Appendix: 2.4G WIFI

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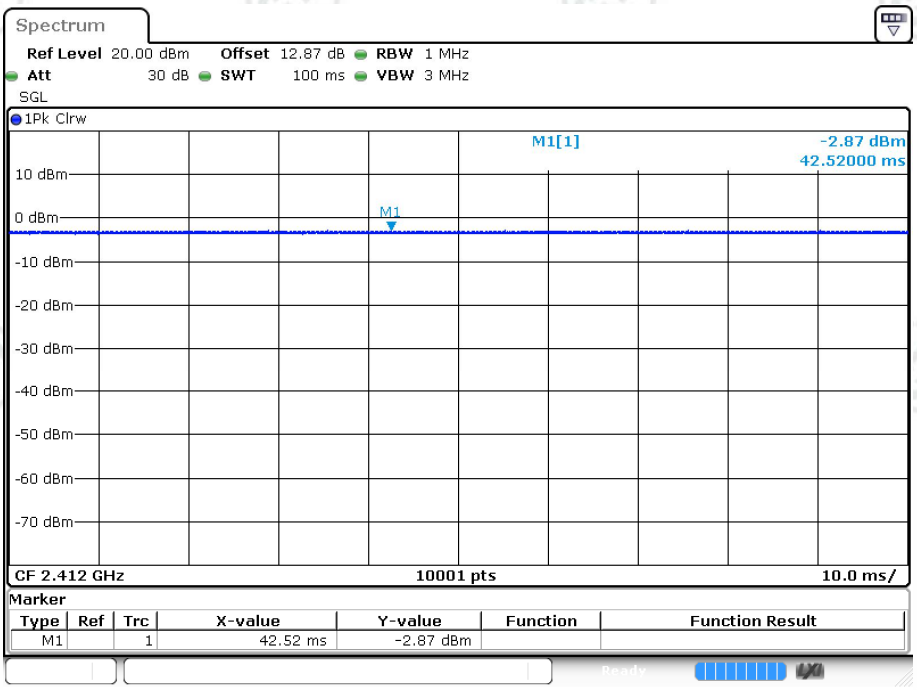
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	100	0	0
NVNT	b	2437	Ant1	100	0	0
NVNT	b	2462	Ant1	100	0	0
NVNT	g	2412	Ant1	100	0	0
NVNT	g	2437	Ant1	100	0	0
NVNT	g	2462	Ant1	100	0	0
NVNT	n20	2412	Ant1	100	0	0
NVNT	n20	2437	Ant1	100	0	0
NVNT	n20	2462	Ant1	100	0	0

