

RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Digital Wireless Backup Camera System Camera
Test Model:	VT101 TX
Sample ID:	HC-C-202604-0230-01-01
Environmental Conditions	
Temperature:	25.6℃
Relative Humidity:	48.6%
Test Voltage:	DC 12V
Test Engineer:	Lily zhang
Note: For a more detailed features description, please refer to the report TBR-C-202604-0230-5 The report only show the worst case data.	

Contents

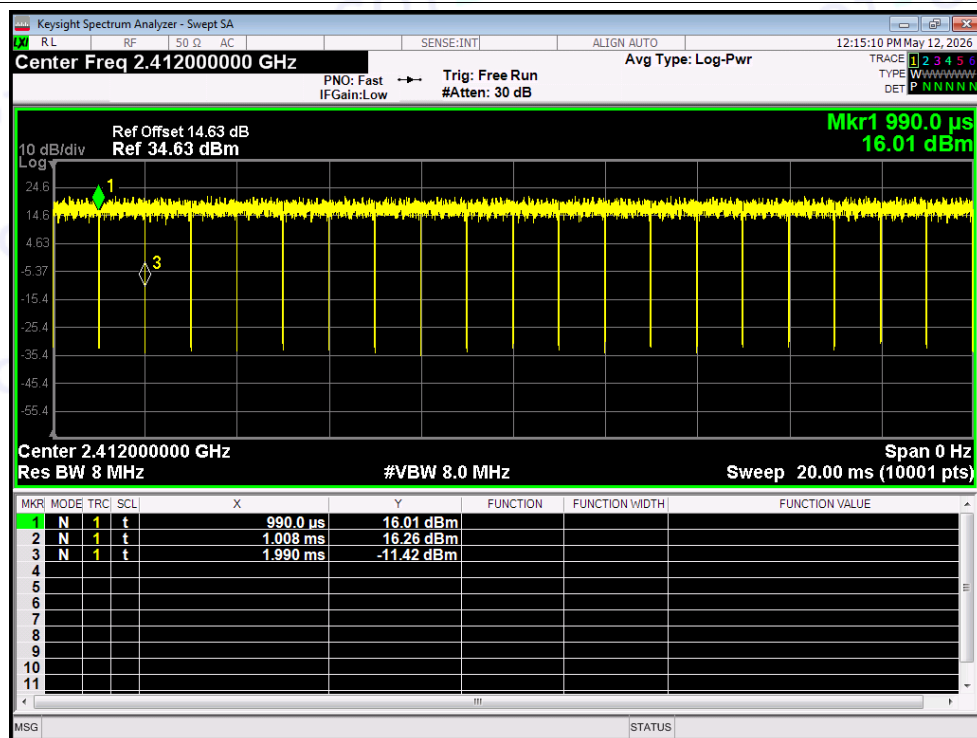
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1. Duty Cycle

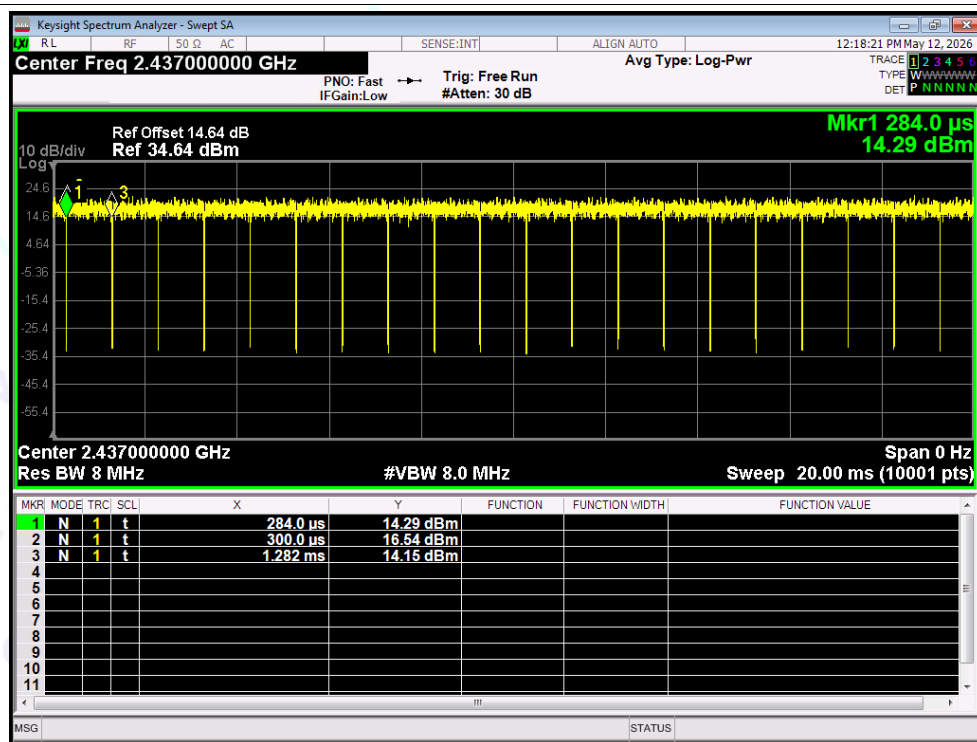
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(VHT20)	2412	Ant1	98.2	0.08	1.02
NVNT	ax(VHT20)	2437	Ant1	98.4	0.07	1.02
NVNT	ax(VHT20)	2462	Ant1	98.2	0.08	1.02
NVNT	b	2412	Ant1	99.76	0.01	0.12
NVNT	b	2437	Ant1	99.82	0.01	0.12
NVNT	b	2462	Ant1	99.82	0.01	0.12
NVNT	g	2412	Ant1	98.84	0.05	0.73
NVNT	g	2437	Ant1	98.84	0.05	0.74
NVNT	g	2462	Ant1	98.84	0.05	0.74
NVNT	n(HT20)	2412	Ant1	98.76	0.05	0.79
NVNT	n(HT20)	2437	Ant1	98.76	0.05	0.79
NVNT	n(HT20)	2462	Ant1	98.6	0.06	0.79

