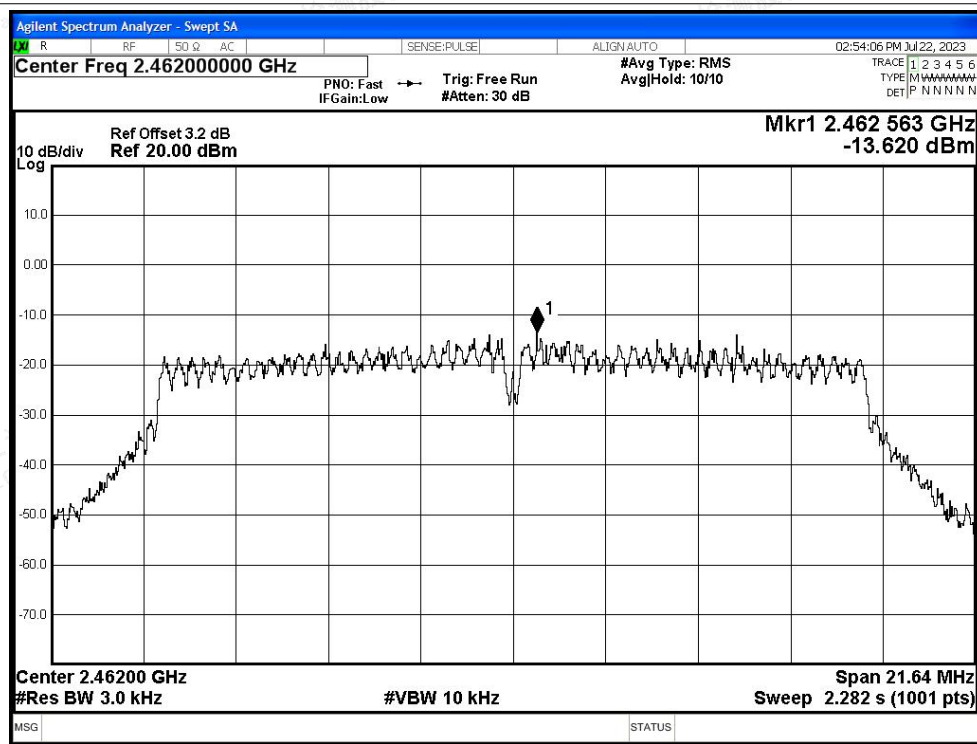
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PSD NVNT g 2437MHz Ant1



PSD NVNT g 2462MHz Ant1

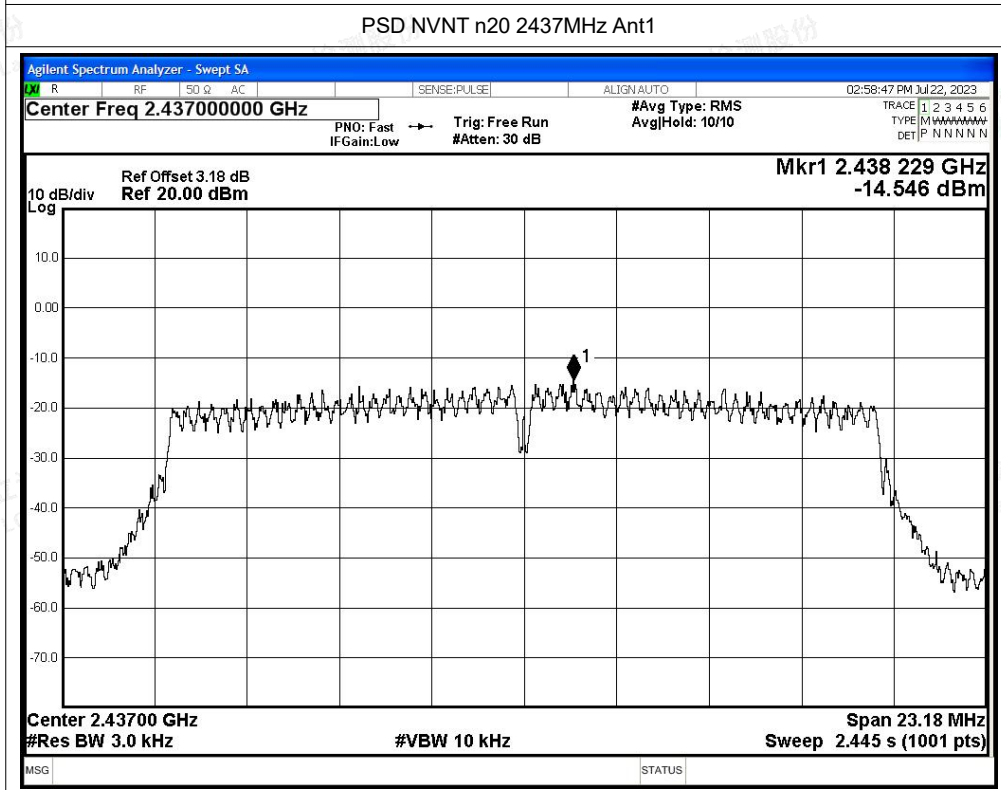
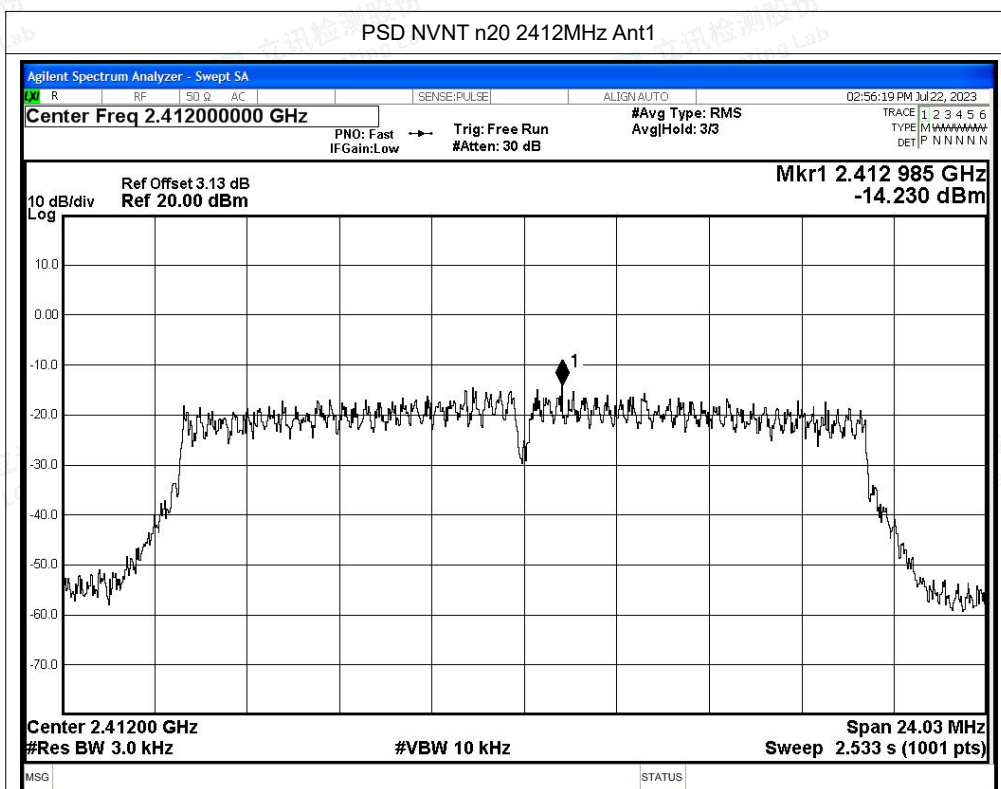