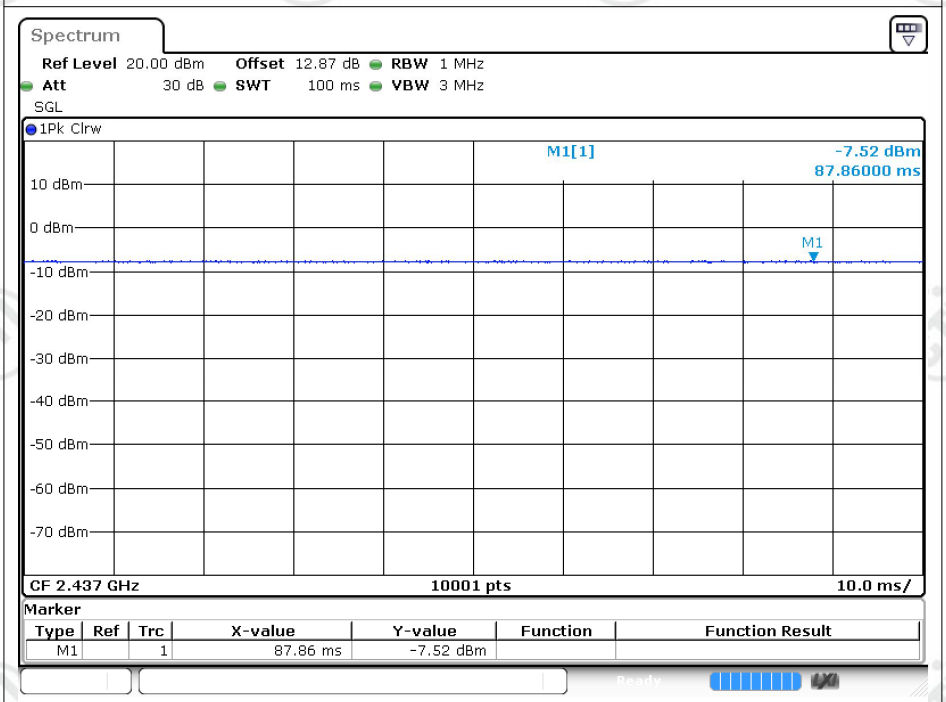
Test Graphs

Duty Cycle NVNT b 2412MHz Ant1



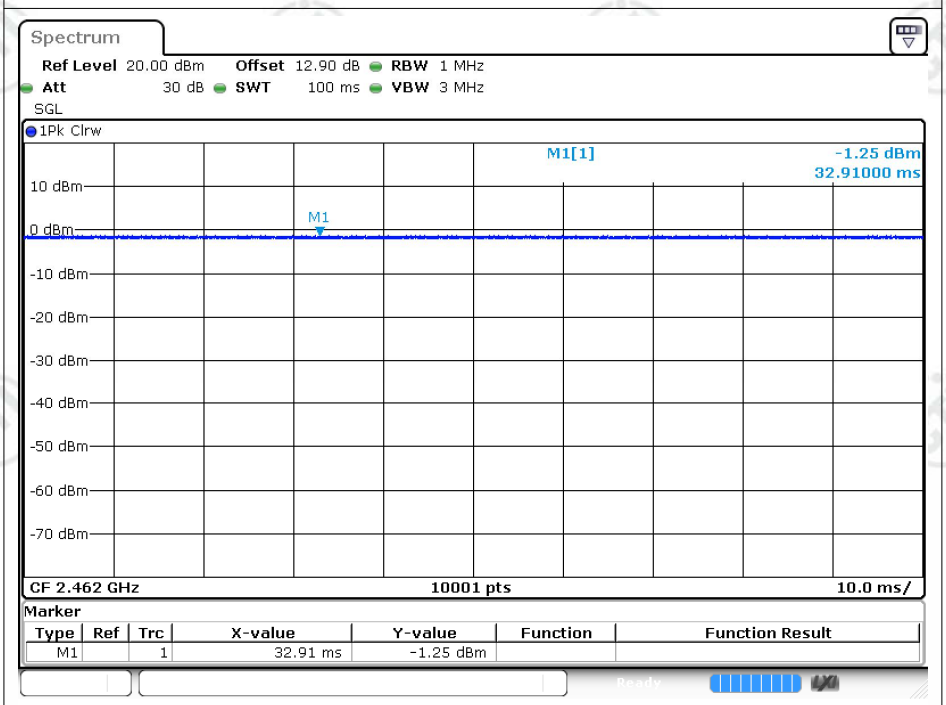
Date: 25.MAY.2023 13:49:32

Duty Cycle NVNT b 2437MHz Ant1



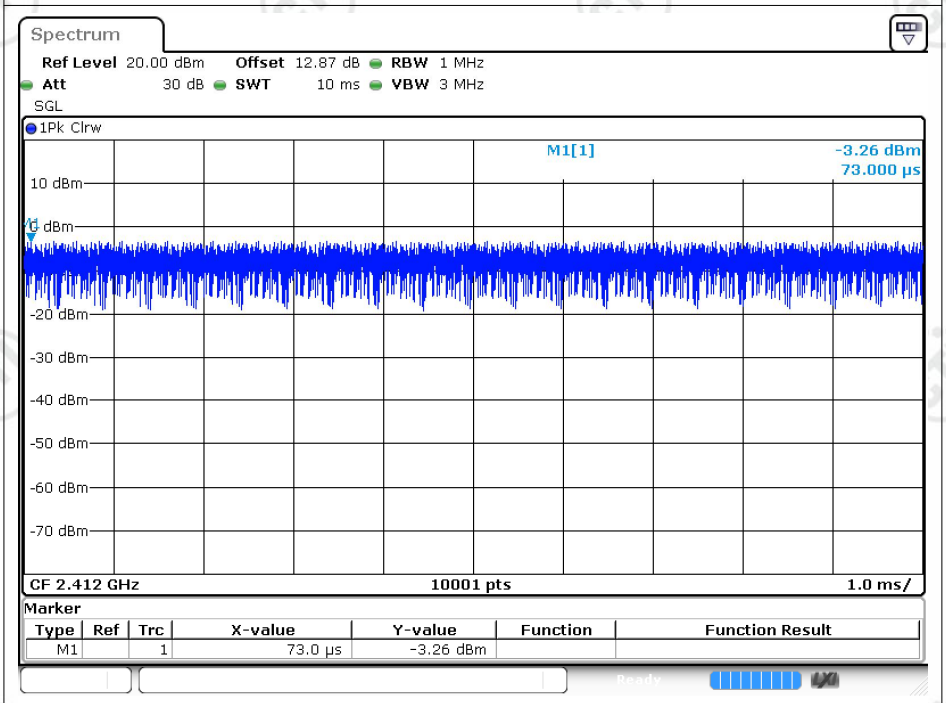
Date: 25.MAY.2023 13:56:23

Duty Cycle NVNT b 2462MHz Ant1



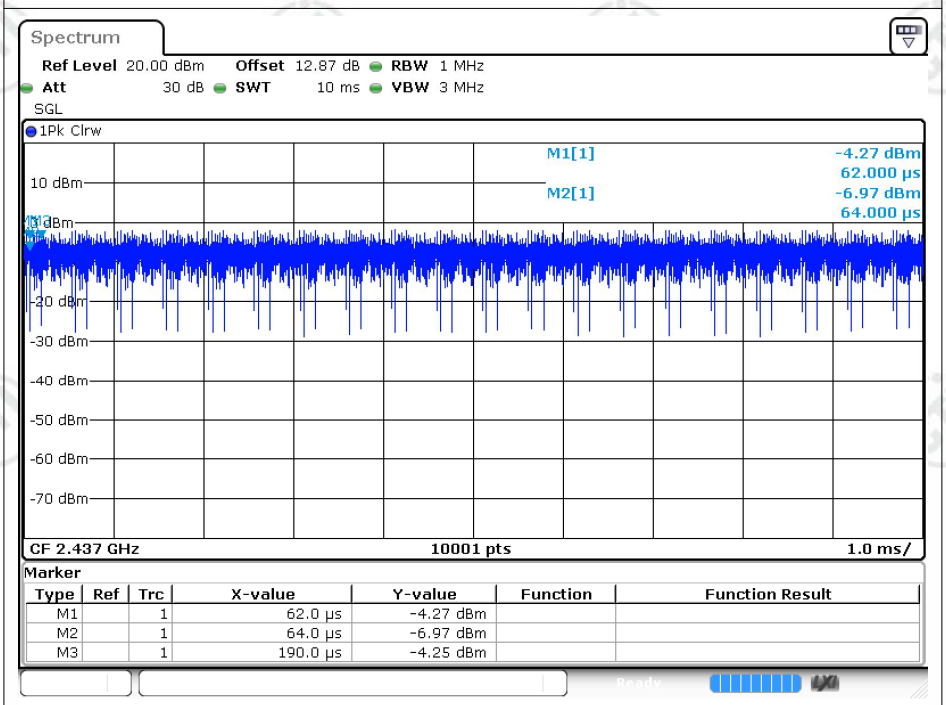
Date: 25.MAY.2023 14:08:16

Duty Cycle NVNT g 2412MHz Ant1



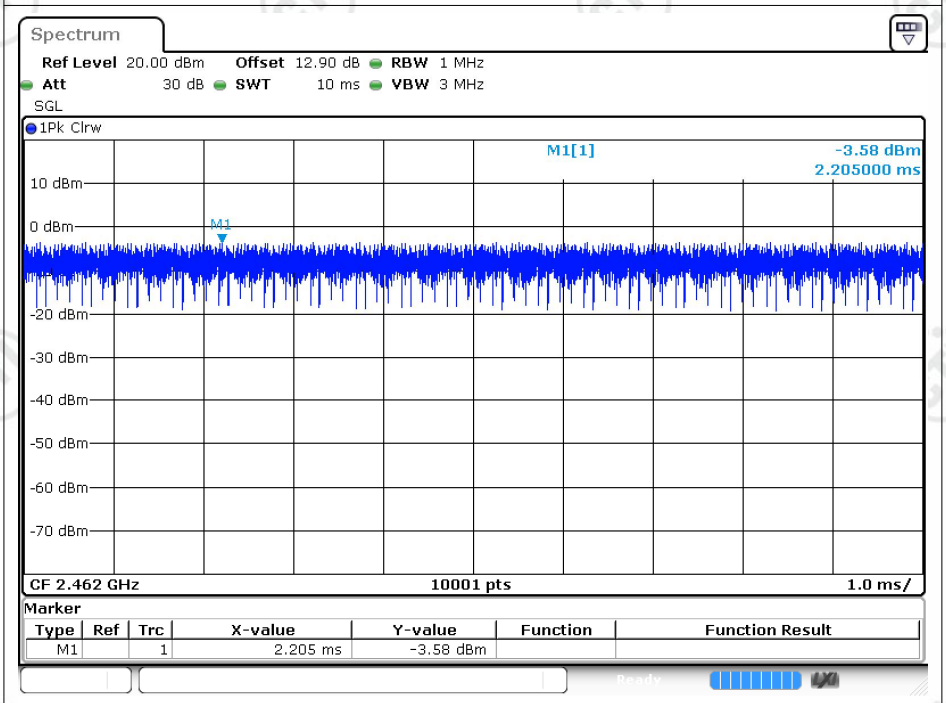
Date: 25.MAY.2023 14:17:39

Duty Cycle NVNT g 2437MHz Ant1



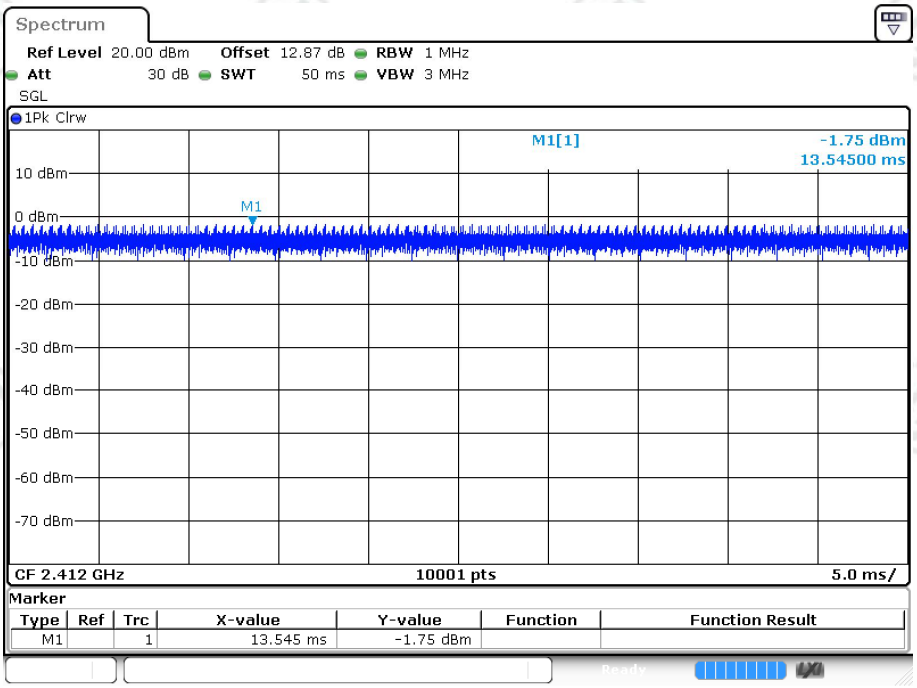
Date: 25.MAY.2023 14:20:49

Duty Cycle NVNT g 2462MHz Ant1



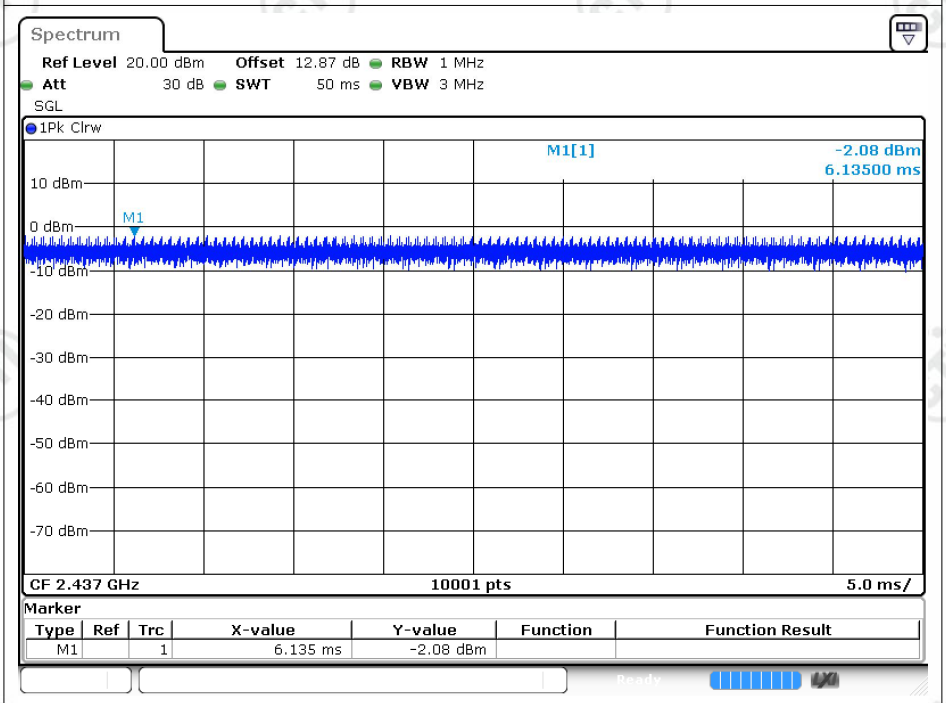
Date: 25.MAY.2023 14:24:06

Duty Cycle NVNT n20 2412MHz Ant1



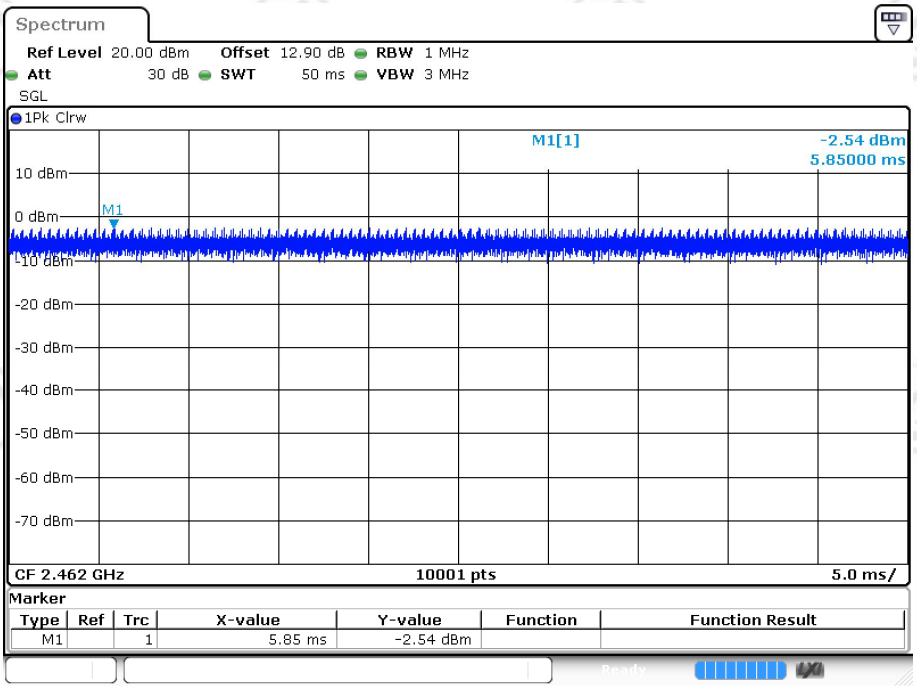
Date: 25.MAY.2023 14:39:18

Duty Cycle NVNT n20 2437MHz Ant1



Date: 25.MAY.2023 14:50:50

Duty Cycle NVNT n20 2462MHz Ant1



Date: 25.MAY.2023 14:57:36

Maximum Peak Conducted Output Power

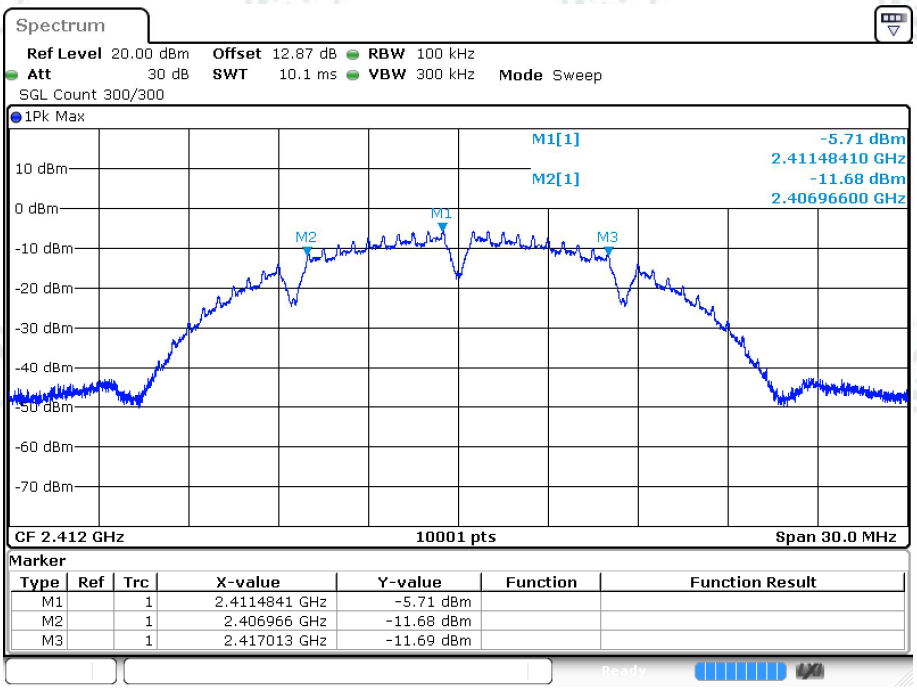
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	4.92	0	4.92	30	Pass