Test Graphs

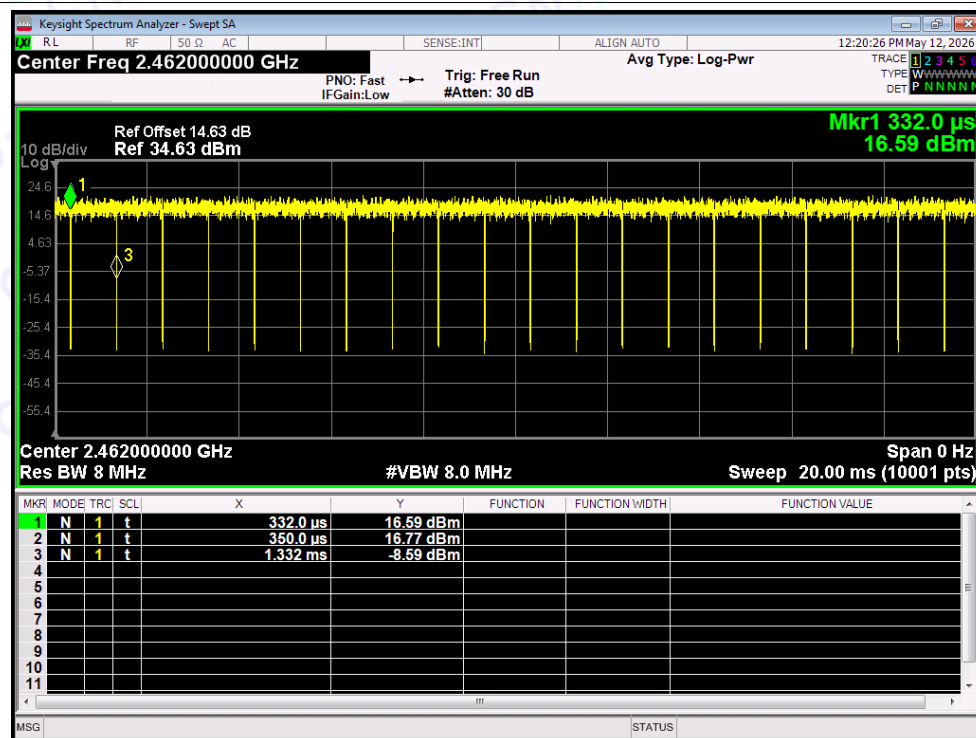
Duty Cycle NVNT ax(VHT20) 2412MHz Ant1



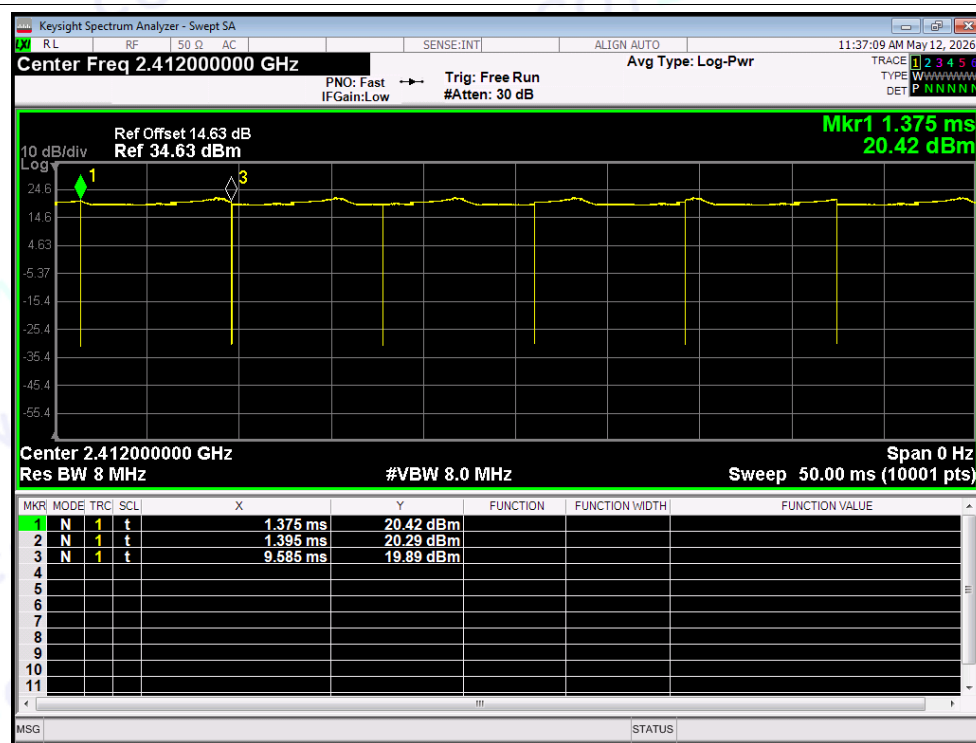
Duty Cycle NVNT ax(VHT20) 2437MHz Ant1



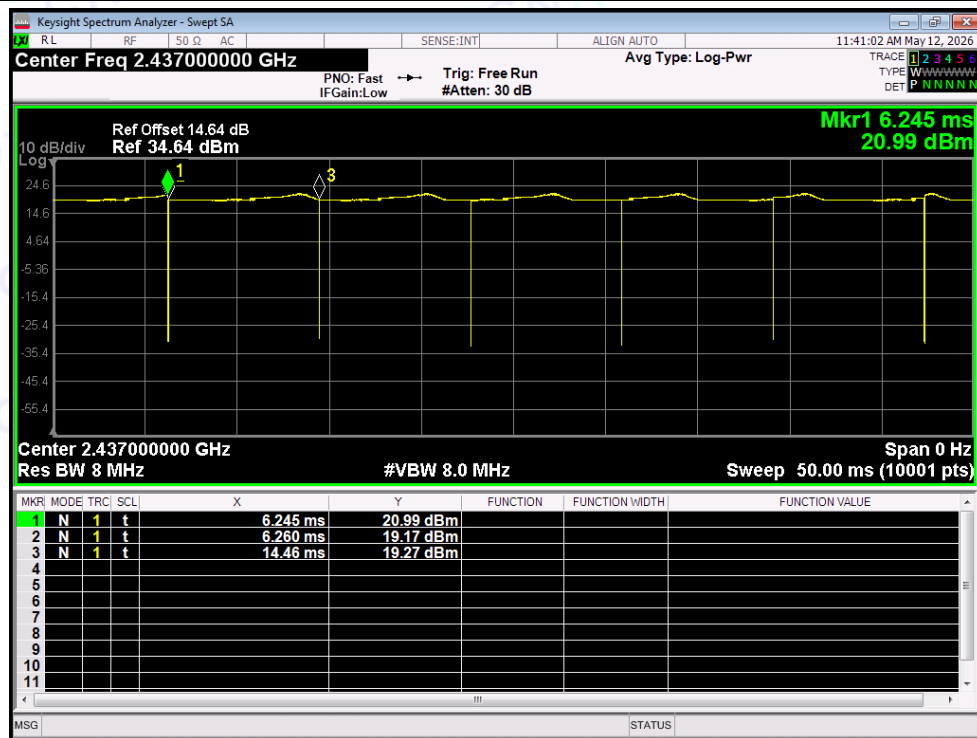
Duty Cycle NVNT ax(VHT20) 2462MHz Ant1



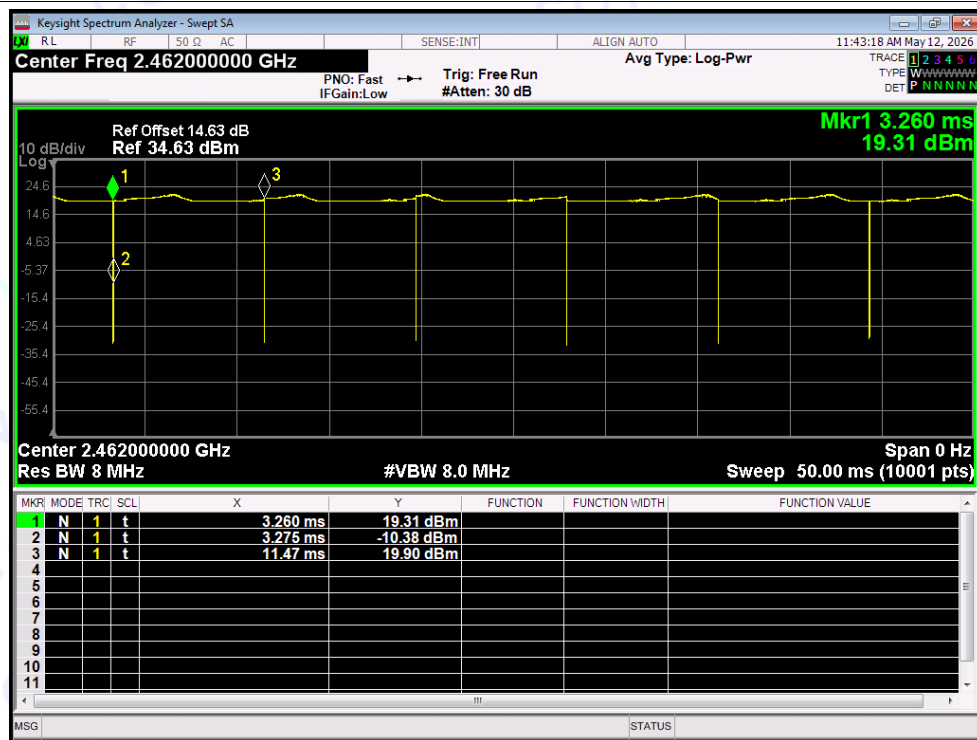
Duty Cycle NVNT b 2412MHz Ant1



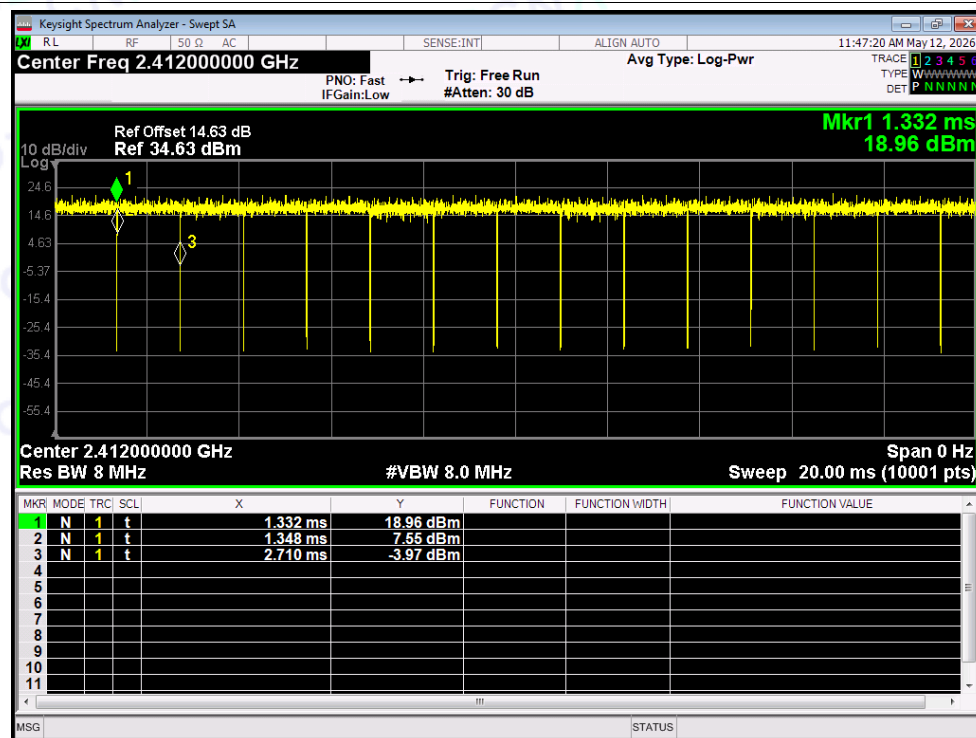
Duty Cycle NVNT b 2437MHz Ant1



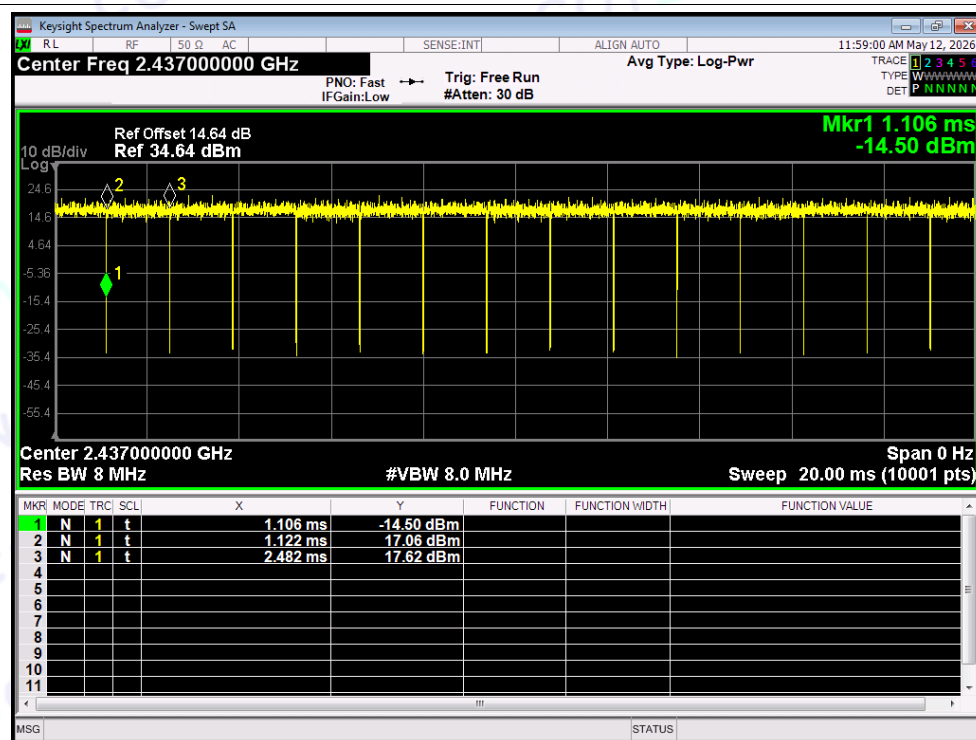
Duty Cycle NVNT b 2462MHz Ant1



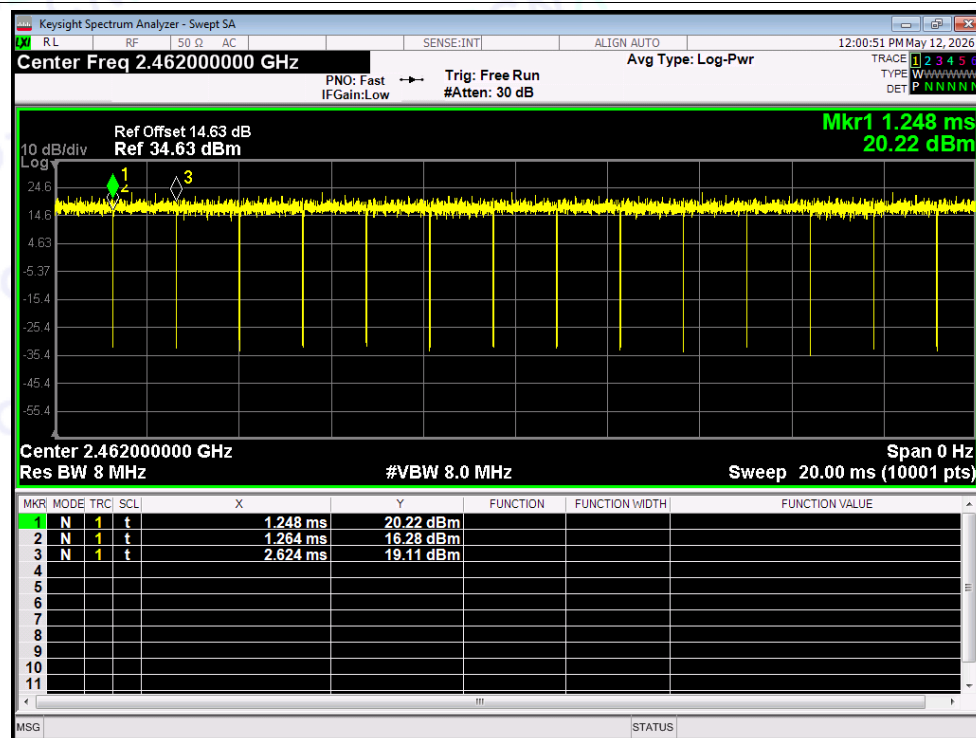
Duty Cycle NVNT g 2412MHz Ant1



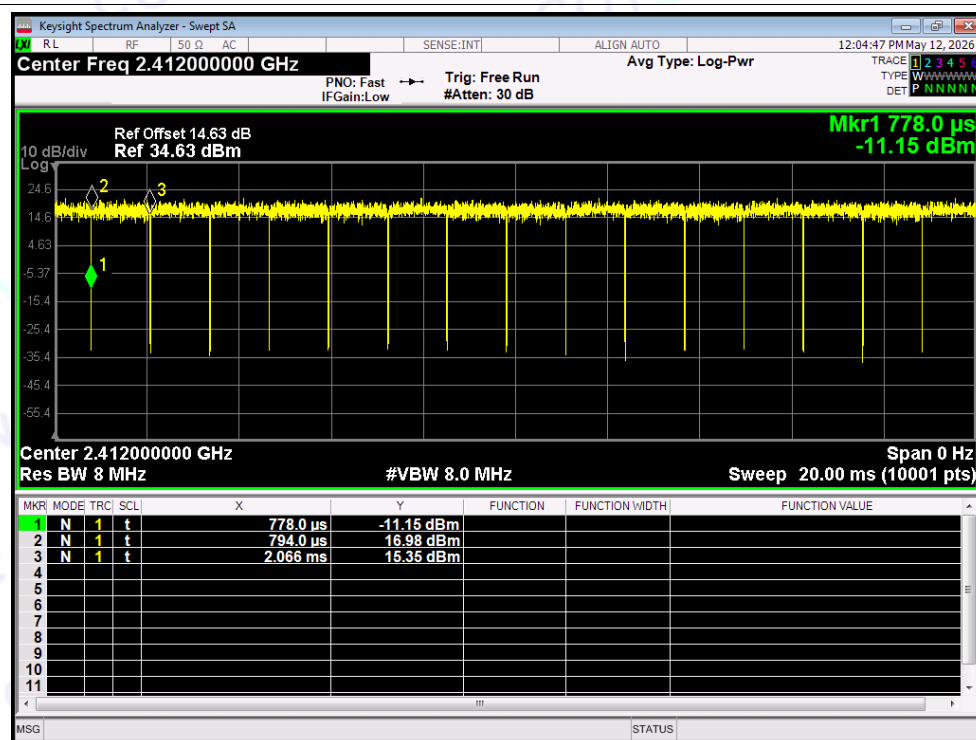
Duty Cycle NVNT g 2437MHz Ant1



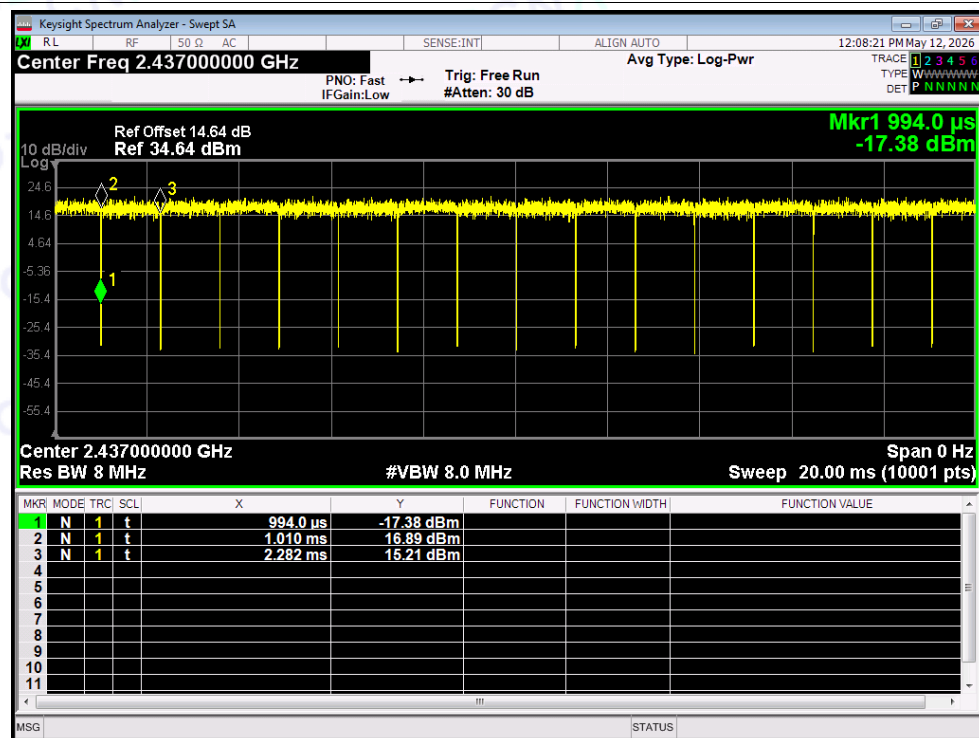
Duty Cycle NVNT g 2462MHz Ant1



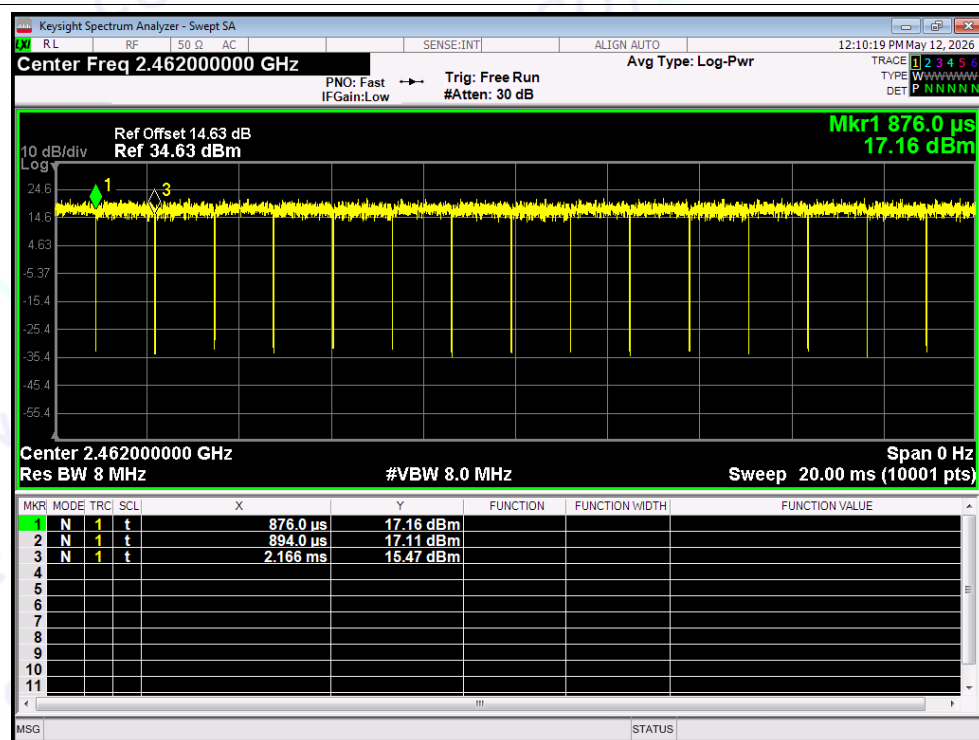
Duty Cycle NVNT n(HT20) 2412MHz Ant1



Duty Cycle NVNT n(HT20) 2437MHz Ant1



Duty Cycle NVNT n(HT20) 2462MHz Ant1



2. Maximum Conducted Output Power

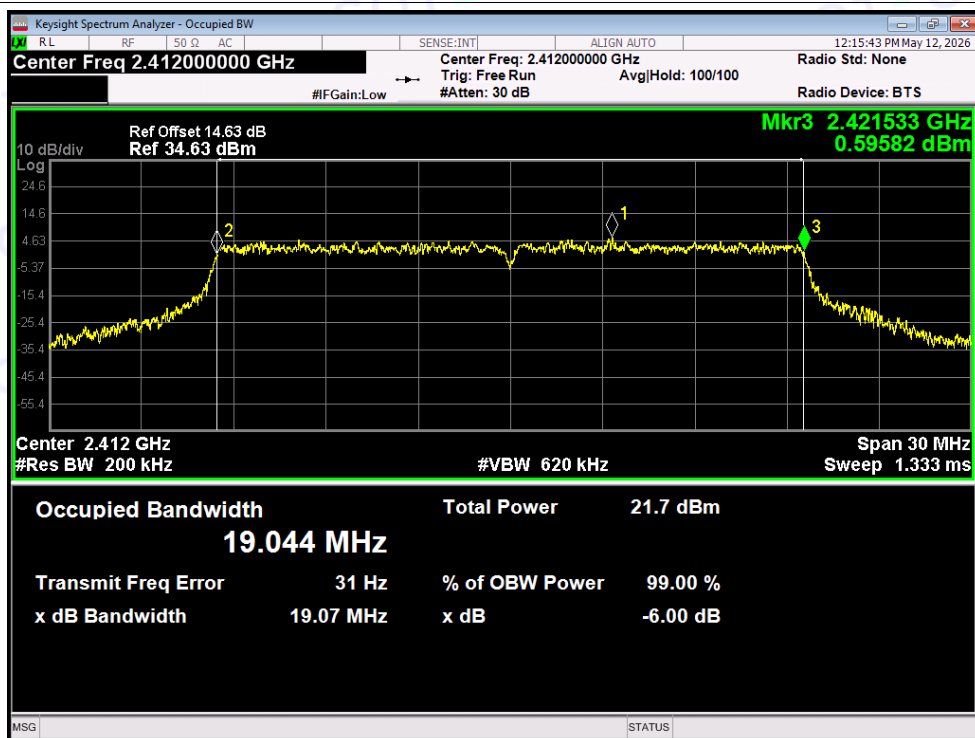
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	15.45	0.08	15.53	30	Pass
NVNT	ax(VHT20)	2437	Ant1	15.35	0.07	15.42	30	Pass
NVNT	ax(VHT20)	2462	Ant1	15.42	0.08	15.5	30	Pass