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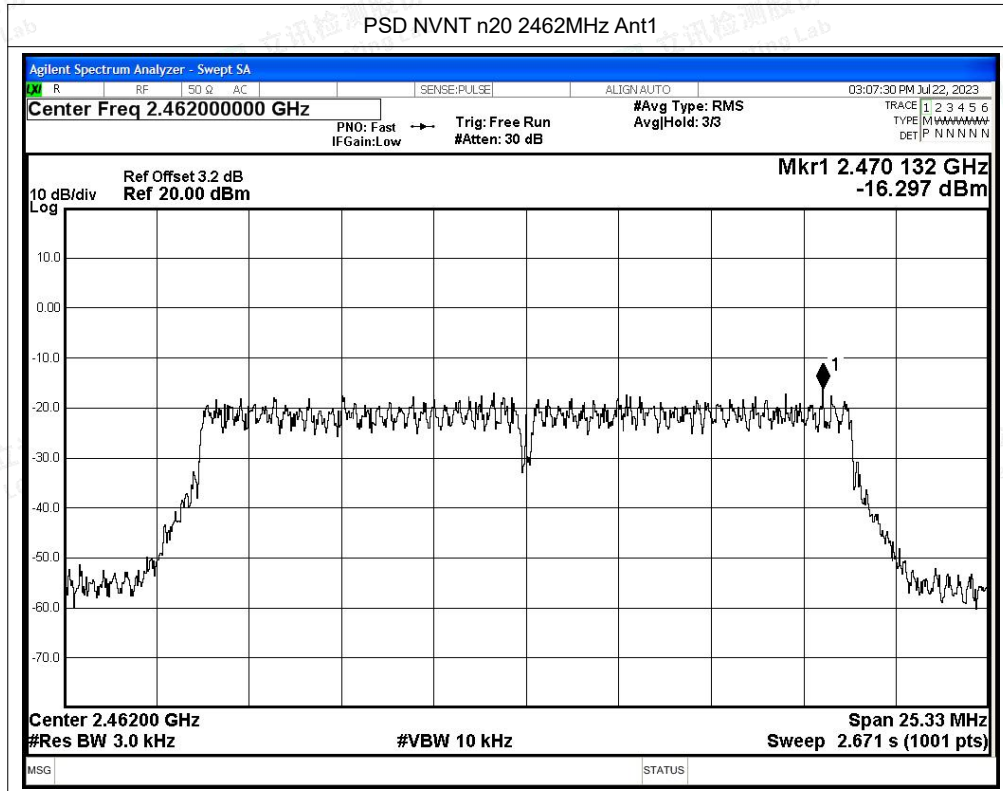


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B.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-46.22	-20	Pass
NVNT	b	2462	Ant1	-59.63	-20	Pass
NVNT	g	2412	Ant1	-39.41	-20	Pass
NVNT	g	2462	Ant1	-47.19	-20	Pass
NVNT	n20	2412	Ant1	-37.23	-20	Pass
NVNT	n20	2462	Ant1	-43.62	-20	Pass