NVNT	b	2437	Ant1	4.57	0	4.57	30	Pass
NVNT	b	2462	Ant1	4.24	0	4.24	30	Pass
NVNT	g	2412	Ant1	2.87	0	2.87	30	Pass
NVNT	g	2437	Ant1	3.01	0	3.01	30	Pass
NVNT	g	2462	Ant1	2.49	0	2.49	30	Pass
NVNT	n20	2412	Ant1	3.24	0	3.24	30	Pass
NVNT	n20	2437	Ant1	2.92	0	2.92	30	Pass
NVNT	n20	2462	Ant1	2.57	0	2.57	30	Pass

-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.047	0.5	Pass
NVNT	b	2437	Ant1	10.032	0.5	Pass
NVNT	b	2462	Ant1	10.044	0.5	Pass
NVNT	g	2412	Ant1	16.533	0.5	Pass
NVNT	g	2437	Ant1	16.515	0.5	Pass
NVNT	g	2462	Ant1	16.524	0.5	Pass
NVNT	n20	2412	Ant1	17.751	0.5	Pass
NVNT	n20	2437	Ant1	17.76	0.5	Pass
NVNT	n20	2462	Ant1	17.76	0.5	Pass

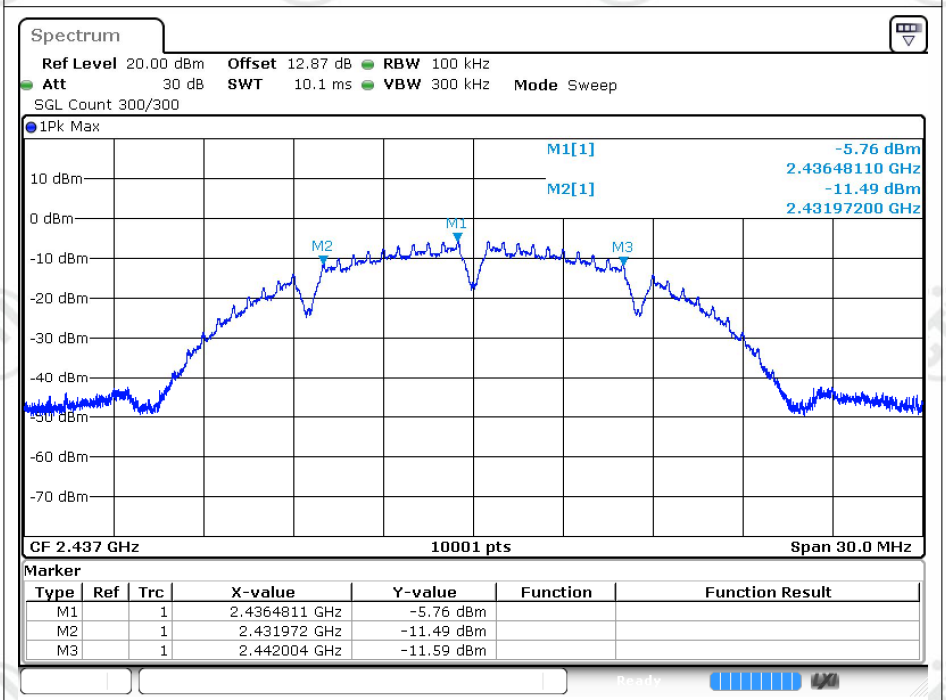
Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



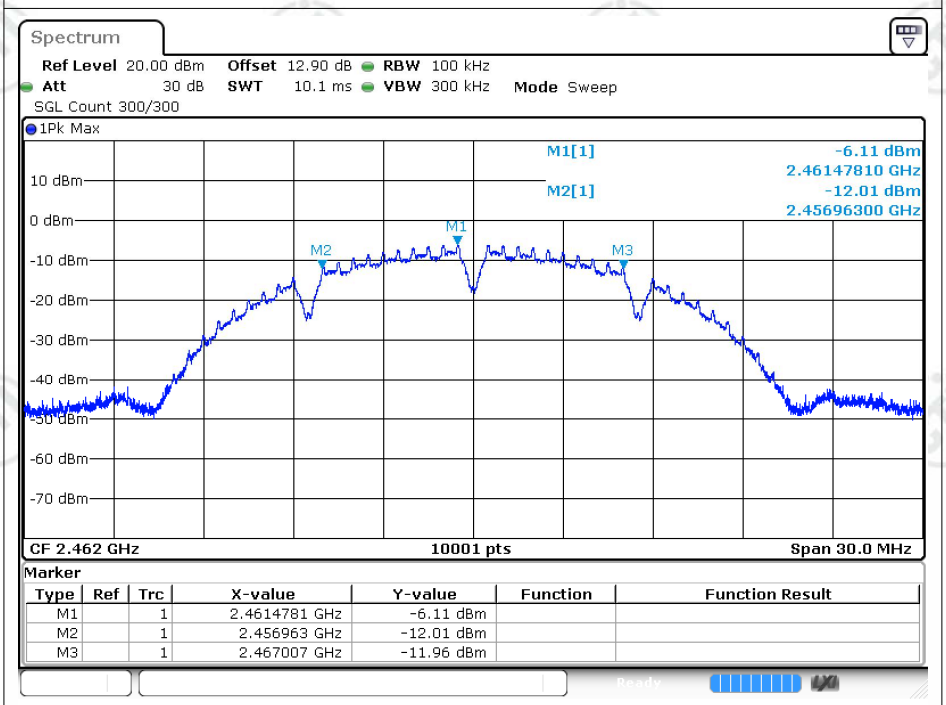
Date: 25.MAY.2023 13:51:19

-6dB Bandwidth NVNT b 2437MHz Ant1



Date: 25.MAY.2023 14:06:28

-6dB Bandwidth NVNT b 2462MHz Ant1

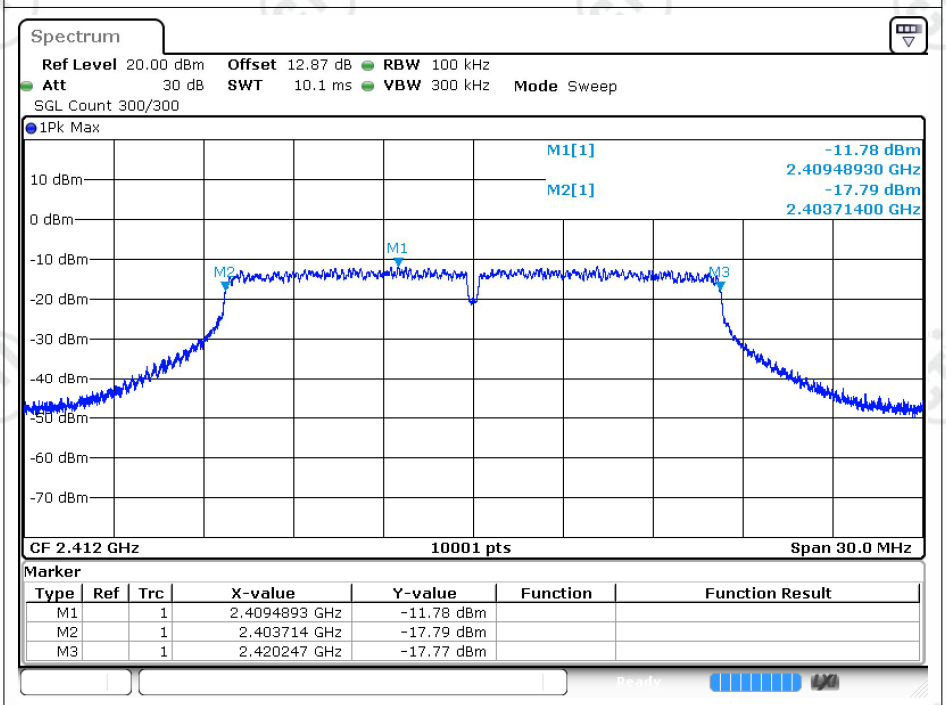


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4614781 GHz	-6.11 dBm		
M2		1	2.456963 GHz	-12.01 dBm		
M3		1	2.467007 GHz	-11.96 dBm		