NVNT	b	2412	Ant1	16.59	0.01	16.6	30	Pass
NVNT	b	2437	Ant1	16.63	0.01	16.64	30	Pass
NVNT	b	2462	Ant1	16.74	0.01	16.75	30	Pass
NVNT	g	2412	Ant1	15.35	0.05	15.4	30	Pass
NVNT	g	2437	Ant1	15.25	0.05	15.3	30	Pass
NVNT	g	2462	Ant1	15.48	0.05	15.53	30	Pass
NVNT	n(HT20)	2412	Ant1	15.33	0.05	15.38	30	Pass
NVNT	n(HT20)	2437	Ant1	15.35	0.05	15.4	30	Pass
NVNT	n(HT20)	2462	Ant1	15.5	0.06	15.56	30	Pass

3. -6dB Bandwidth

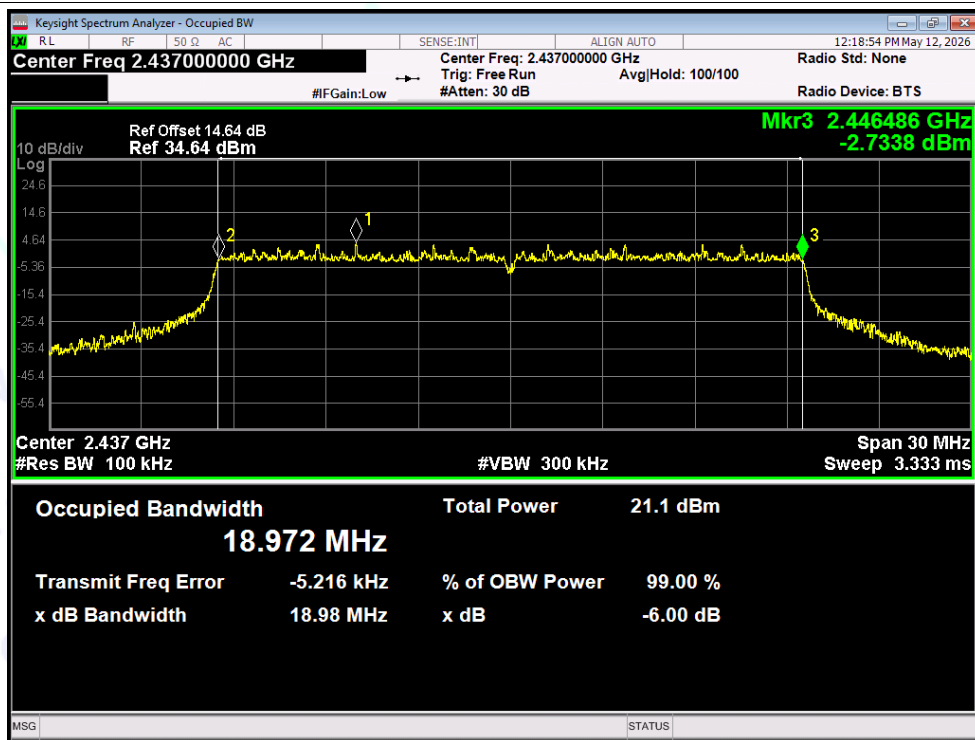
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(VHT20)	2412	Ant1	19.07	0.5	Pass
NVNT	ax(VHT20)	2437	Ant1	18.98	0.5	Pass
NVNT	ax(VHT20)	2462	Ant1	18.98	0.5	Pass
NVNT	b	2412	Ant1	10.14	0.5	Pass
NVNT	b	2437	Ant1	10.14	0.5	Pass
NVNT	b	2462	Ant1	10.13	0.5	Pass
NVNT	g	2412	Ant1	16.43	0.5	Pass
NVNT	g	2437	Ant1	16.46	0.5	Pass
NVNT	g	2462	Ant1	16.45	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.66	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.66	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.69	0.5	Pass

Test Graphs

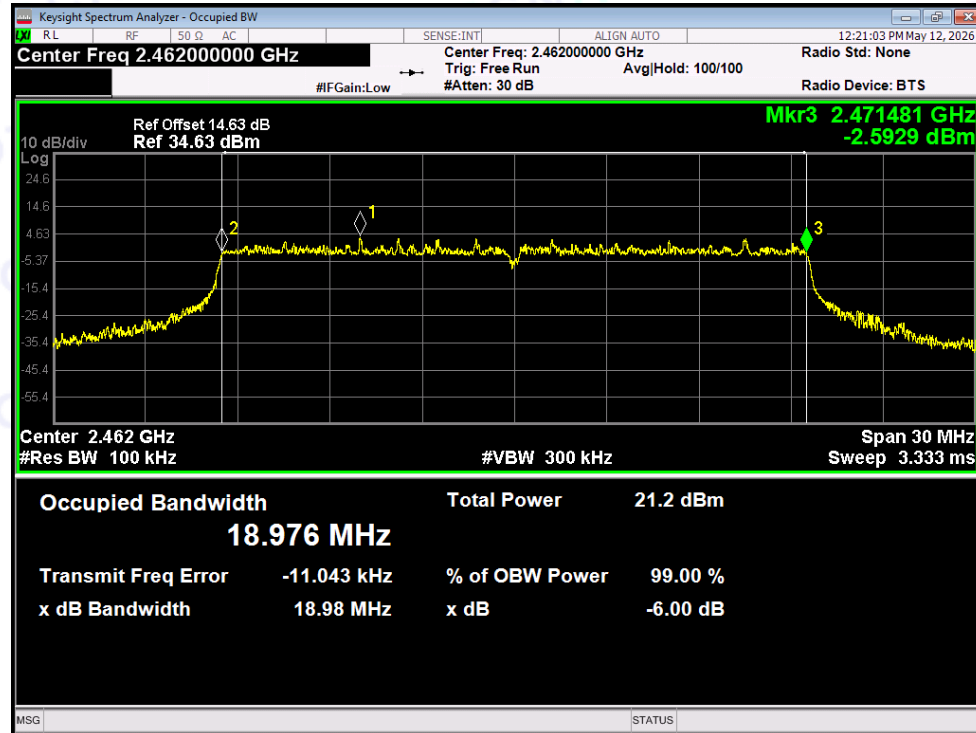
-6dB Bandwidth NVNT ax(VHT20) 2412MHz Ant1