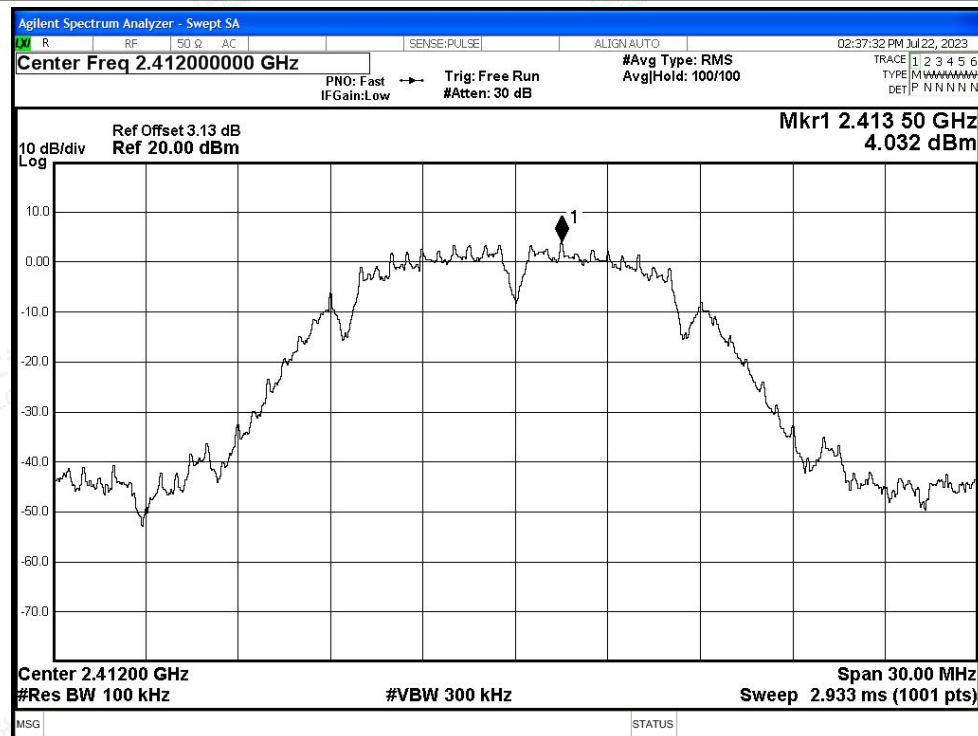


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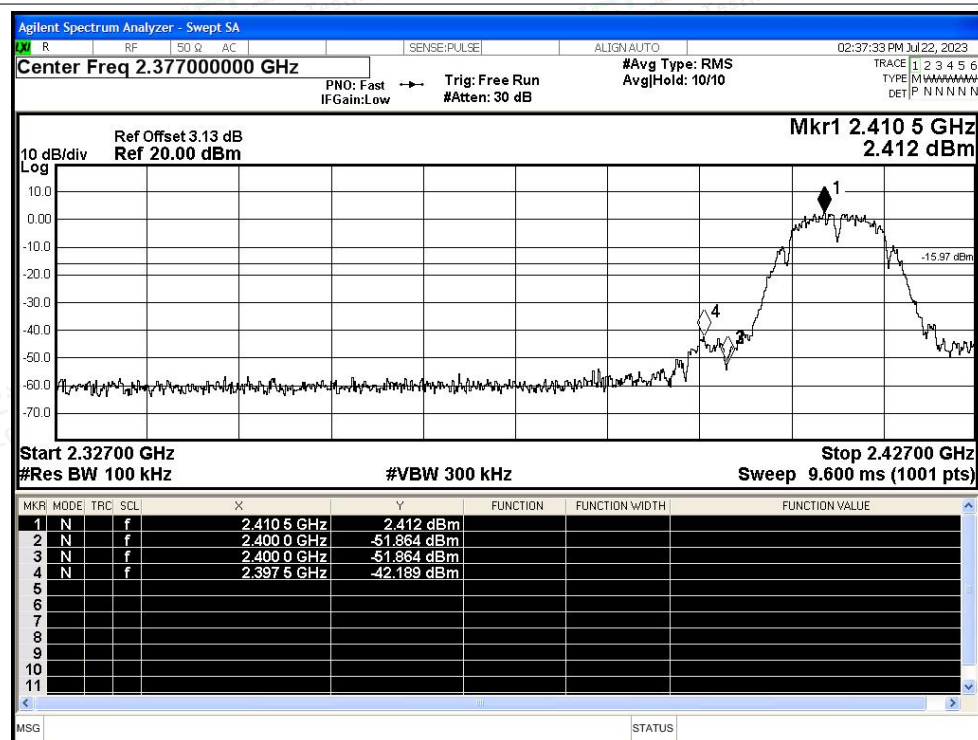


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



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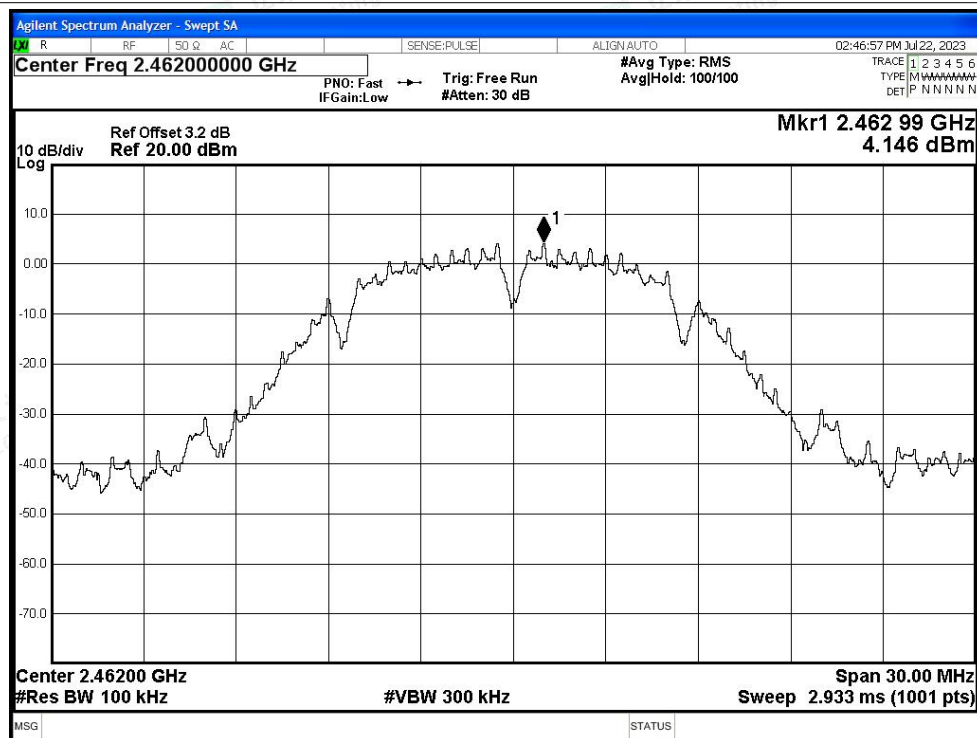
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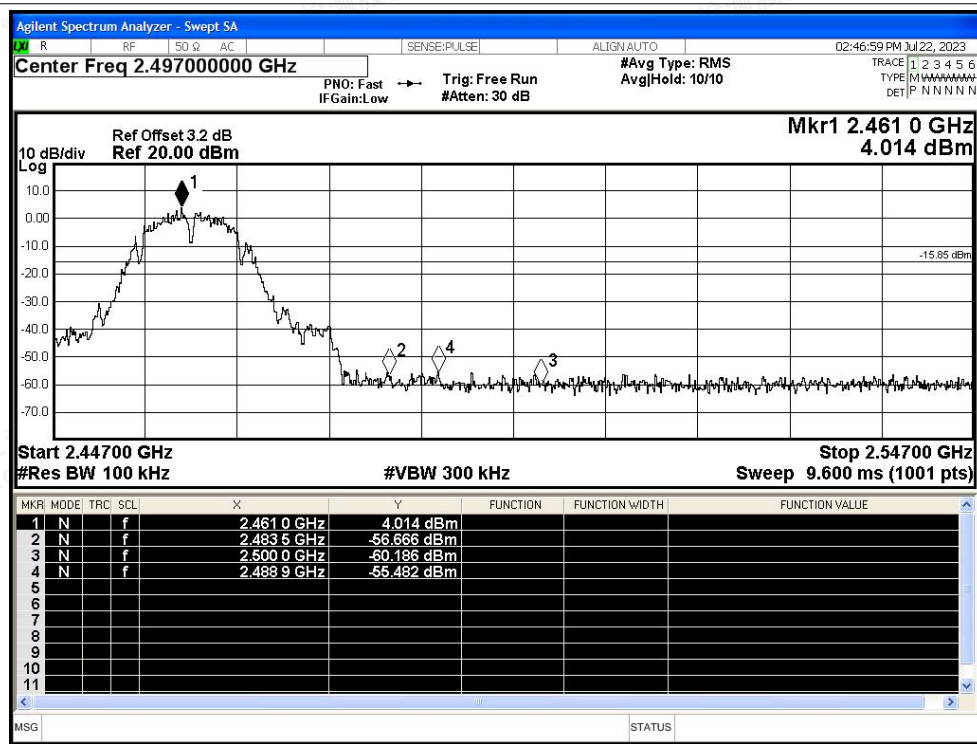
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Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission



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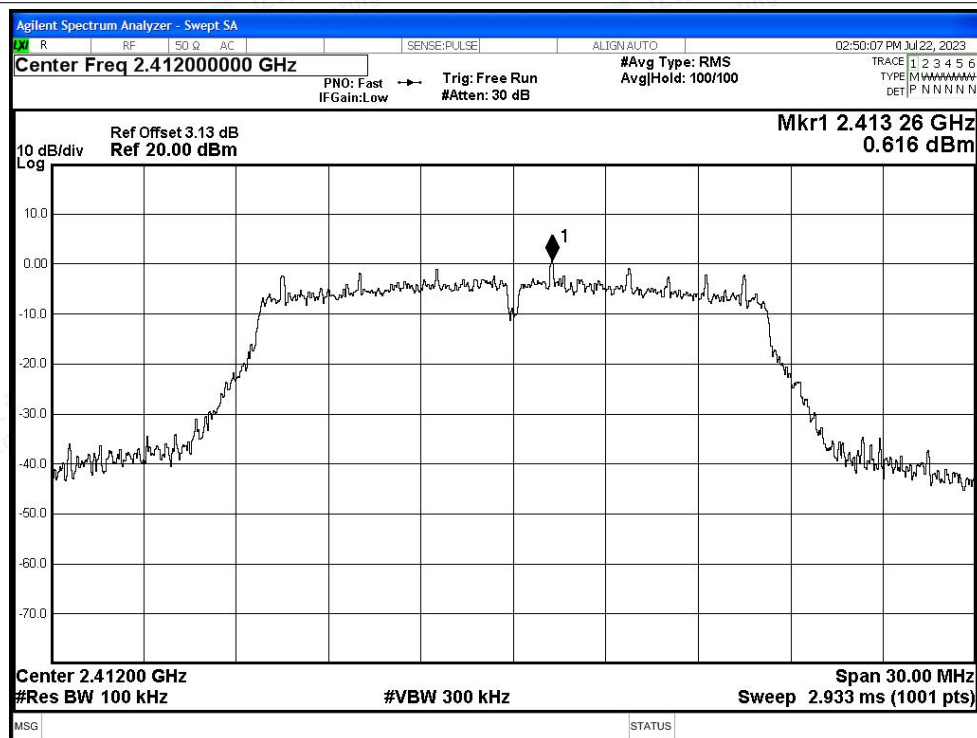
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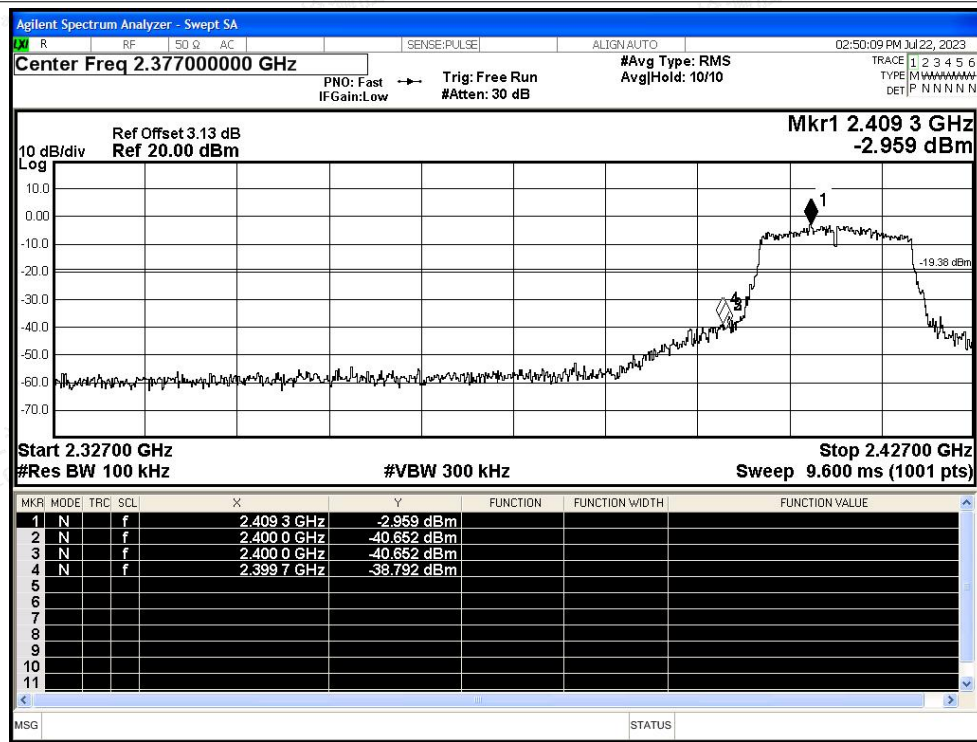
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Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