Date: 25.MAY.2023 14:08:57

-6dB Bandwidth NVNT g 2412MHz Ant1

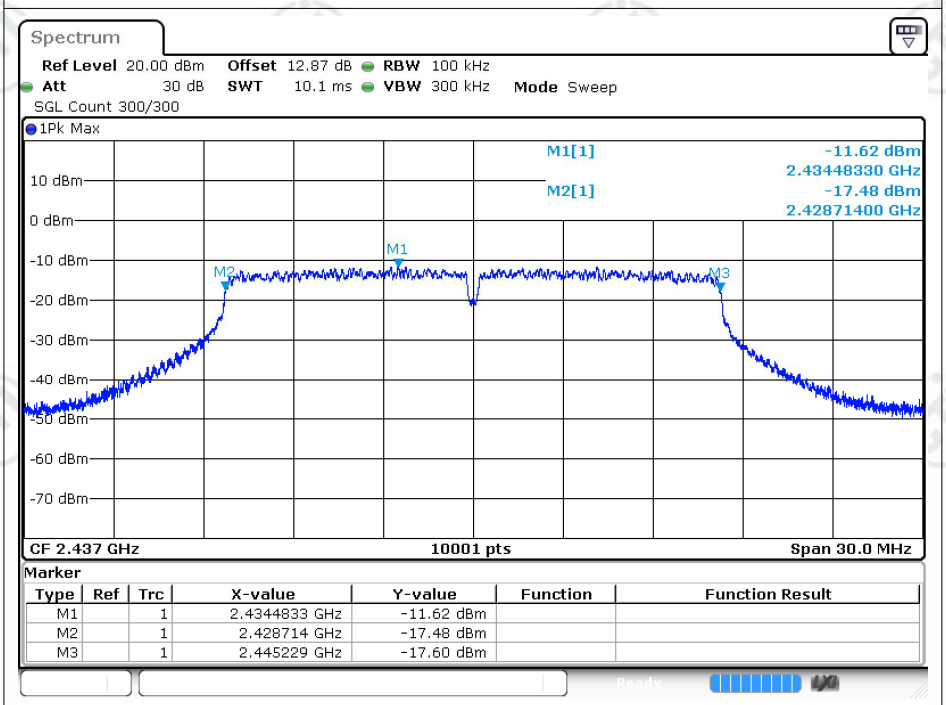


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4094893 GHz	-11.78 dBm		
M2		1	2.403714 GHz	-17.79 dBm		
M3		1	2.420247 GHz	-17.77 dBm		

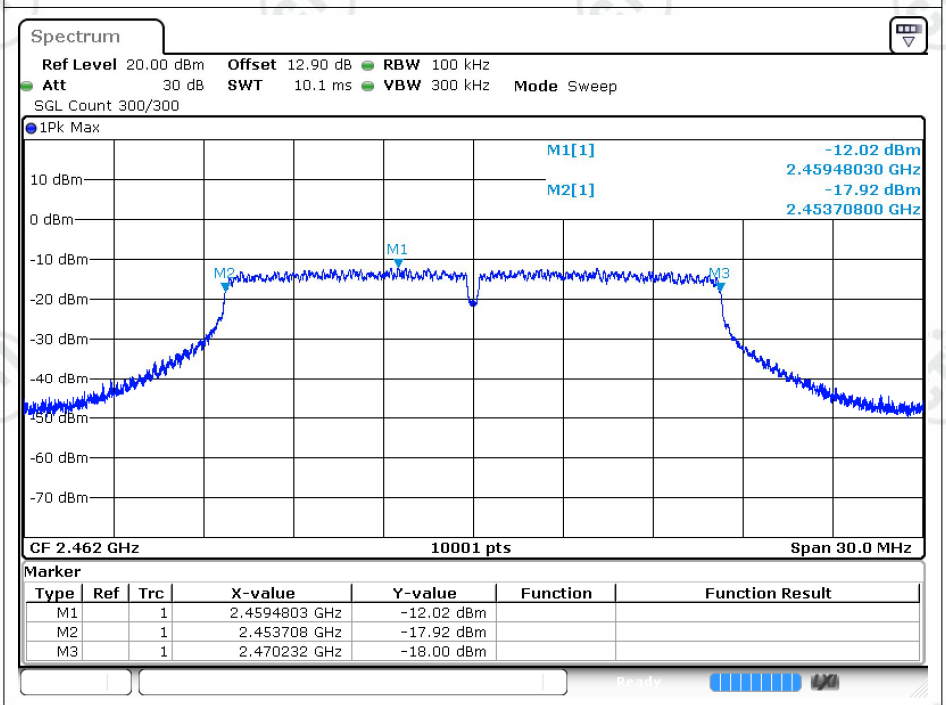
Date: 25.MAY.2023 14:18:15

-6dB Bandwidth NVNT g 2437MHz Ant1



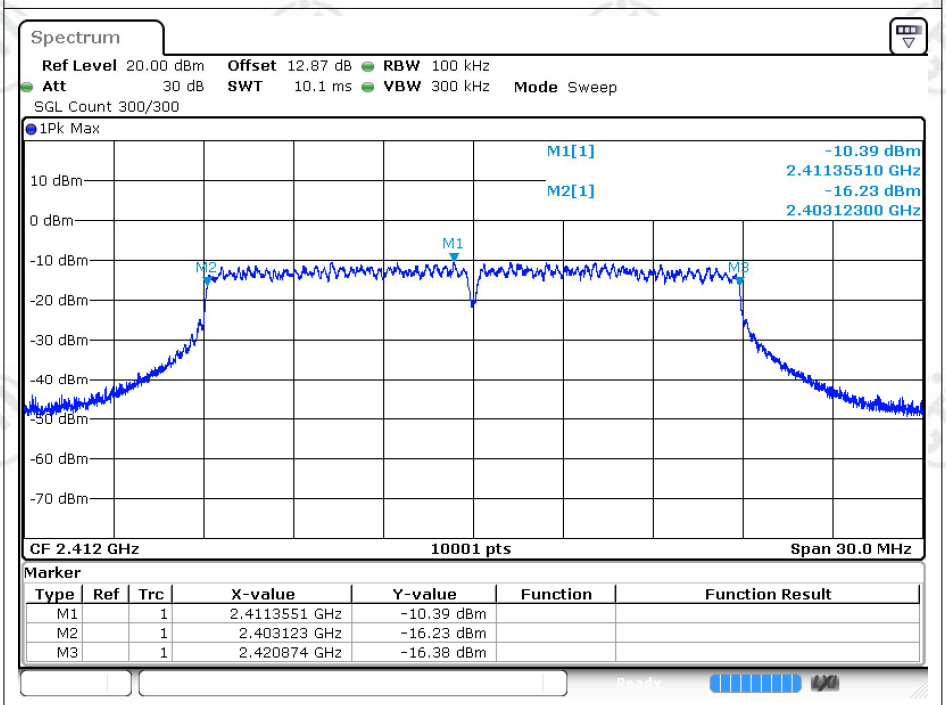
Date: 25.MAY.2023 14:21:50

-6dB Bandwidth NVNT g 2462MHz Ant1



Date: 25.MAY.2023 14:24:48

-6dB Bandwidth NVNT n20 2412MHz Ant1

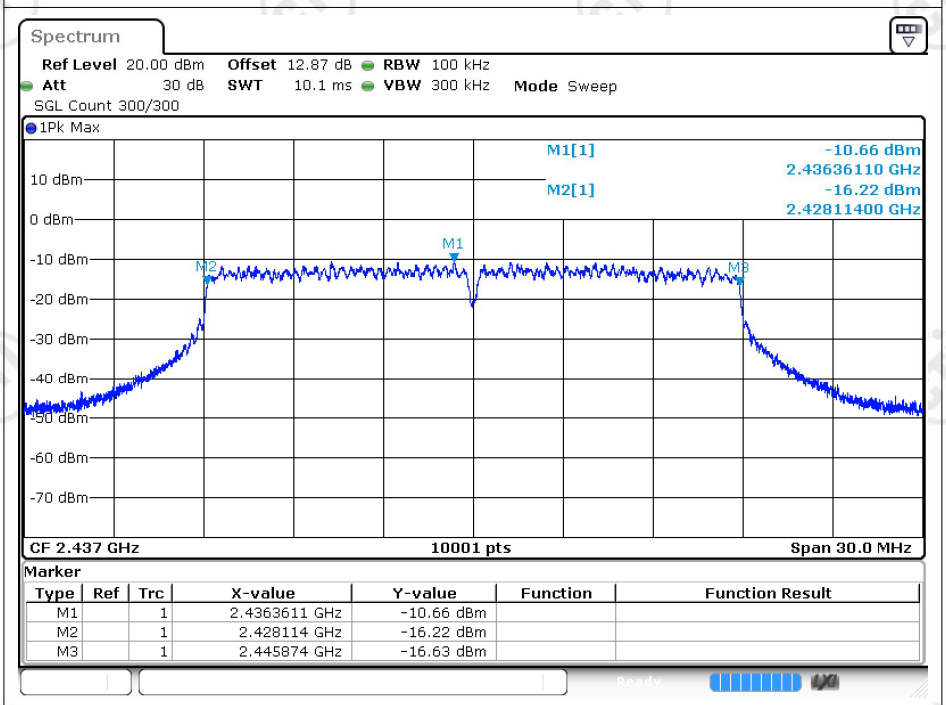


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4113551 GHz	-10.39 dBm		
M2		1	2.403123 GHz	-16.23 dBm		
M3		1	2.420874 GHz	-16.38 dBm		