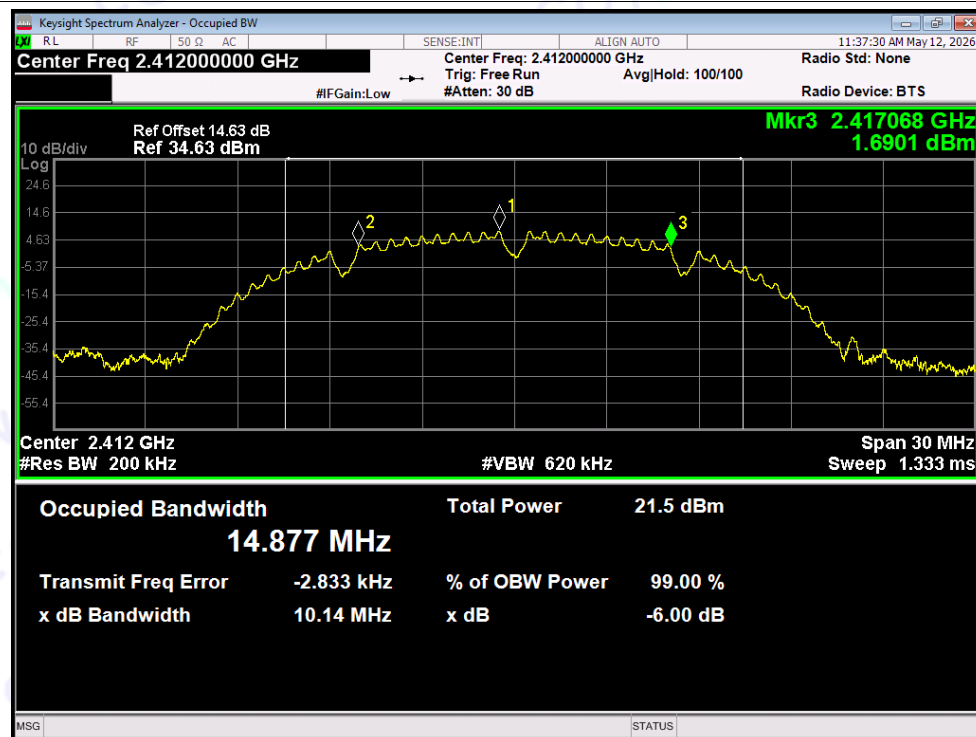
-6dB Bandwidth NVNT ax(VHT20) 2437MHz Ant1



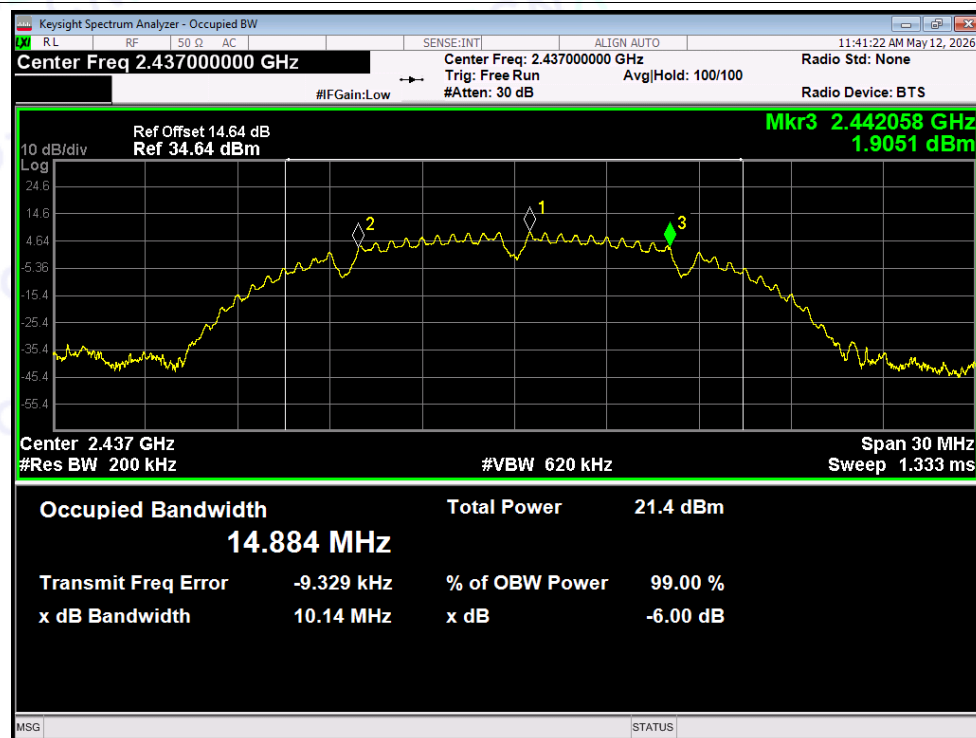
-6dB Bandwidth NVNT ax(VHT20) 2462MHz Ant1