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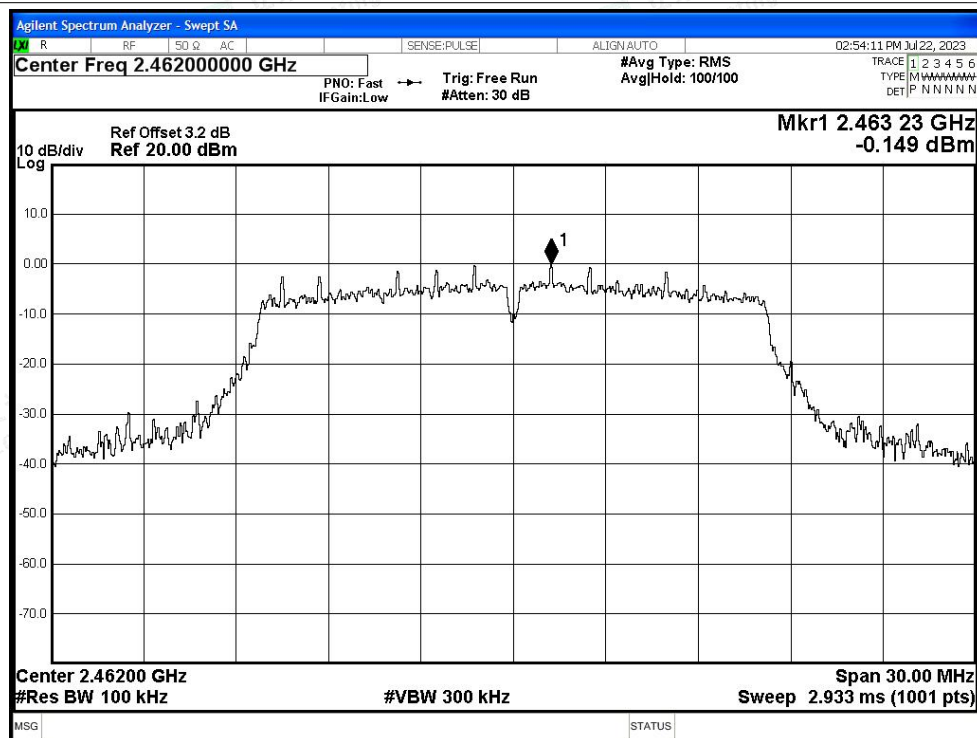
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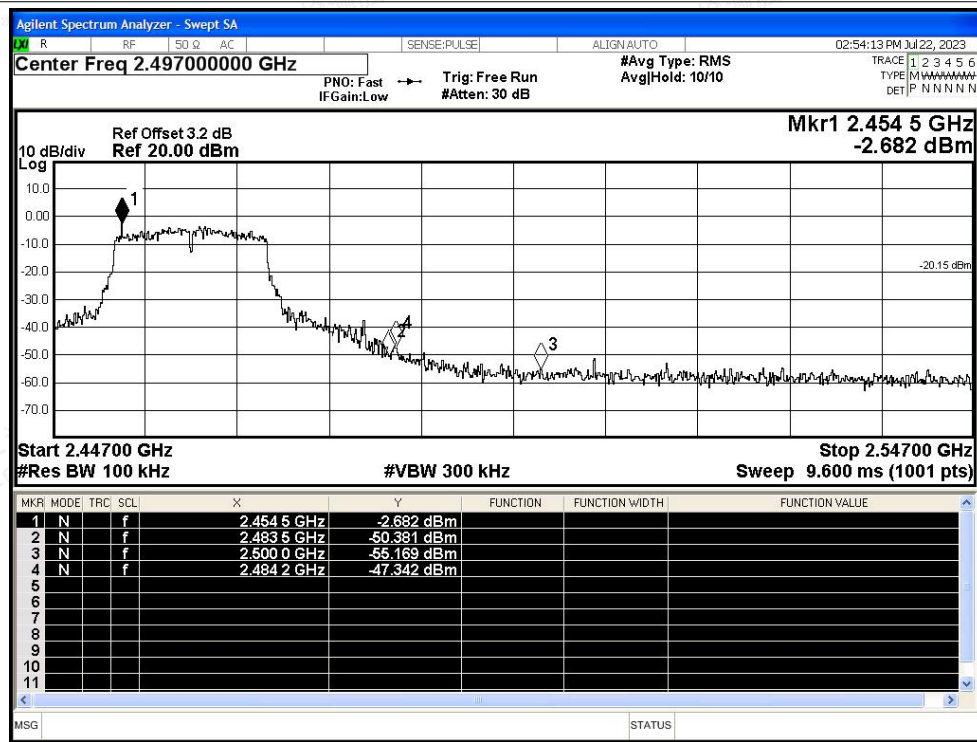
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Band Edge NVNT g 2462MHz Ant1 Emission



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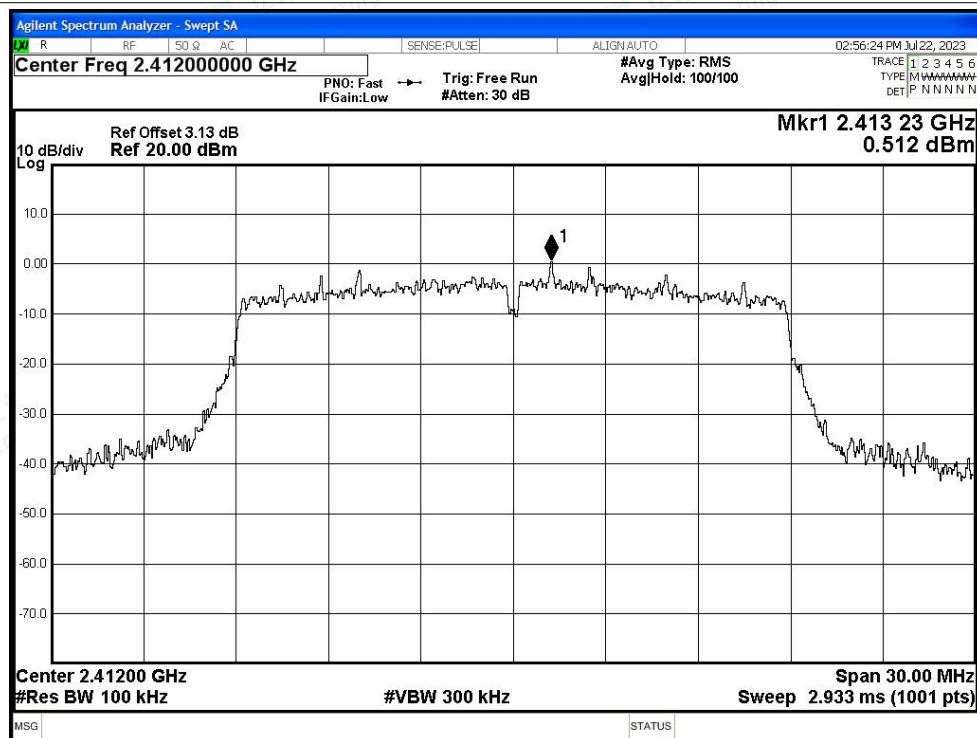
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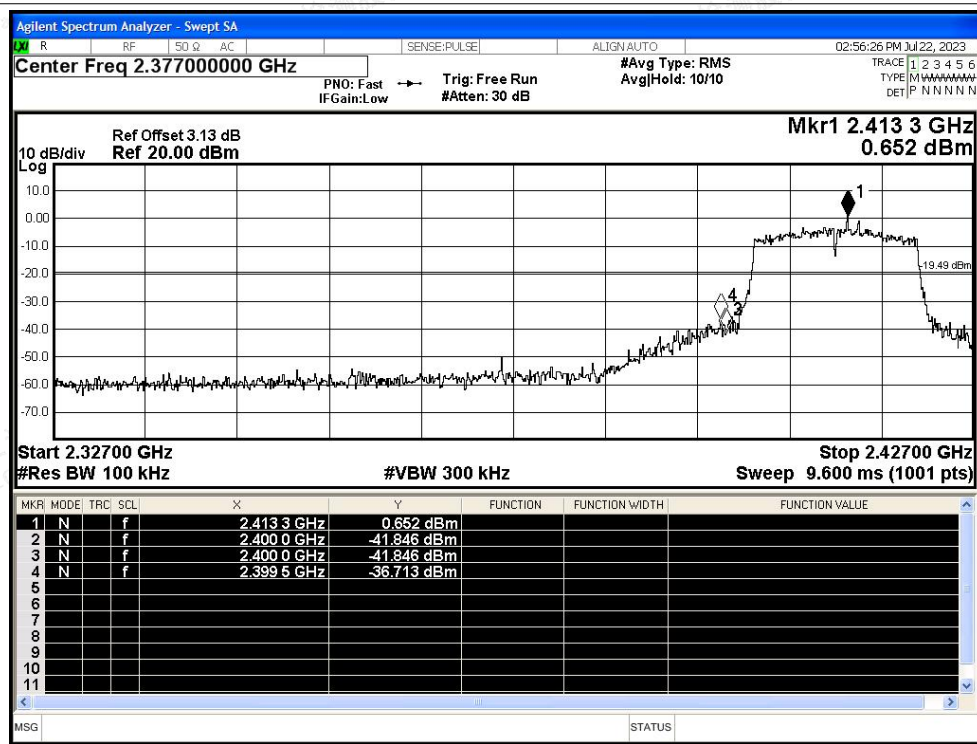
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Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission

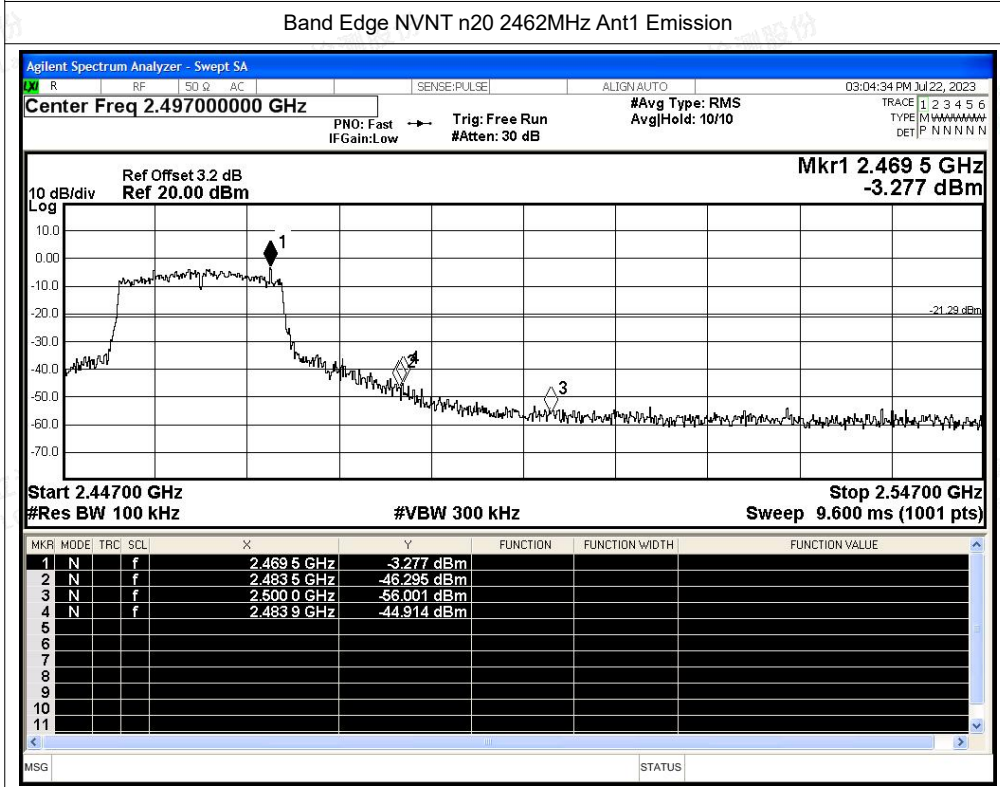
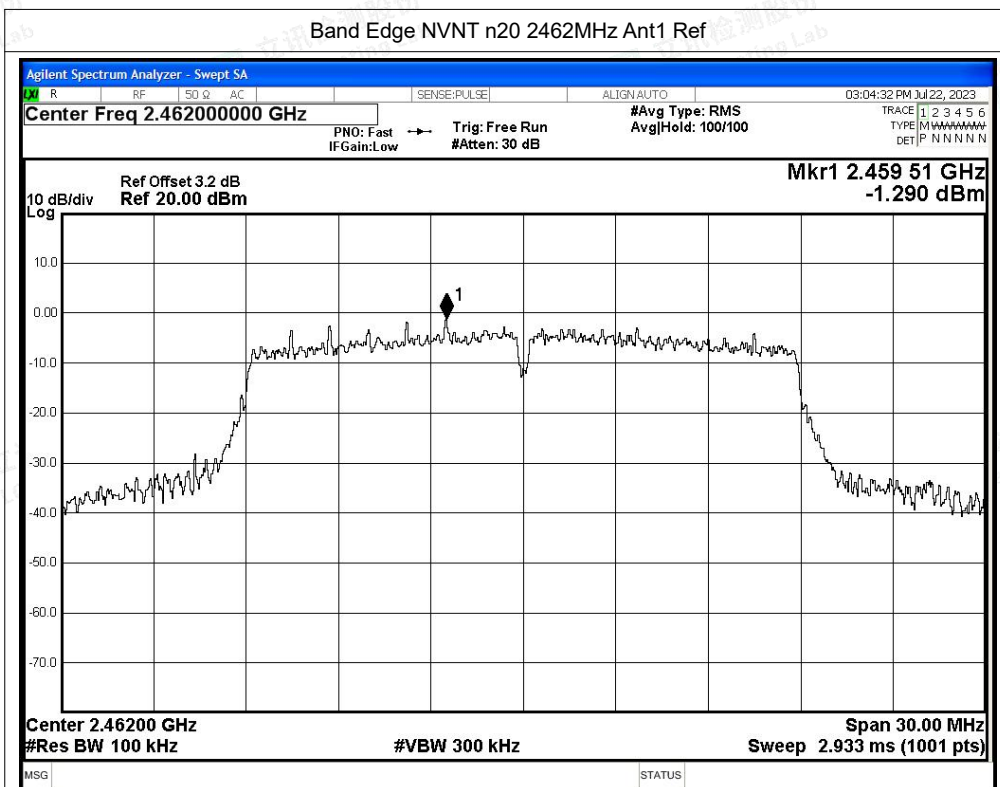