Date: 25.MAY.2023 14:39:54

-6dB Bandwidth NVNT n20 2437MHz Ant1

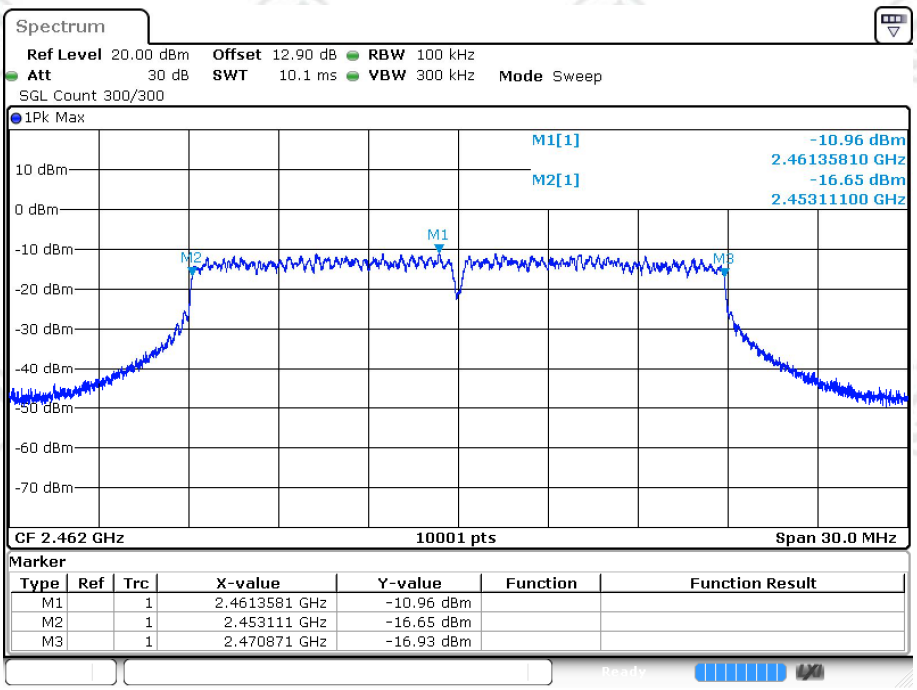


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.4363611 GHz	-10.66 dBm		
M2		1	2.428114 GHz	-16.22 dBm		
M3		1	2.445874 GHz	-16.63 dBm		

Date: 25.MAY.2023 14:51:32

-6dB Bandwidth NVNT n20 2462MHz Ant1



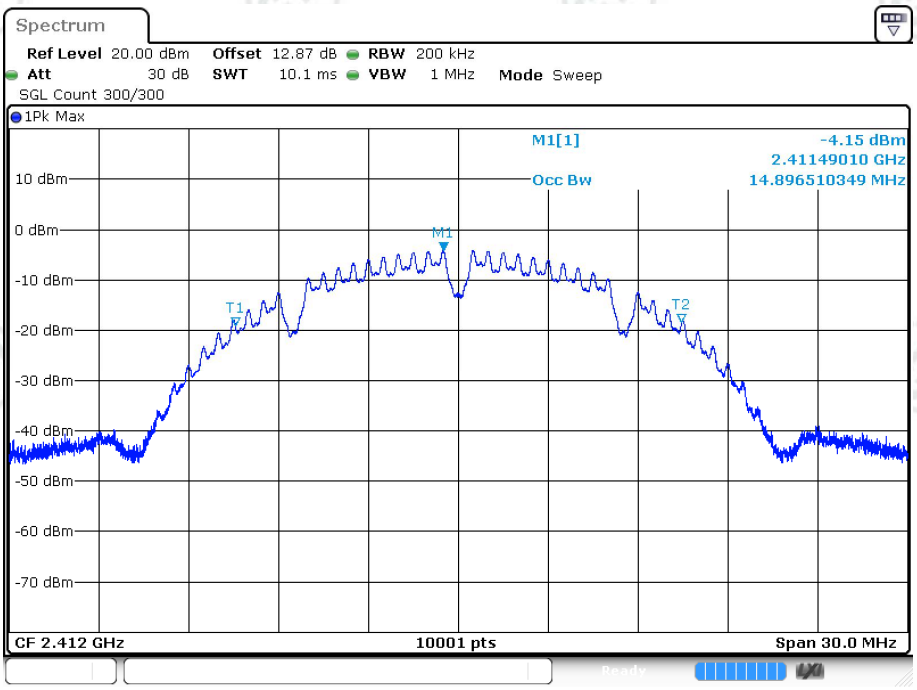
Date: 25.MAY.2023 14:58:35

Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.897
NVNT	b	2437	Ant1	14.894
NVNT	b	2462	Ant1	14.897
NVNT	g	2412	Ant1	16.615
NVNT	g	2437	Ant1	16.618
NVNT	g	2462	Ant1	16.615
NVNT	n20	2412	Ant1	17.689
NVNT	n20	2437	Ant1	17.683
NVNT	n20	2462	Ant1	17.689