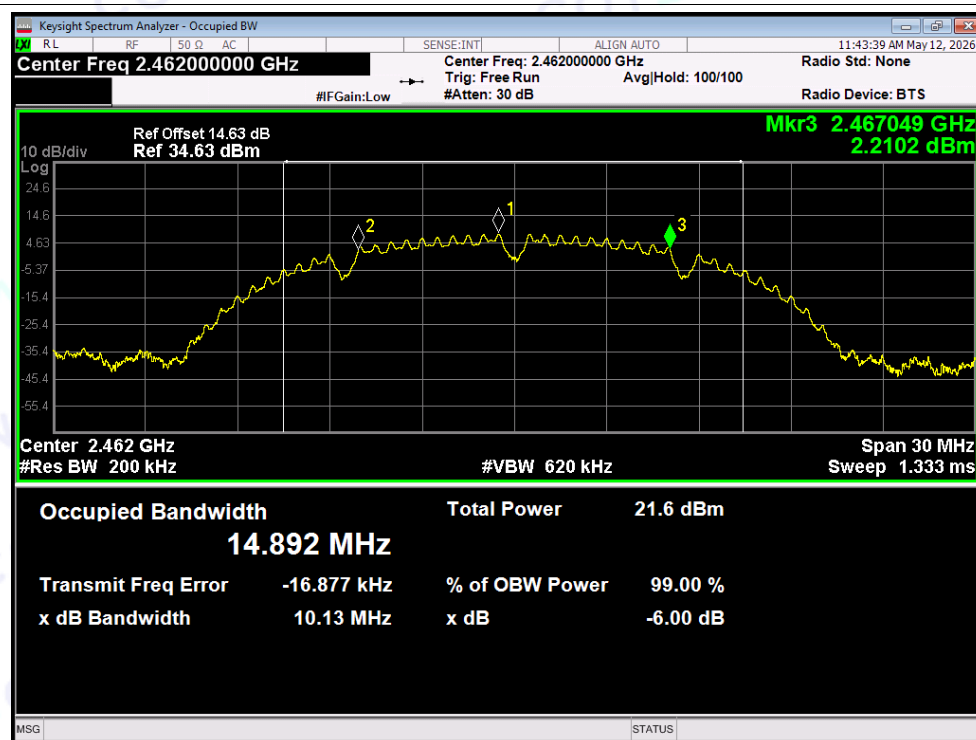
-6dB Bandwidth NVNT b 2412MHz Ant1



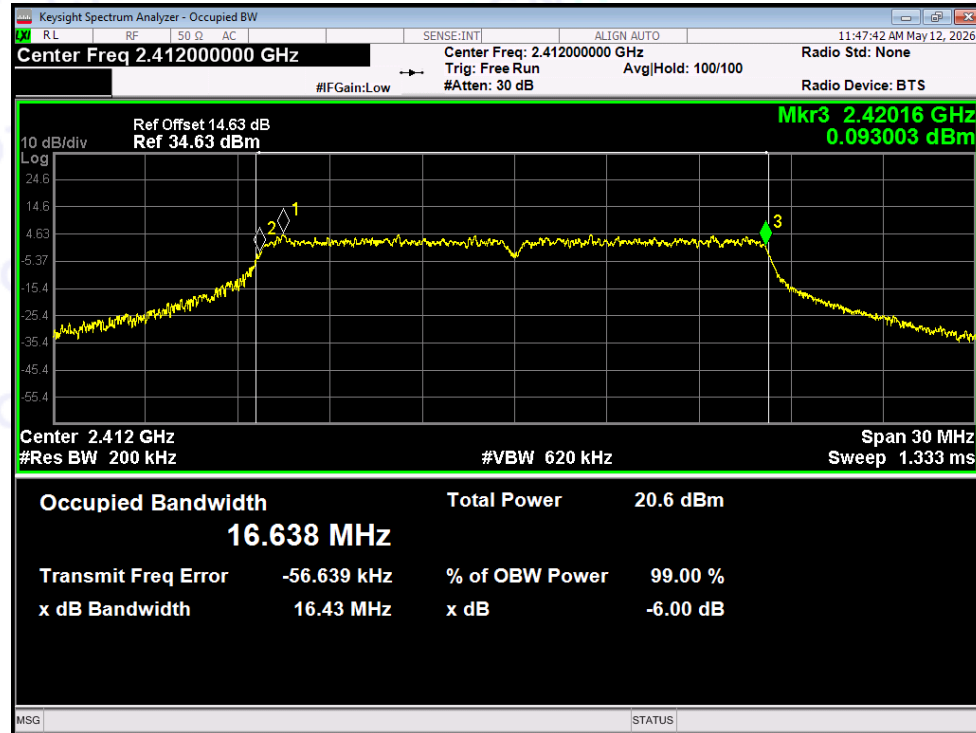
-6dB Bandwidth NVNT b 2437MHz Ant1



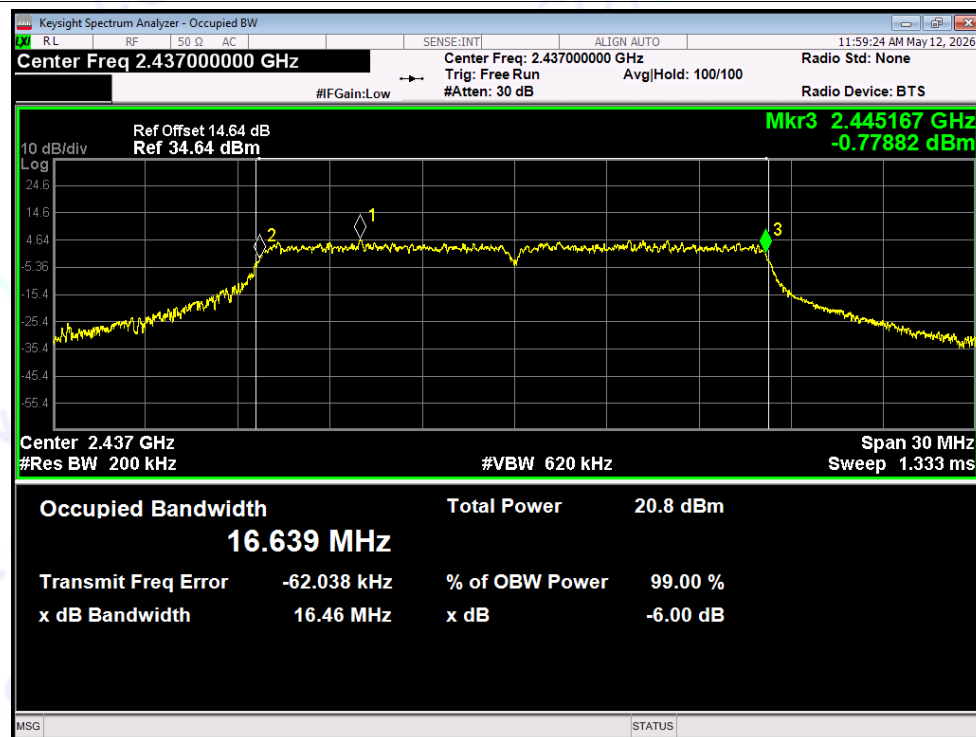
-6dB Bandwidth NVNT b 2462MHz Ant1



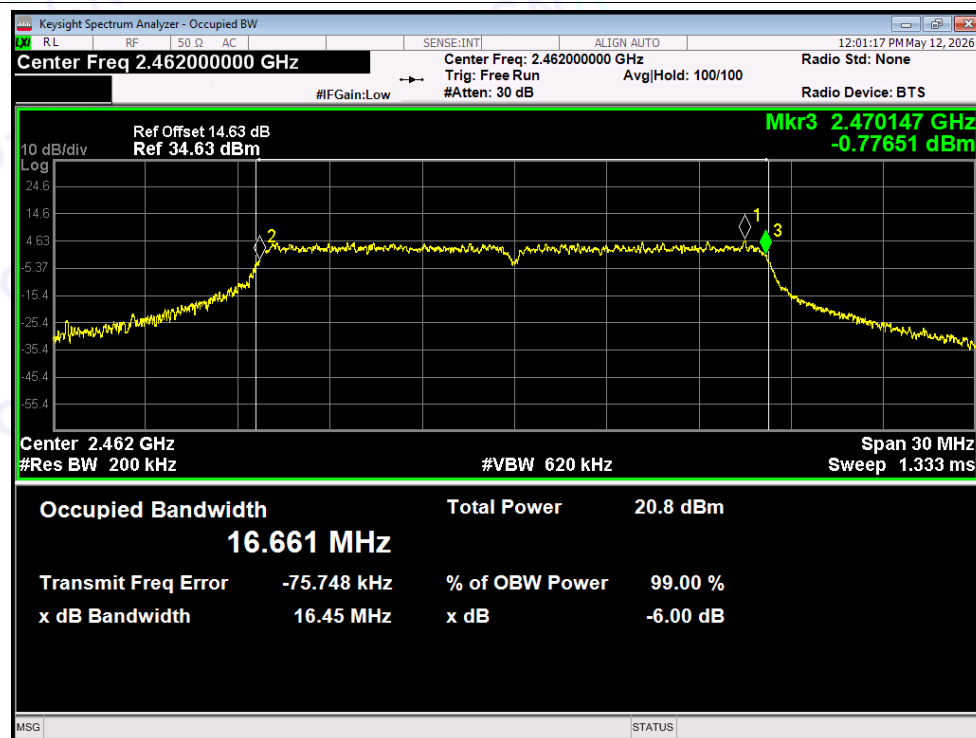
-6dB Bandwidth NVNT g 2412MHz Ant1



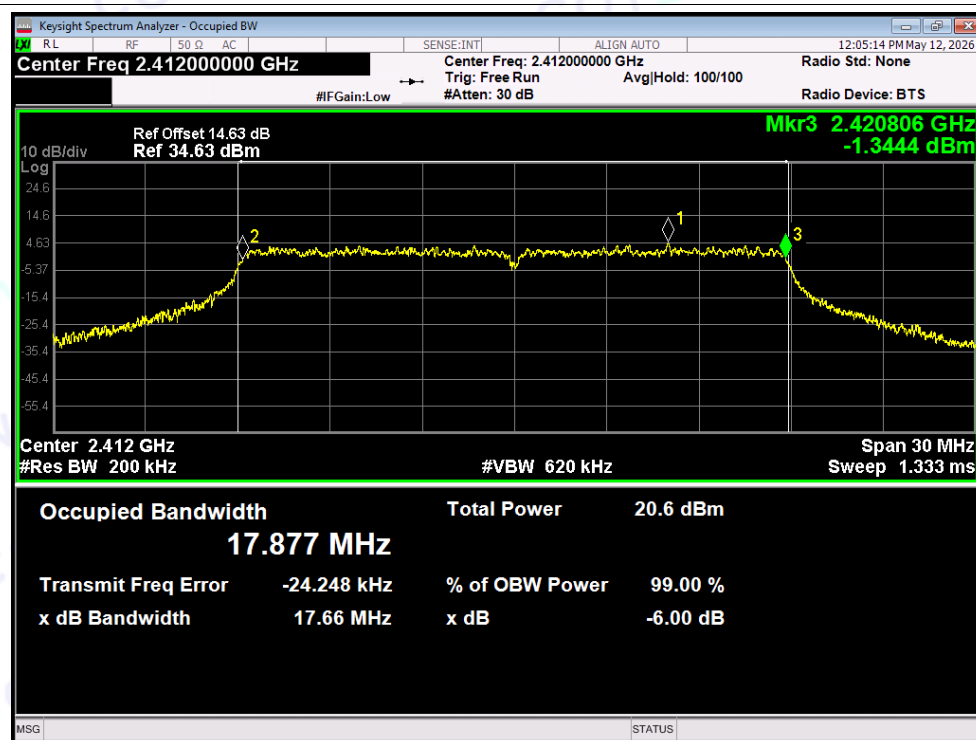
-6dB Bandwidth NVNT g 2437MHz Ant1



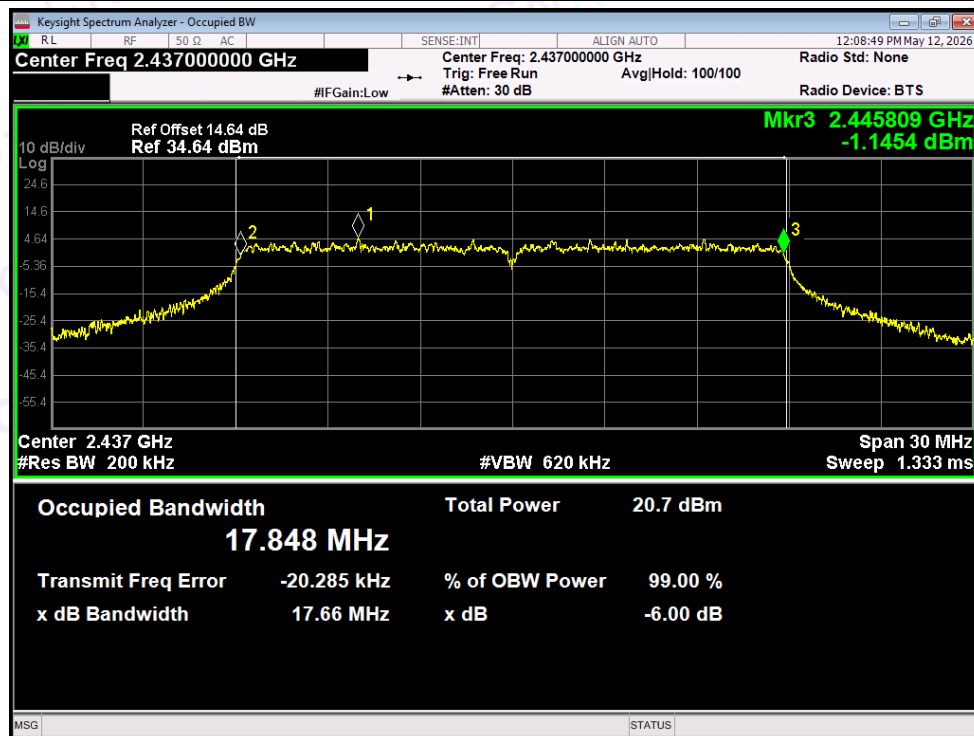
-6dB Bandwidth NVNT g 2462MHz Ant1



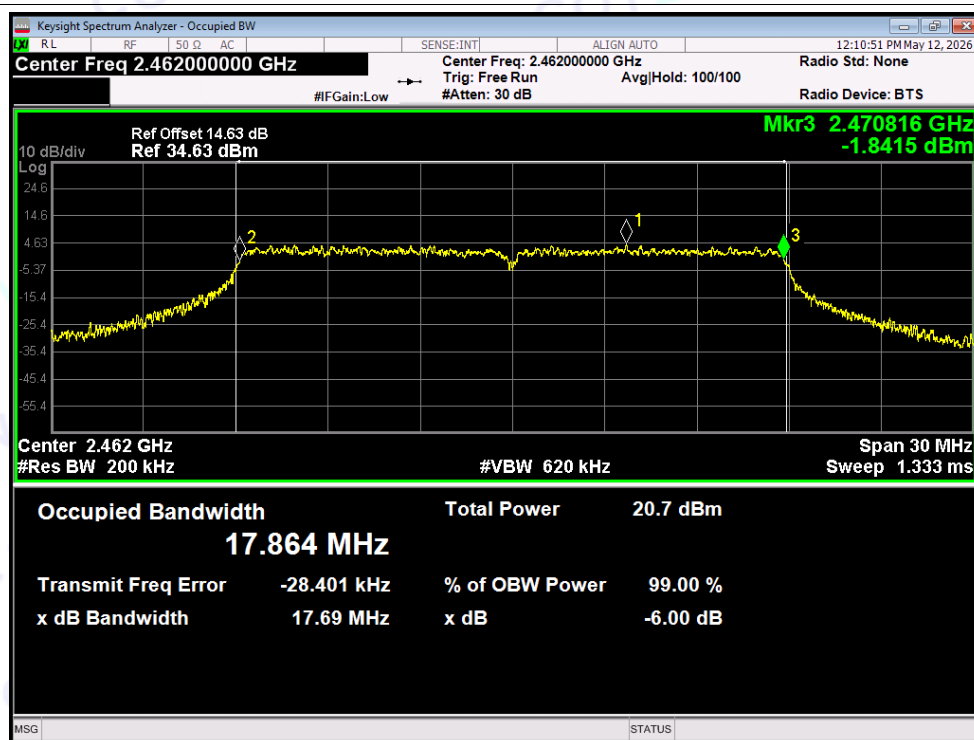
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1

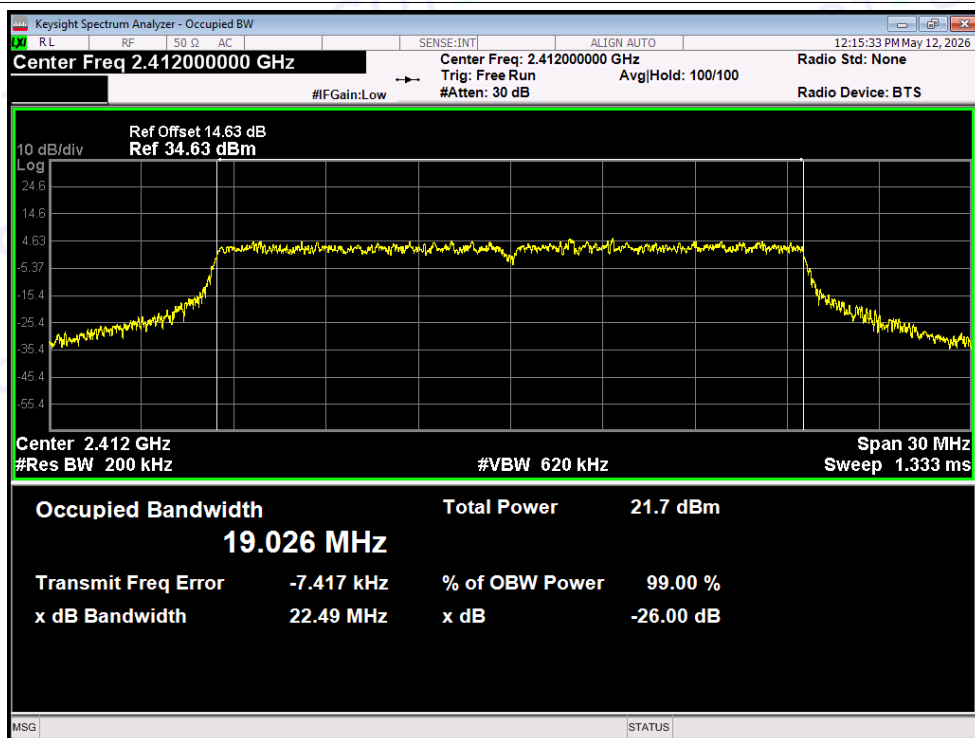


4. Occupied Channel Bandwidth

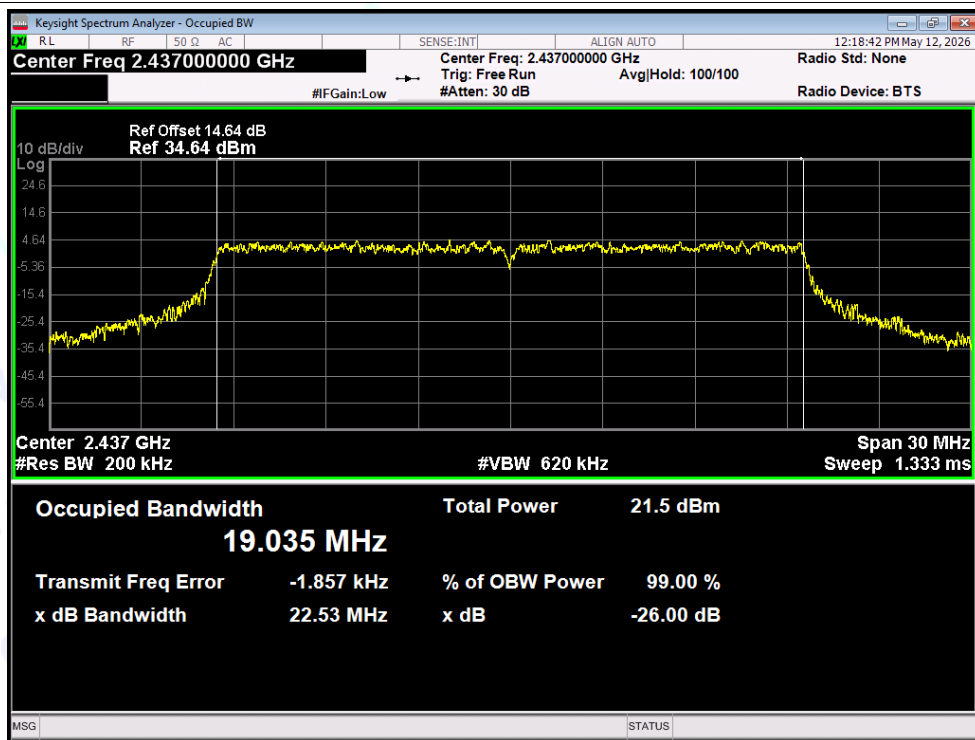
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax(VHT20)	2412	Ant1	19.026
NVNT	ax(VHT20)	2437	Ant1	19.035
NVNT	ax(VHT20)	2462	Ant1	19.022
NVNT	b	2412	Ant1	14.877
NVNT	b	2437	Ant1	14.881
NVNT	b	2462	Ant1	14.88
NVNT	g	2412	Ant1	16.666
NVNT	g	2437	Ant1	16.63
NVNT	g	2462	Ant1	16.62
NVNT	n(HT20)	2412	Ant1	17.854
NVNT	n(HT20)	2437	Ant1	17.856
NVNT	n(HT20)	2462	Ant1	17.882