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B.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-48.74	-20	Pass
NVNT	b	2437	Ant1	-48.82	-20	Pass
NVNT	b	2462	Ant1	-47.78	-20	Pass
NVNT	g	2412	Ant1	-44.63	-20	Pass
NVNT	g	2437	Ant1	-43.56	-20	Pass
NVNT	g	2462	Ant1	-42.94	-20	Pass
NVNT	n20	2412	Ant1	-43.44	-20	Pass
NVNT	n20	2437	Ant1	-44.1	-20	Pass
NVNT	n20	2462	Ant1	-43.57	-20	Pass



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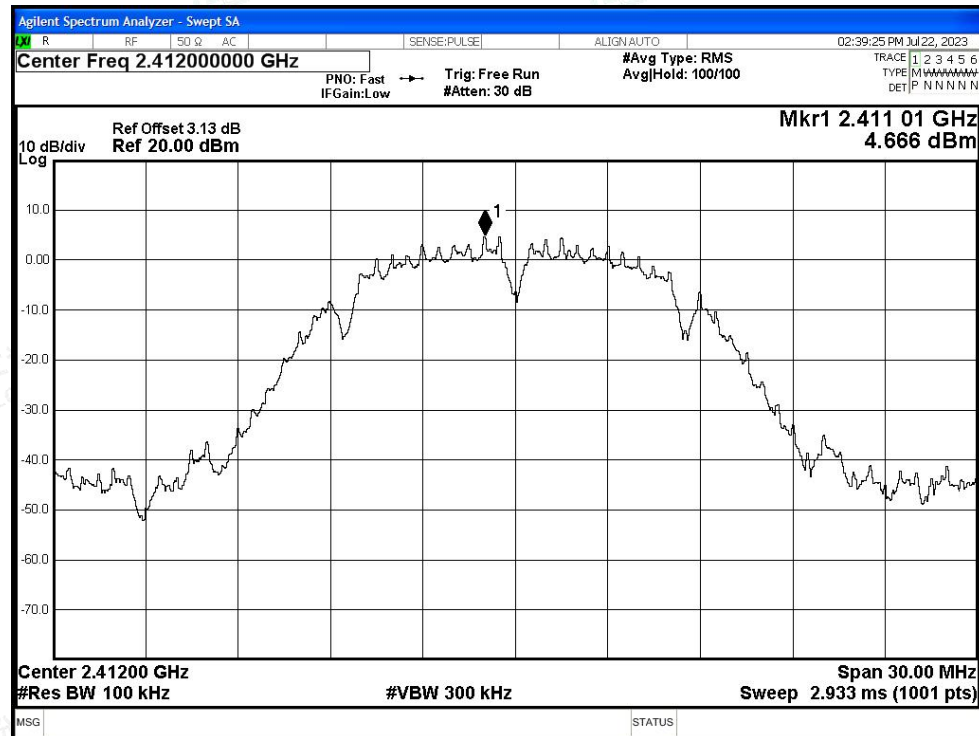
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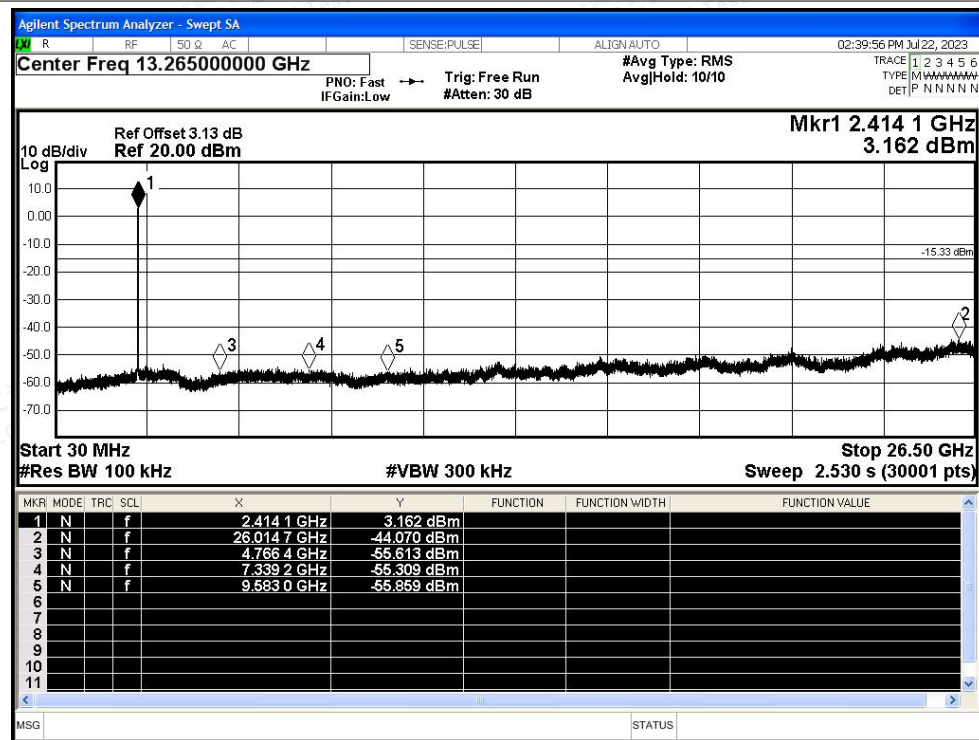


Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission



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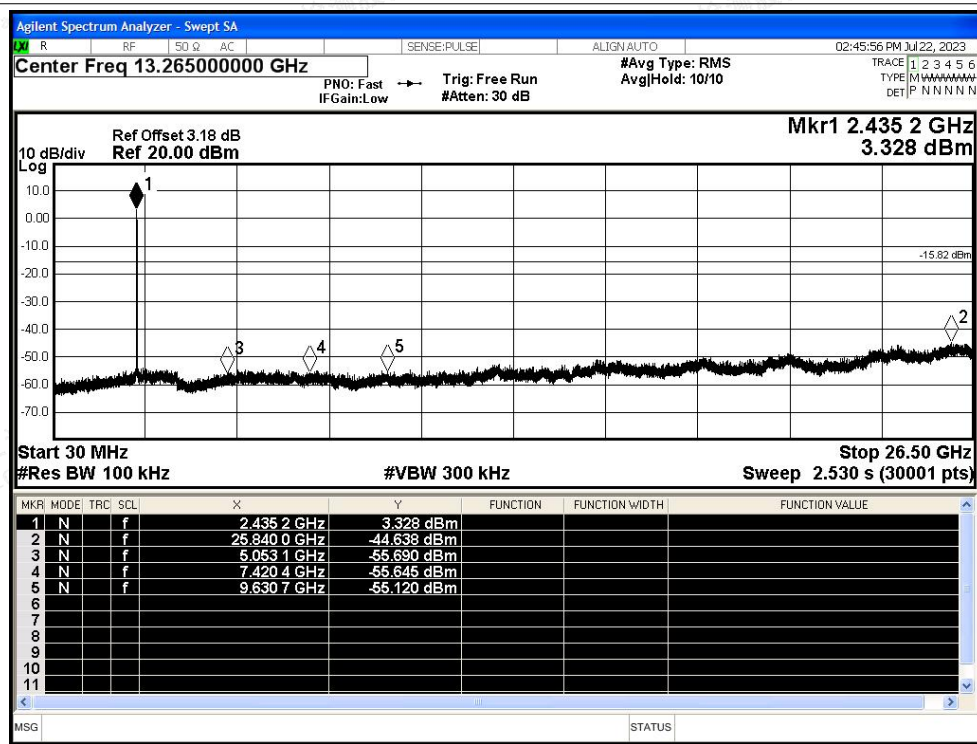
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Tx. Spurious NVNT b 2437MHz Ant1 Ref



Tx. Spurious NVNT b 2437MHz Ant1 Emission



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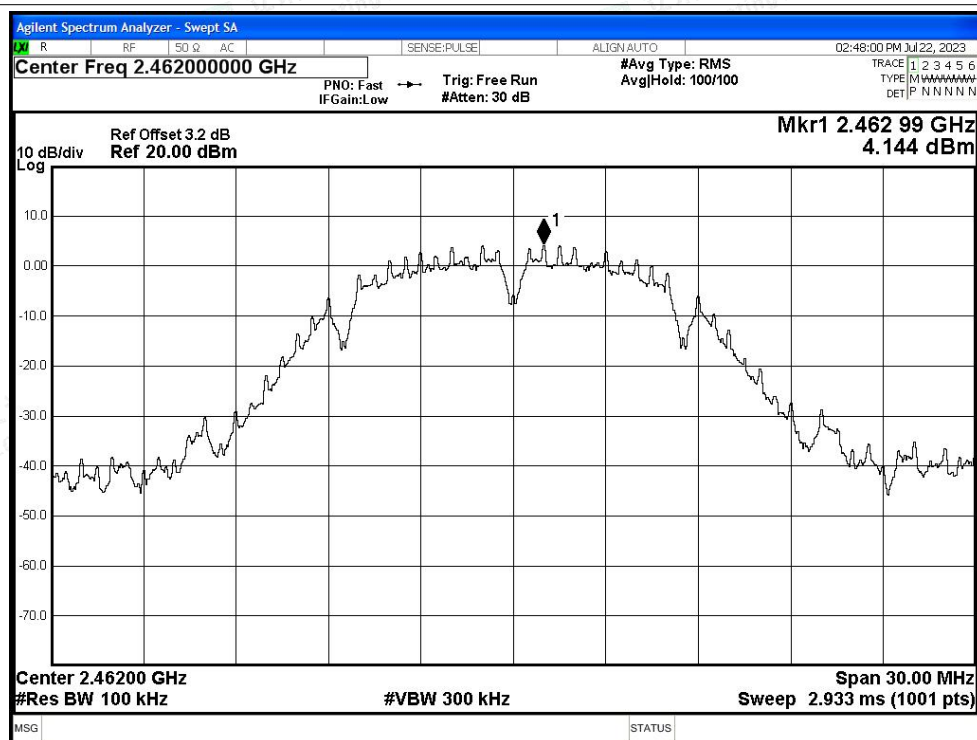
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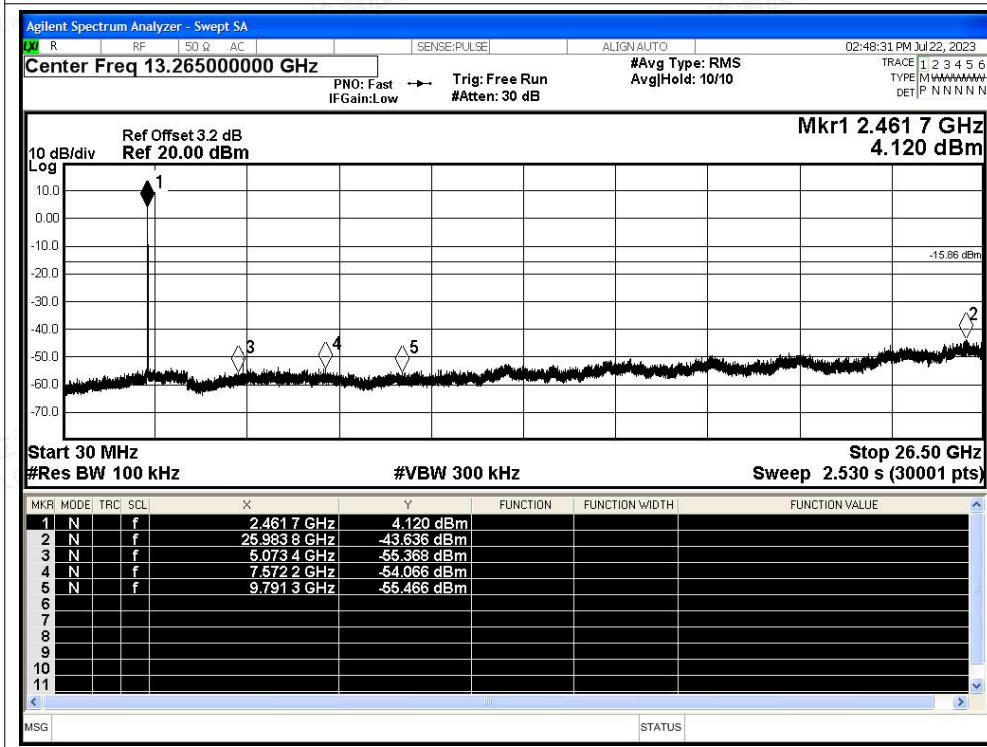
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Tx. Spurious NVNT b 2462MHz Ant1 Ref



Tx. Spurious NVNT b 2462MHz Ant1 Emission



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