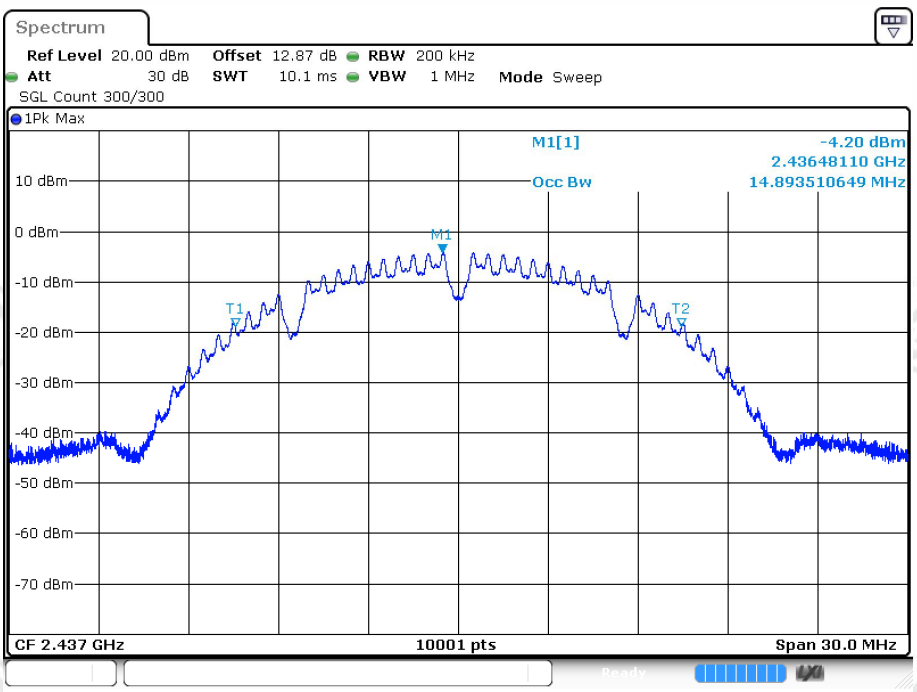
Test Graphs

OBW NVNT b 2412MHz Ant1



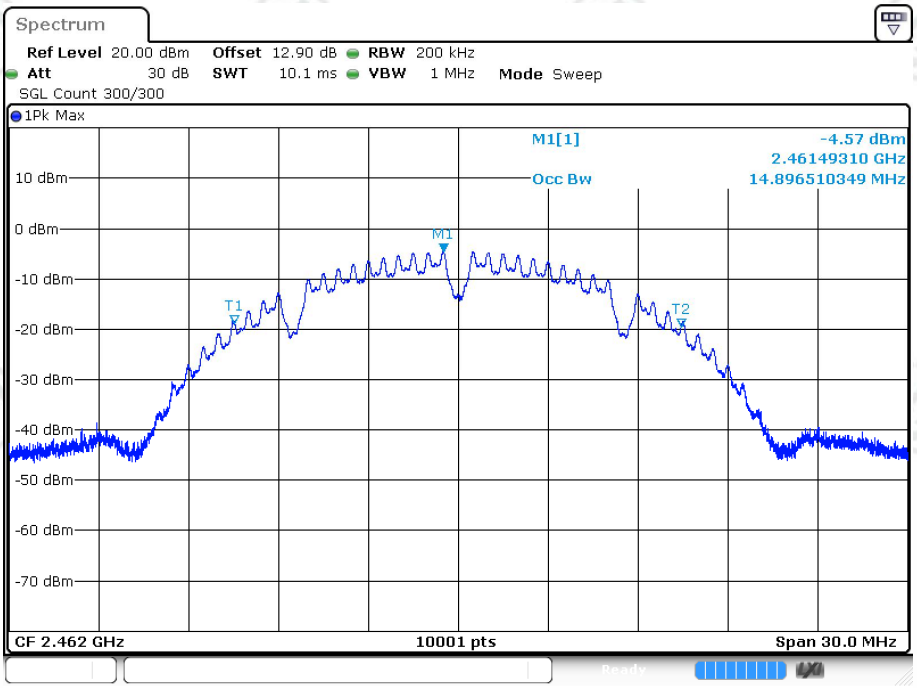
Date: 25.MAY.2023 13:51:08

OBW NVNT b 2437MHz Ant1



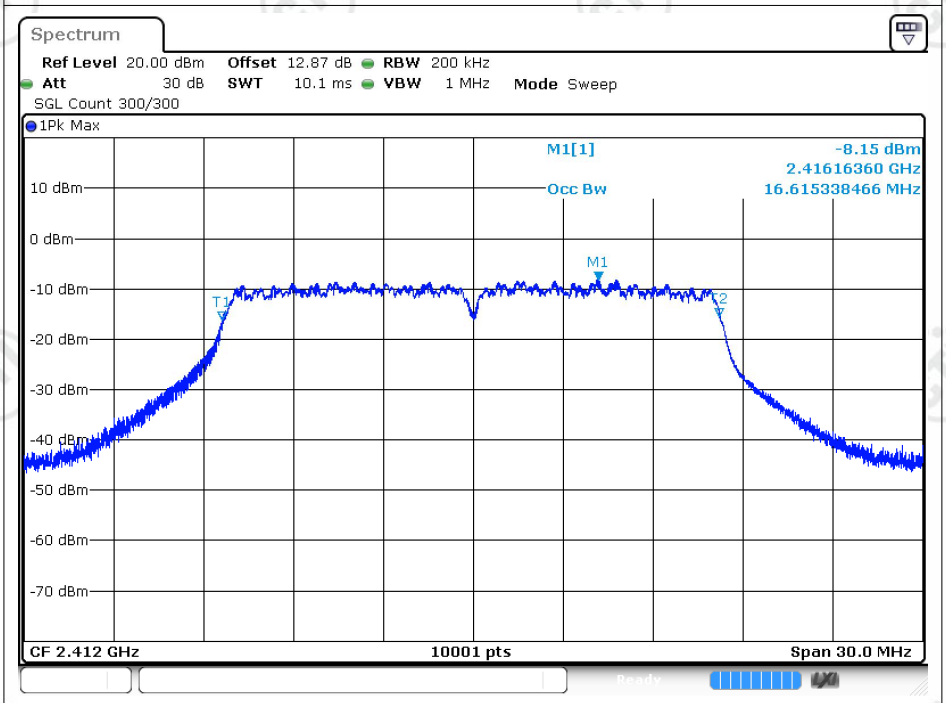
Date: 25.MAY.2023 14:06:17

OBW NVNT b 2462MHz Ant1



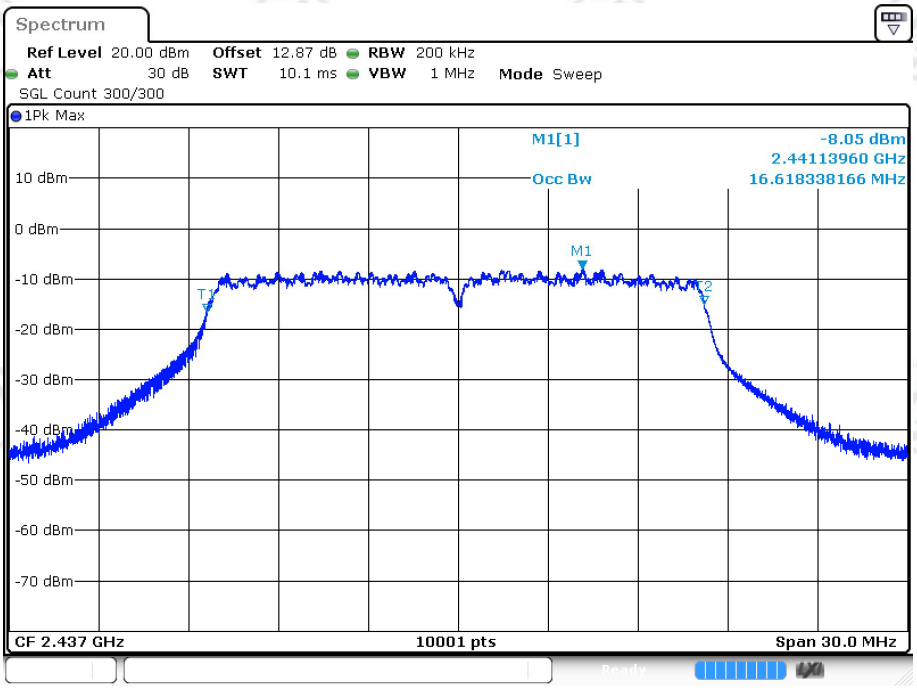
Date: 25.MAY.2023 14:08:44

OBW NVNT g 2412MHz Ant1



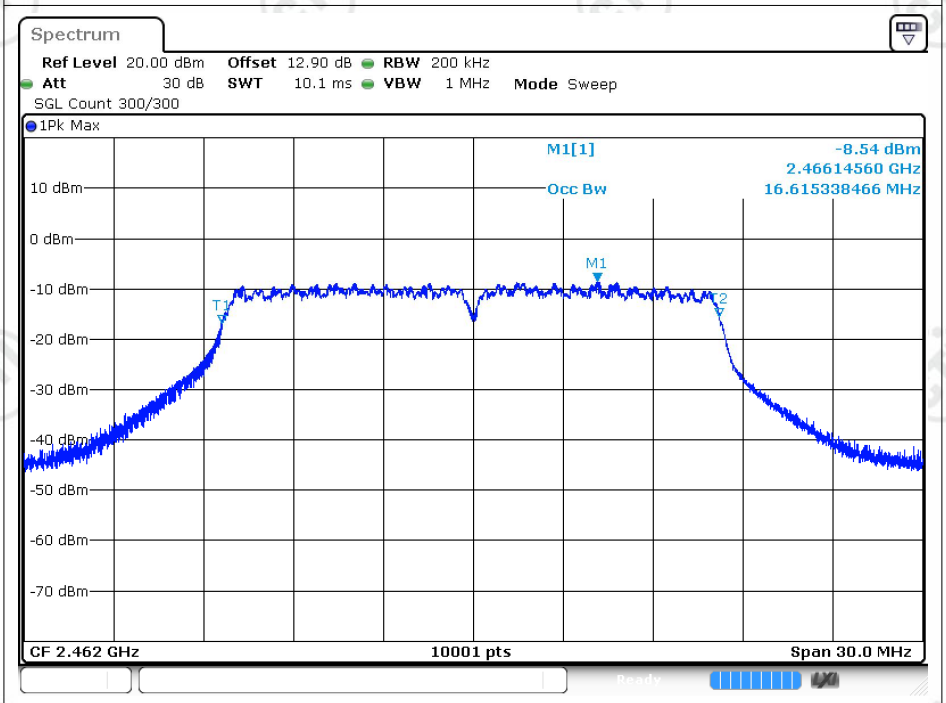
Date: 25.MAY.2023 14:18:04

OBW NVNT g 2437MHz Ant1



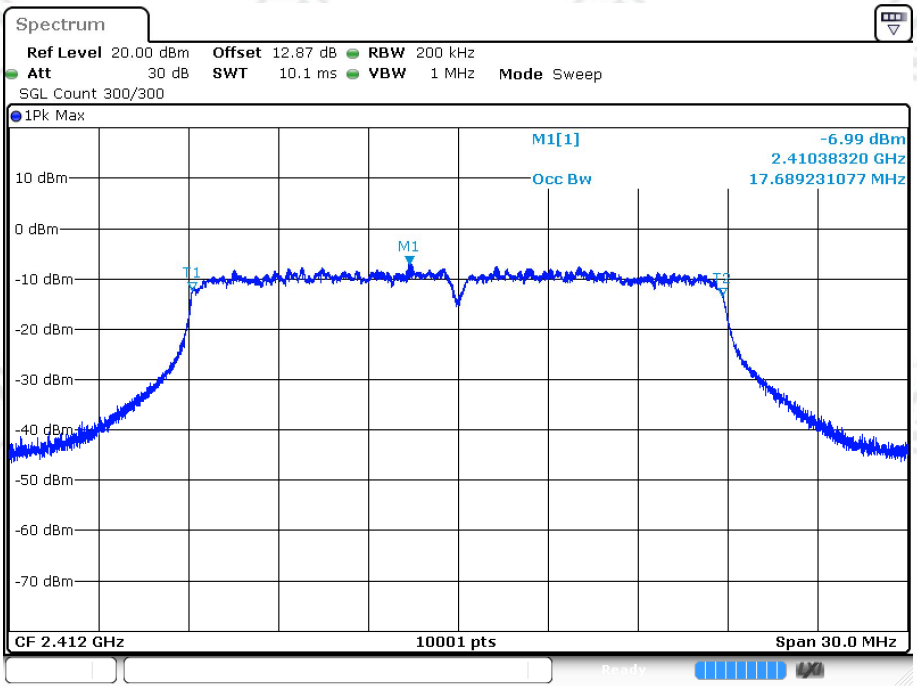
Date: 25.MAY.2023 14:21:38

OBW NVNT g 2462MHz Ant1



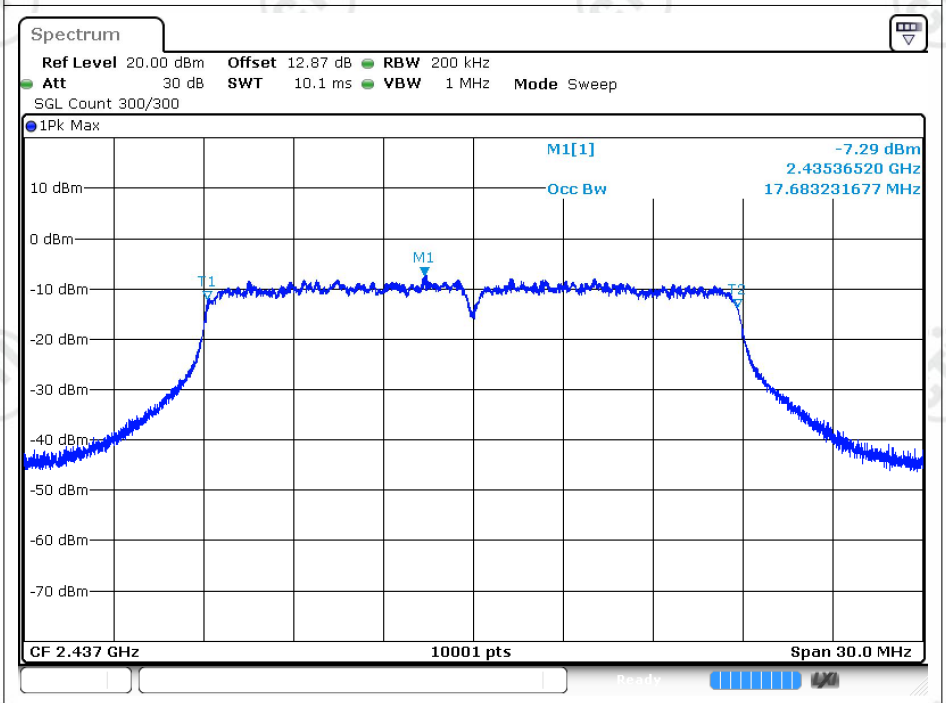
Date: 25.MAY.2023 14:24:36

OBW NVNT n20 2412MHz Ant1



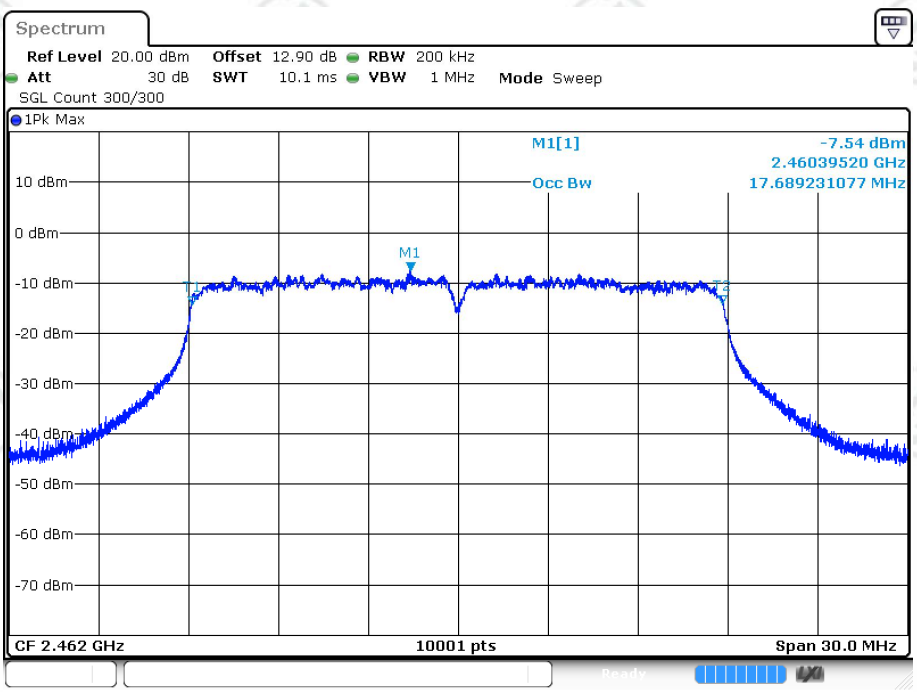
Date: 25.MAY.2023 14:39:43

OBW NVNT n20 2437MHz Ant1



Date: 25.MAY.2023 14:51:20