Test Graphs

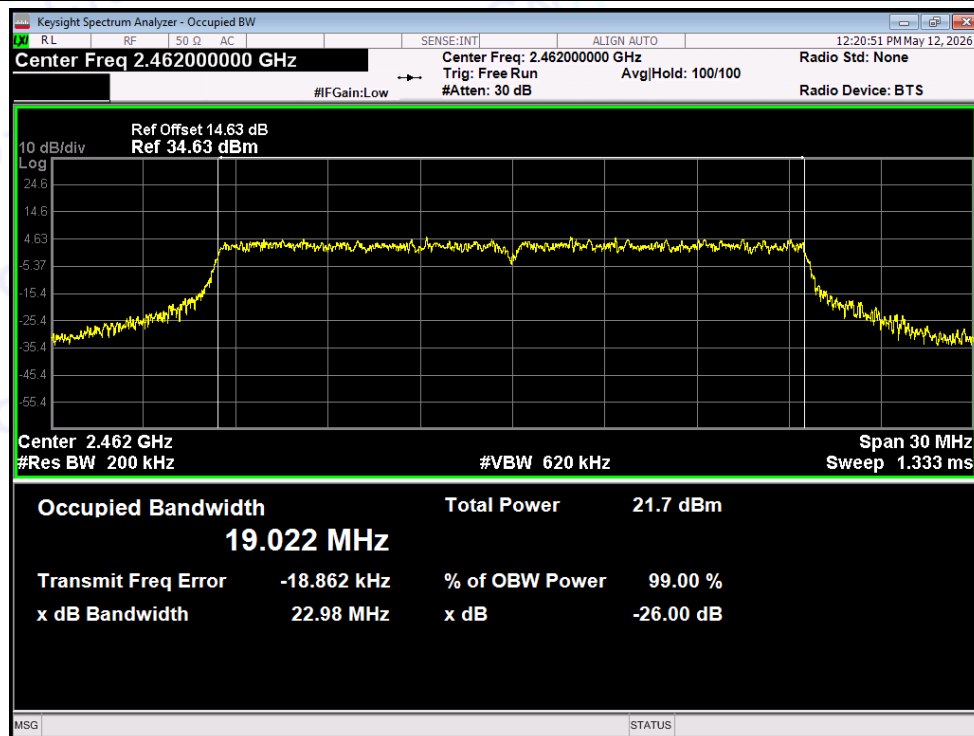
OBW NVNT ax(VHT20) 2412MHz Ant1



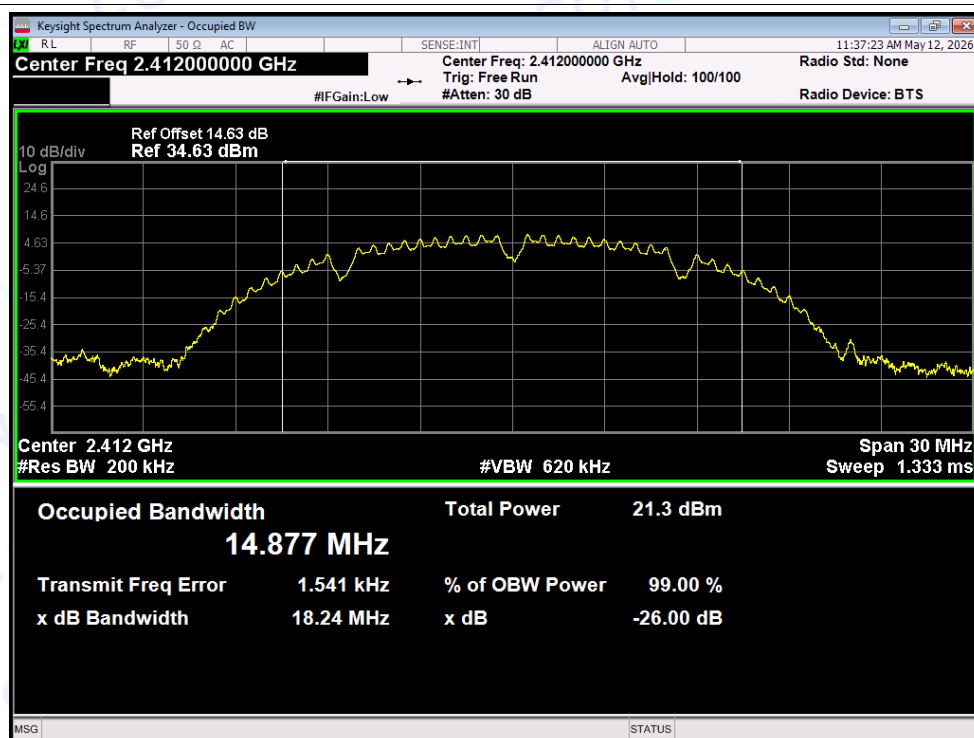
OBW NVNT ax(VHT20) 2437MHz Ant1



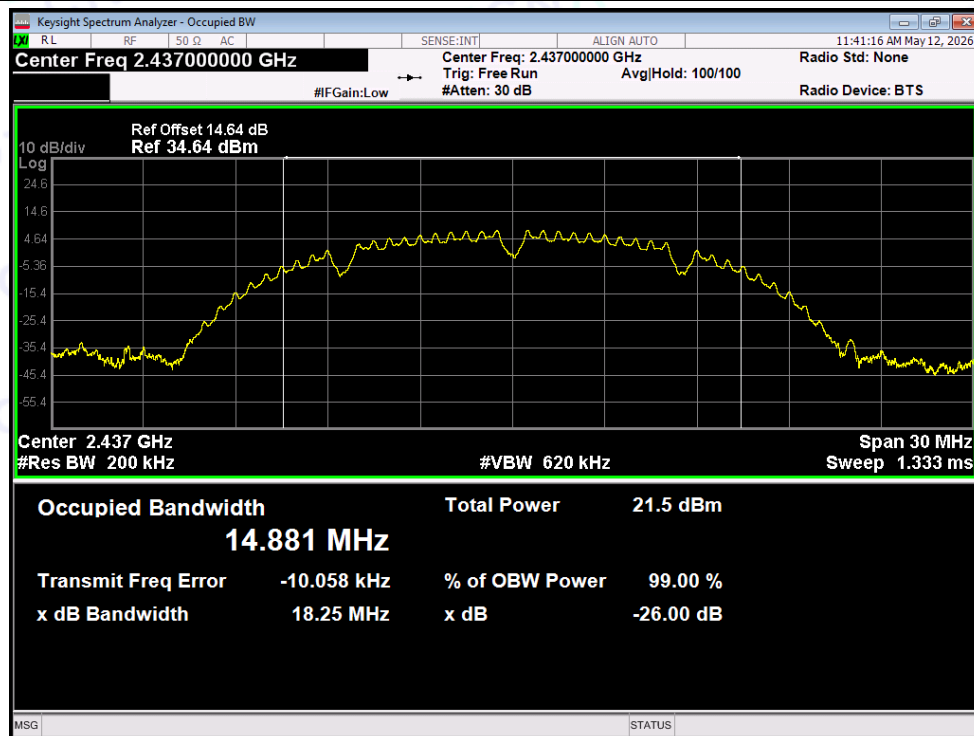
OBW NVNT ax(VHT20) 2462MHz Ant1



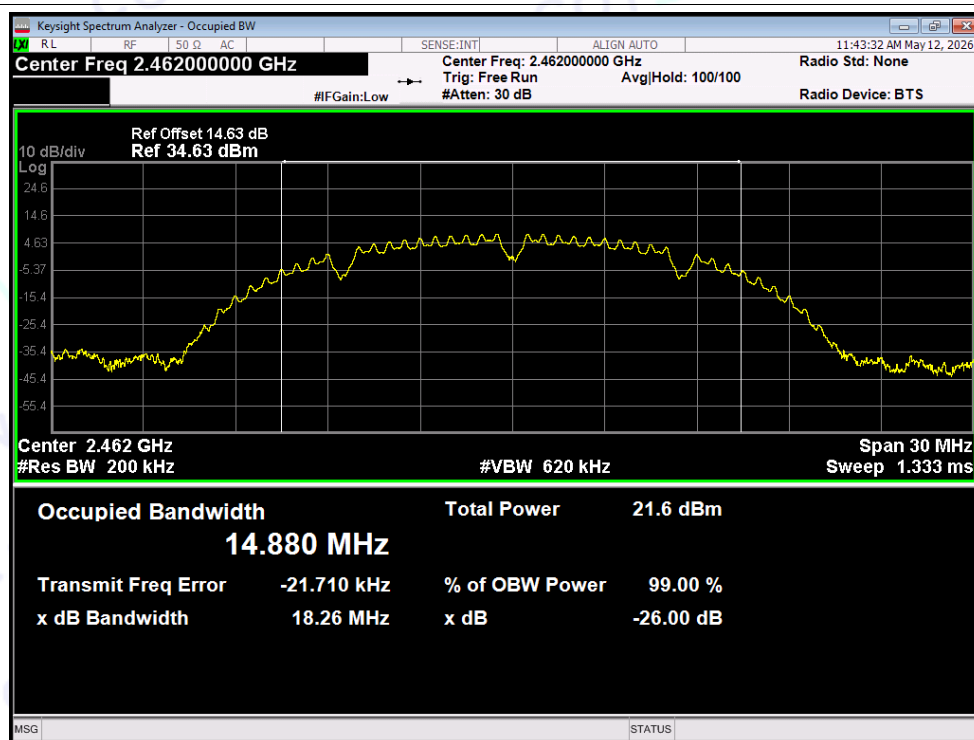
OBW NVNT b 2412MHz Ant1



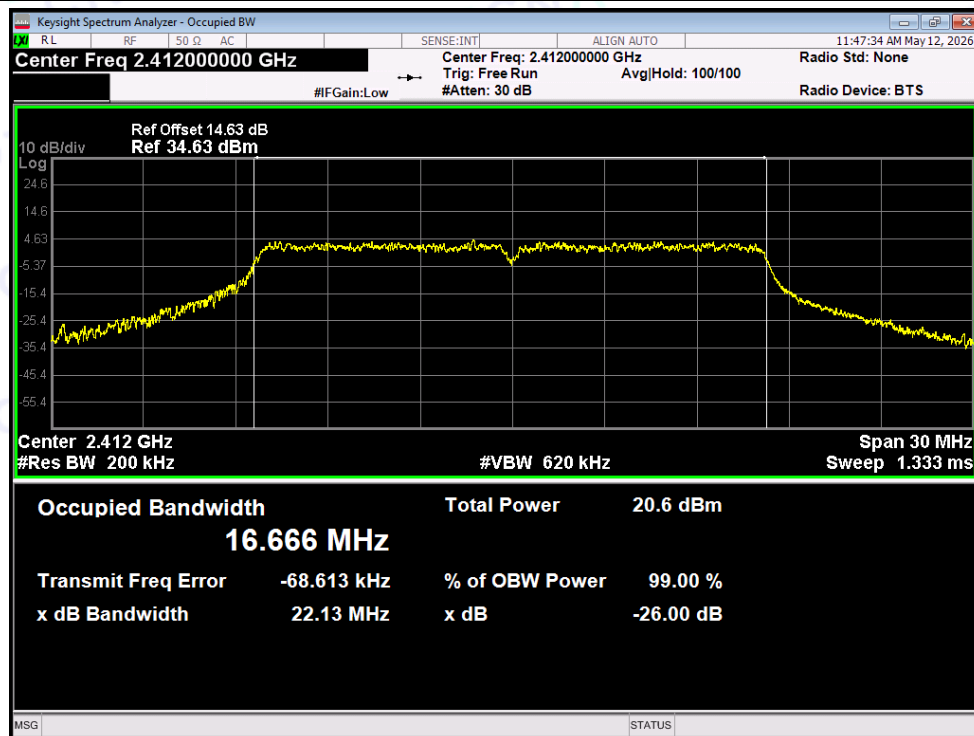
OBW NVNT b 2437MHz Ant1



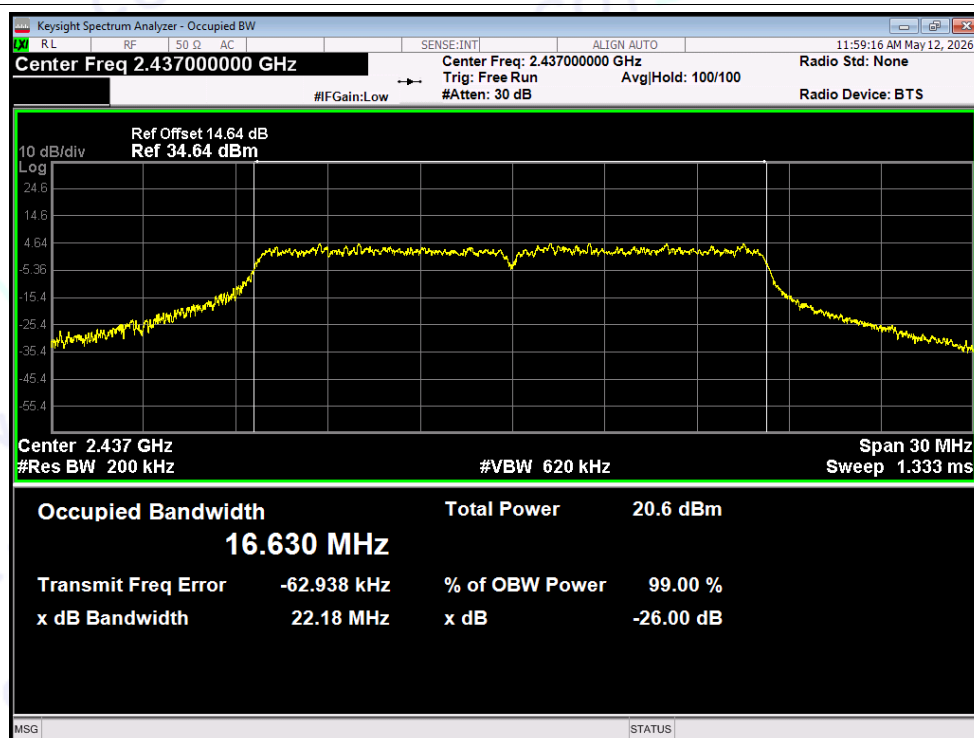
OBW NVNT b 2462MHz Ant1



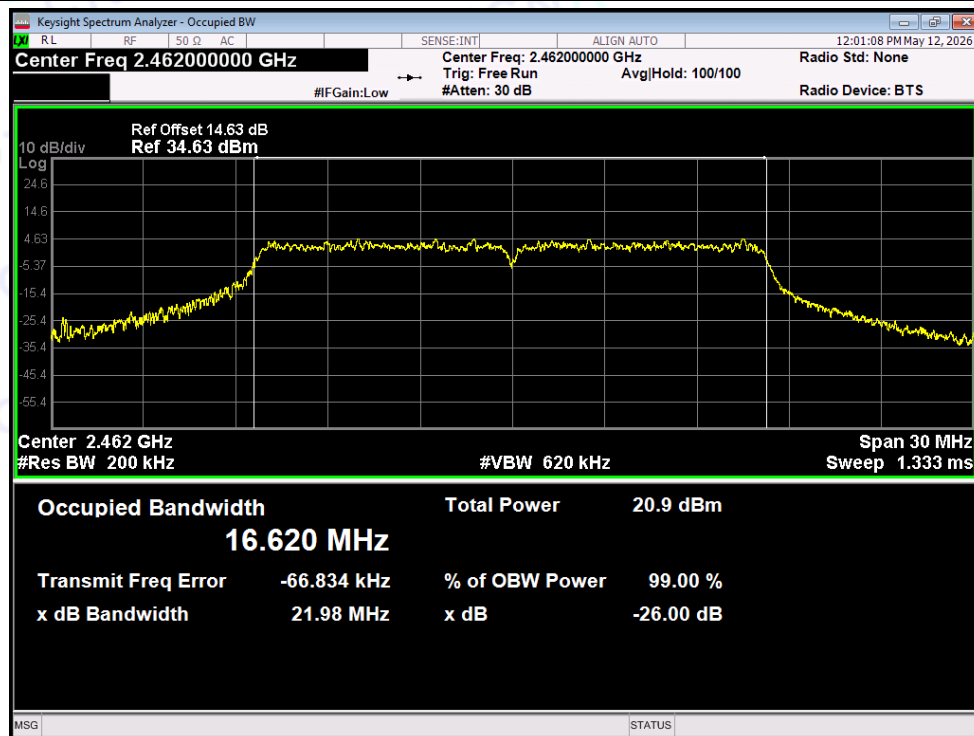
OBW NVNT g 2412MHz Ant1



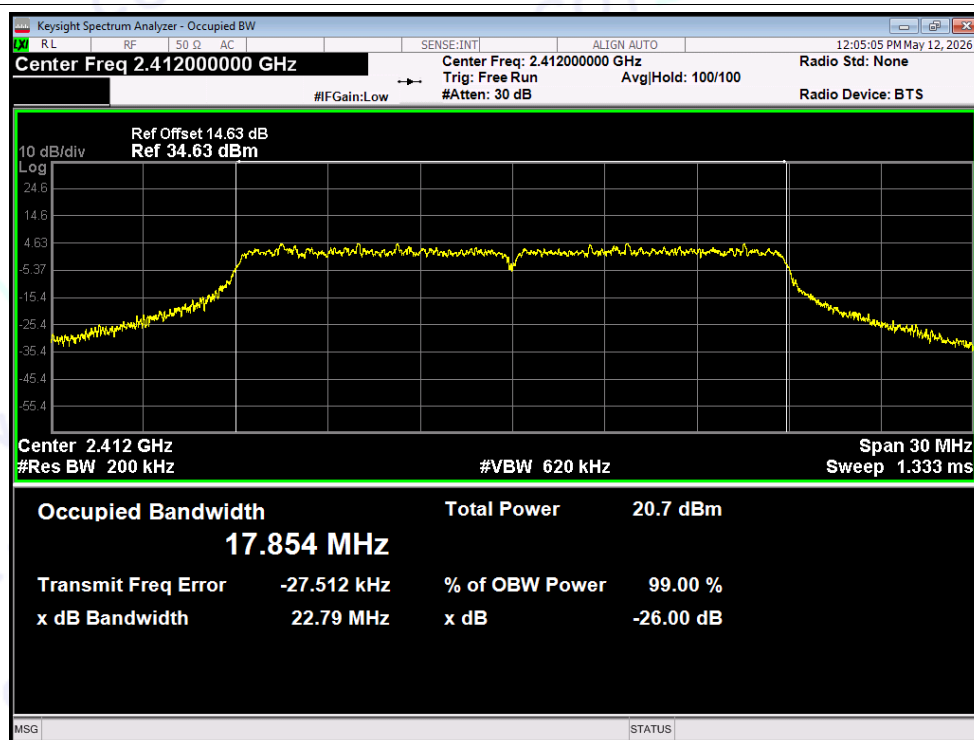