OBW NVNT n20 2462MHz Ant1



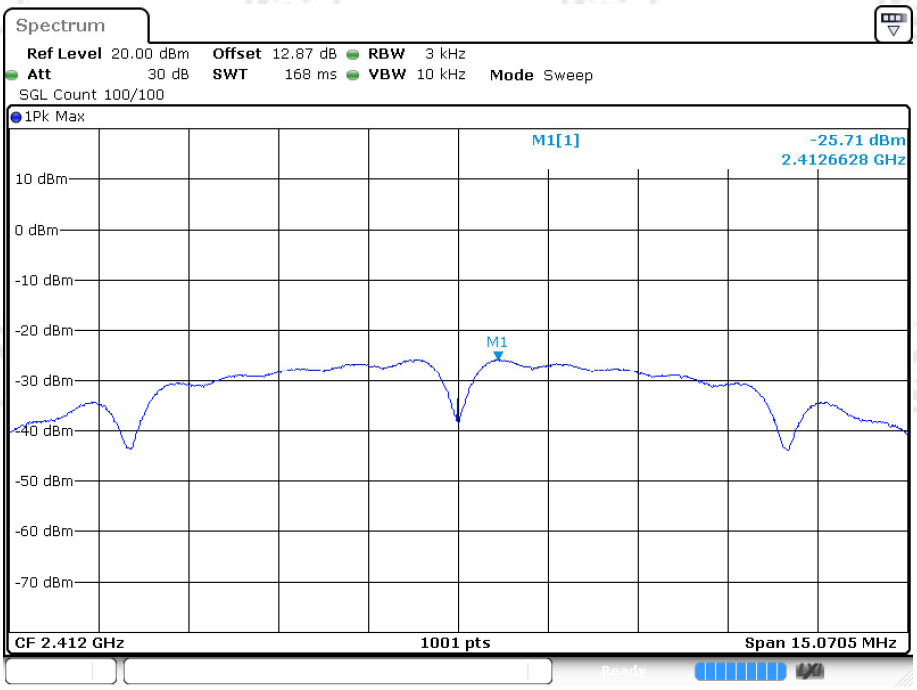
Date: 25.MAY.2023 14:58:23

Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-25.71	0	-25.71	8	Pass
NVNT	b	2437	Ant1	-25.69	0	-25.69	8	Pass
NVNT	b	2462	Ant1	-26.04	0	-26.04	8	Pass
NVNT	g	2412	Ant1	-26.05	0	-26.05	8	Pass
NVNT	g	2437	Ant1	-25.94	0	-25.94	8	Pass
NVNT	g	2462	Ant1	-26.37	0	-26.37	8	Pass
NVNT	n20	2412	Ant1	-24.11	0	-24.11	8	Pass
NVNT	n20	2437	Ant1	-24.31	0	-24.31	8	Pass
NVNT	n20	2462	Ant1	-24.46	0	-24.46	8	Pass

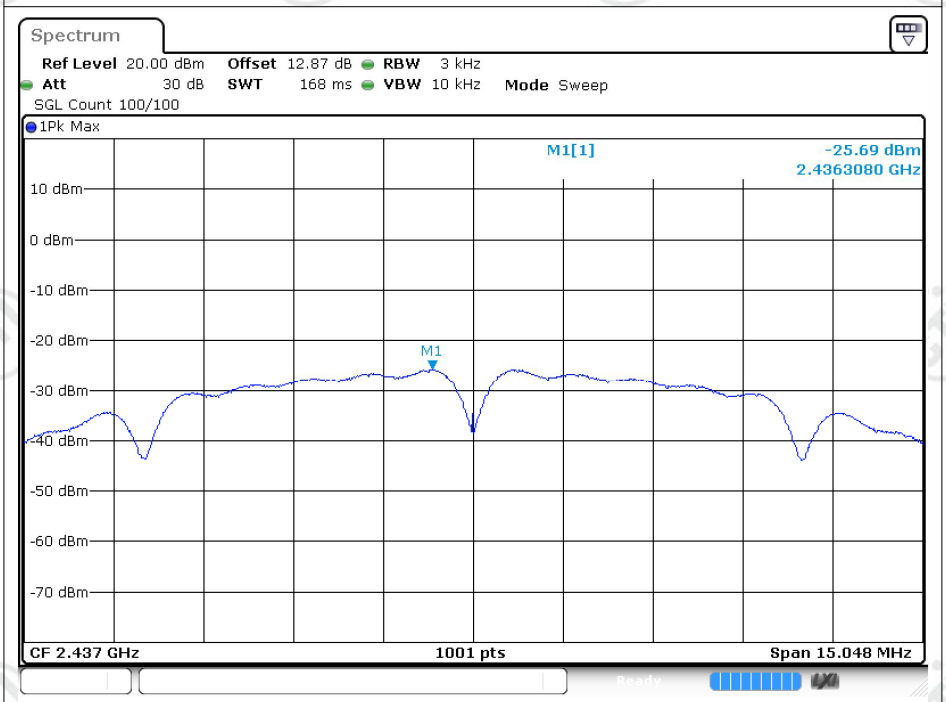
Test Graphs

PSD NVNT b 2412MHz Ant1



Date: 25.MAY.2023 13:51:43

PSD NVNT b 2437MHz Ant1



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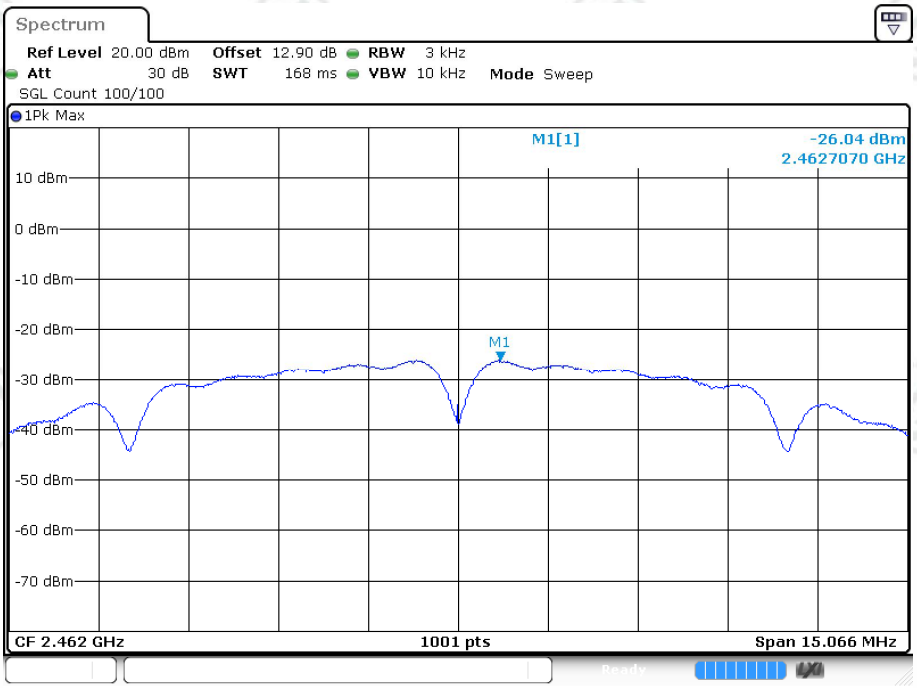
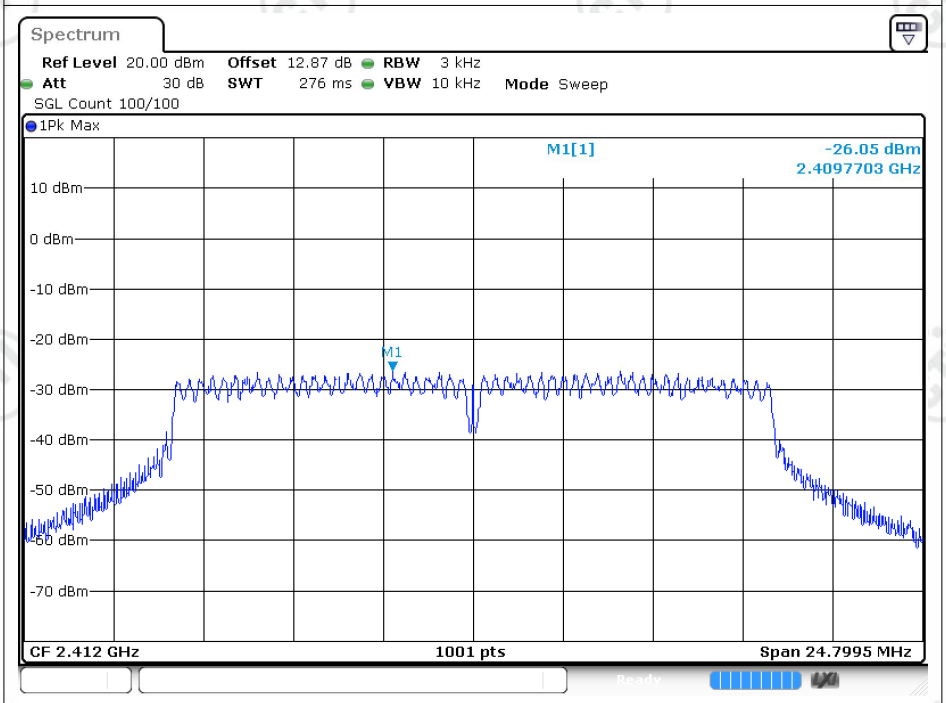
PSD NVNT b 2462MHz Ant1