OBW NVNT g 2437MHz Ant1



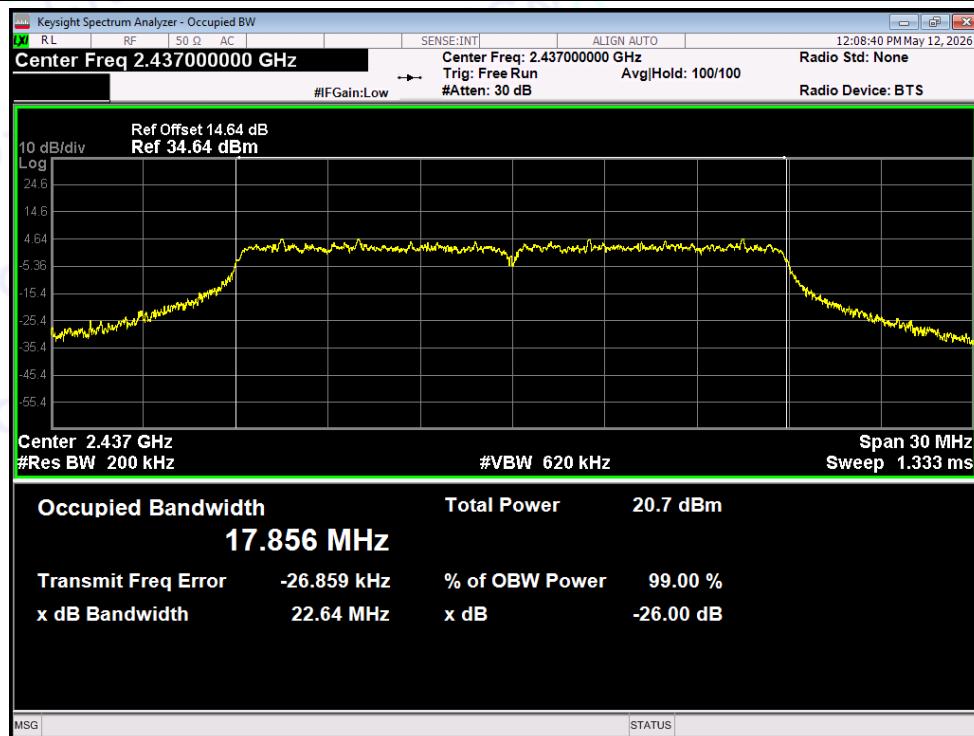
OBW NVNT g 2462MHz Ant1



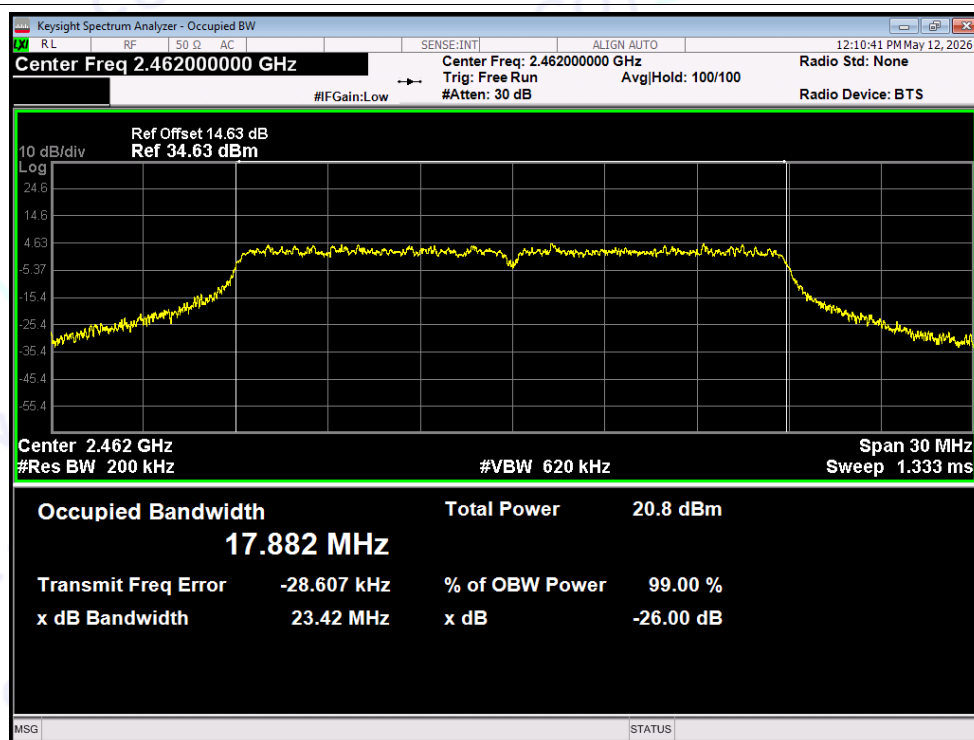
OBW NVNT n(HT20) 2412MHz Ant1



OBW NVNT n(HT20) 2437MHz Ant1



OBW NVNT n(HT20) 2462MHz Ant1

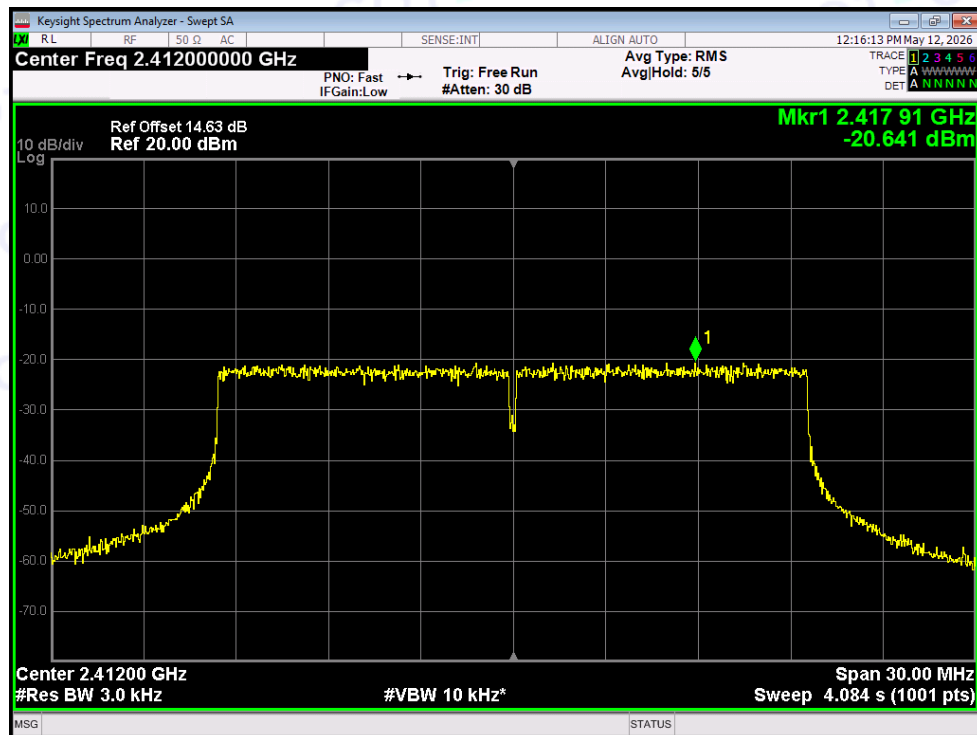


5. Maximum Power Spectral Density Level

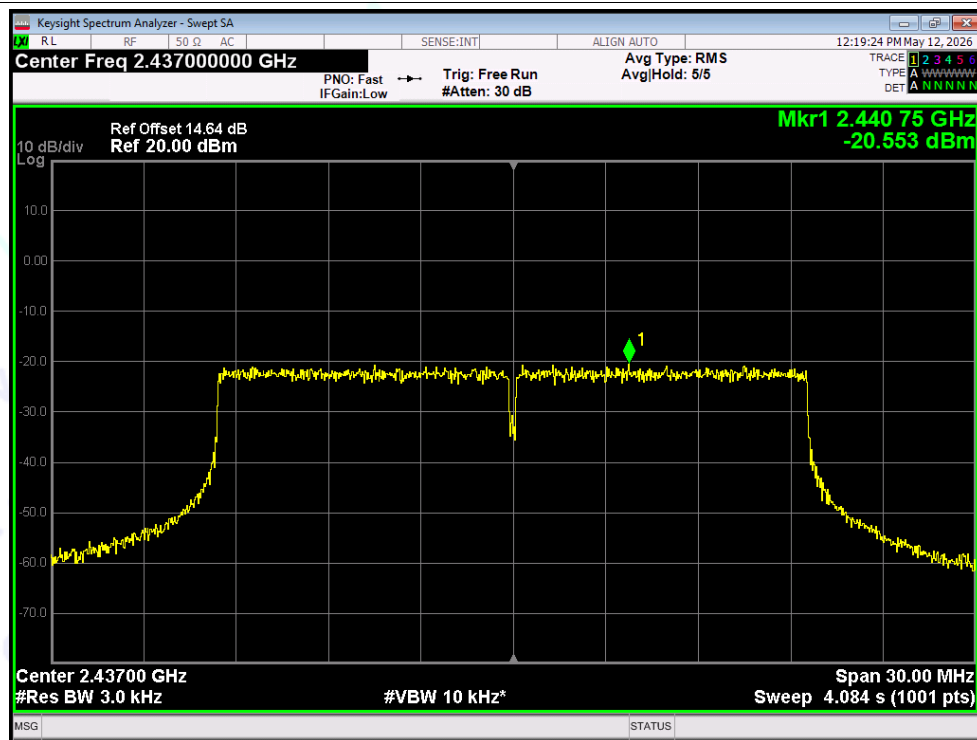
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-20.641	8	Pass
NVNT	ax(VHT20)	2437	Ant1	-20.553	8	Pass
NVNT	ax(VHT20)	2462	Ant1	-20.154	8	Pass