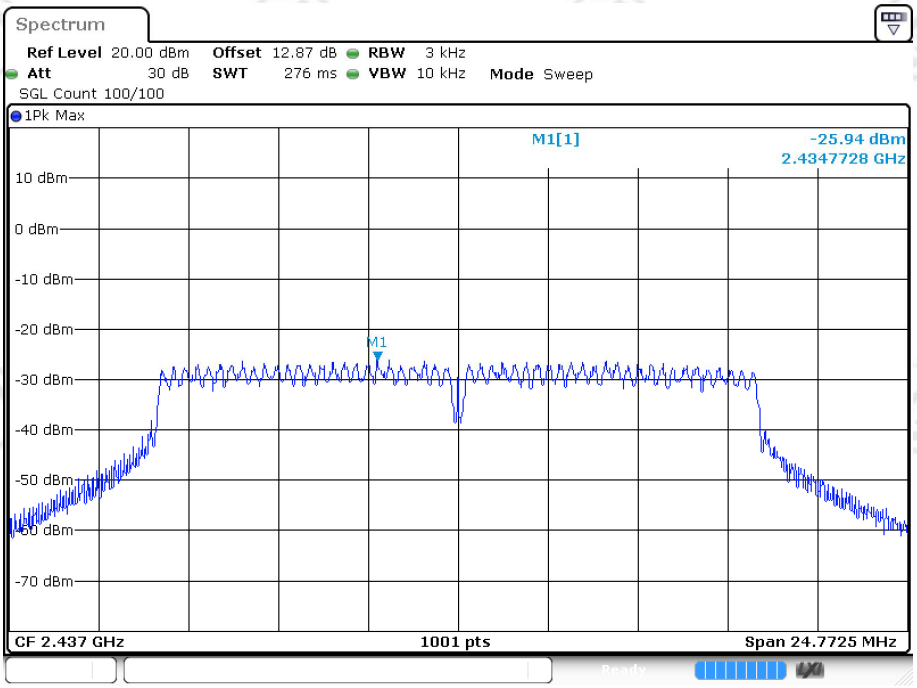
Date: 25.MAY.2023 14:09:20

PSD NVNT g 2412MHz Ant1



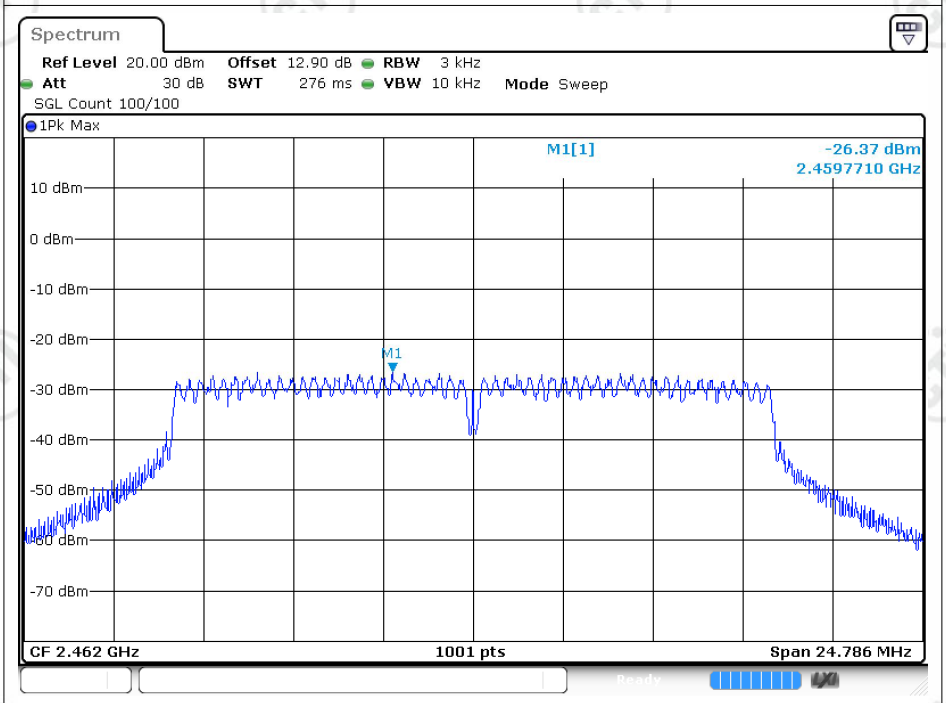
Date: 25.MAY.2023 14:18:51

PSD NVNT g 2437MHz Ant1



Date: 25.MAY.2023 14:22:47

PSD NVNT g 2462MHz Ant1



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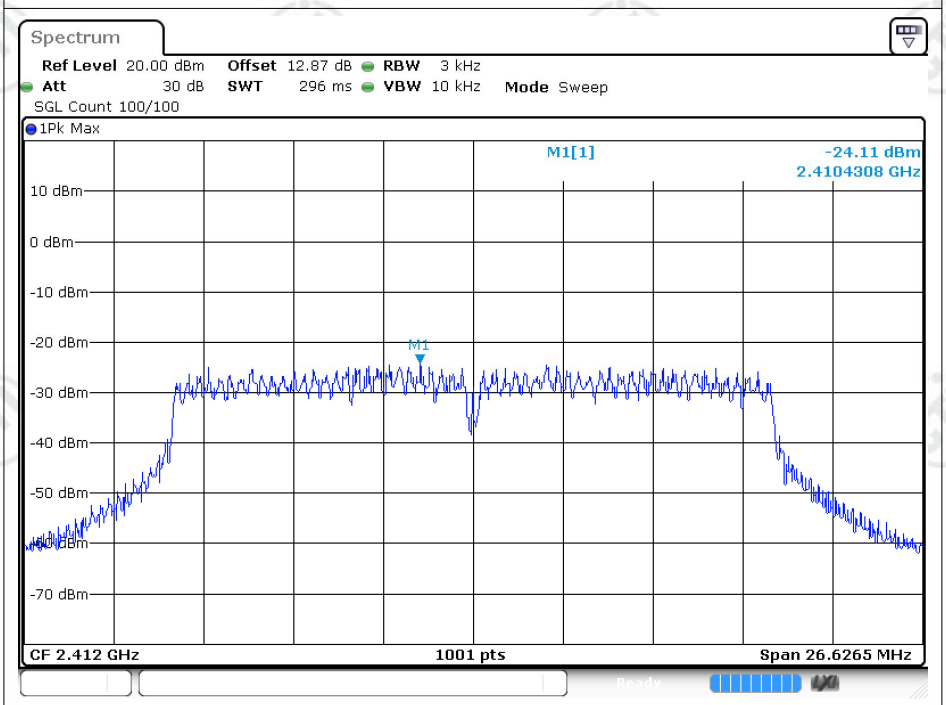
PSD NVNT n20 2412MHz Ant1



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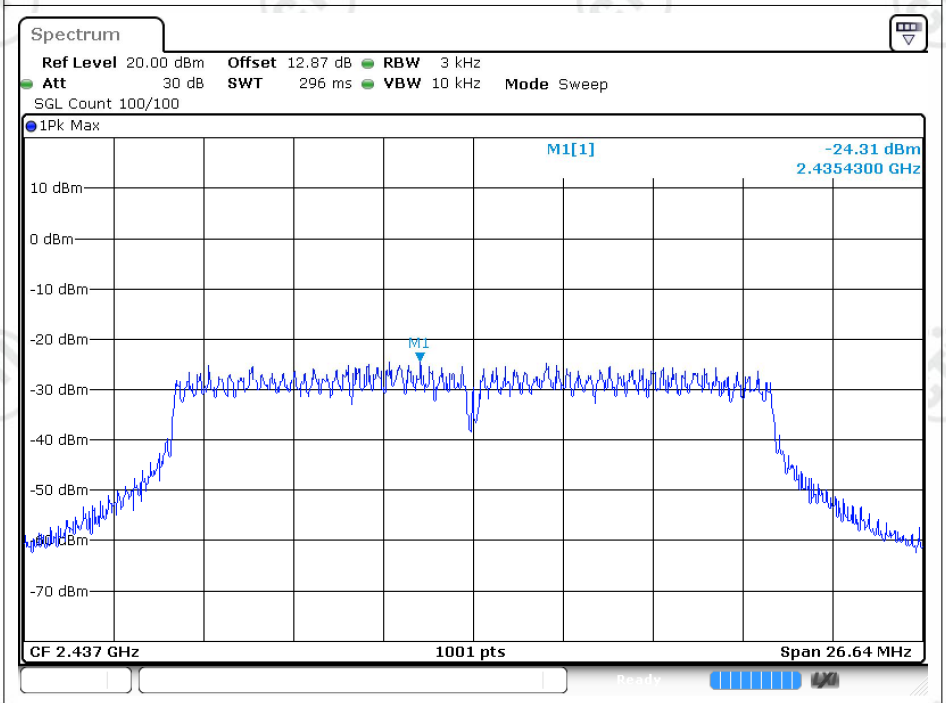
PSD NVNT n20 2437MHz Ant1



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