NVNT	b	2412	Ant1	-16.184	8	Pass
NVNT	b	2437	Ant1	-16.204	8	Pass
NVNT	b	2462	Ant1	-16.082	8	Pass
NVNT	g	2412	Ant1	-19.412	8	Pass
NVNT	g	2437	Ant1	-19.493	8	Pass
NVNT	g	2462	Ant1	-19.317	8	Pass
NVNT	n(HT20)	2412	Ant1	-19.777	8	Pass
NVNT	n(HT20)	2437	Ant1	-19.838	8	Pass
NVNT	n(HT20)	2462	Ant1	-19.487	8	Pass

Test Graphs

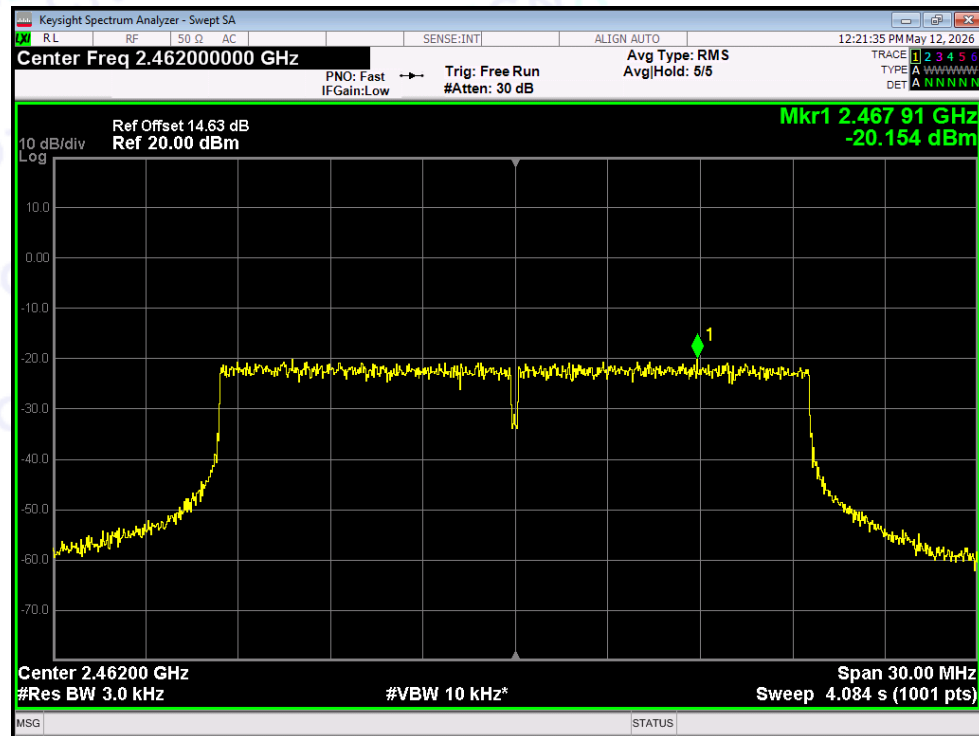
PSD NVNT ax(VHT20) 2412MHz Ant1



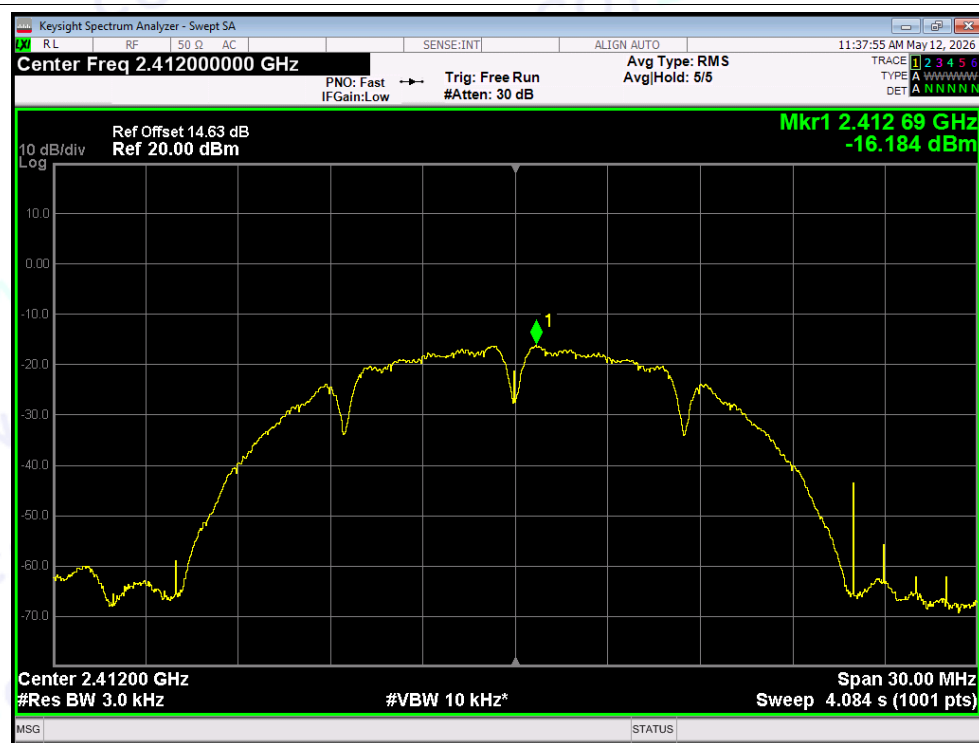
PSD NVNT ax(VHT20) 2437MHz Ant1



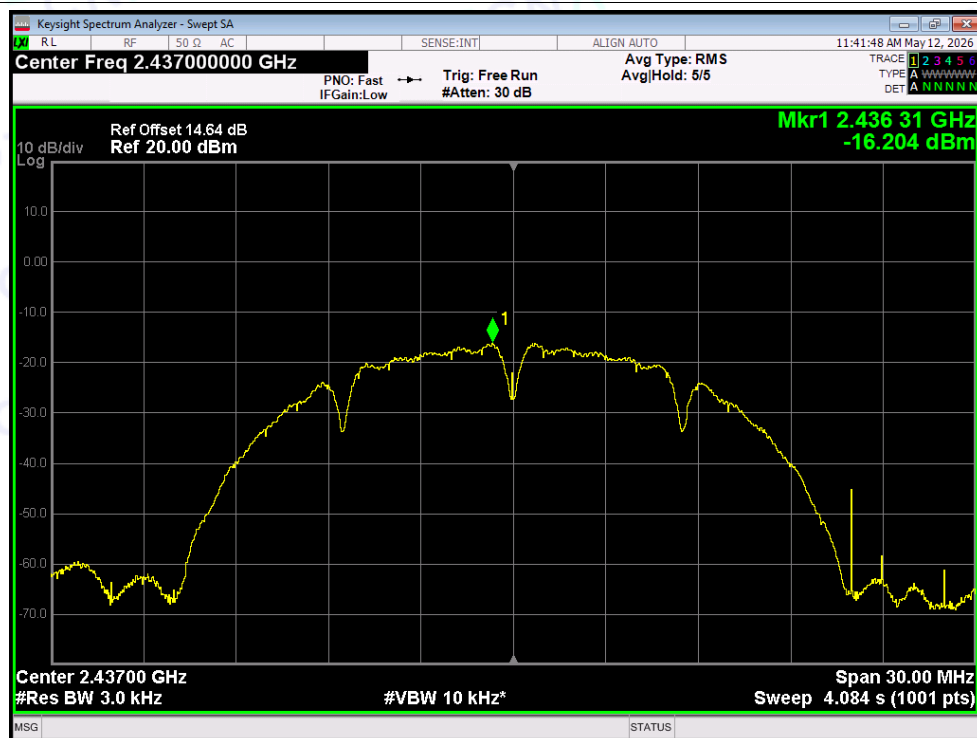
PSD NVNT ax(VHT20) 2462MHz Ant1



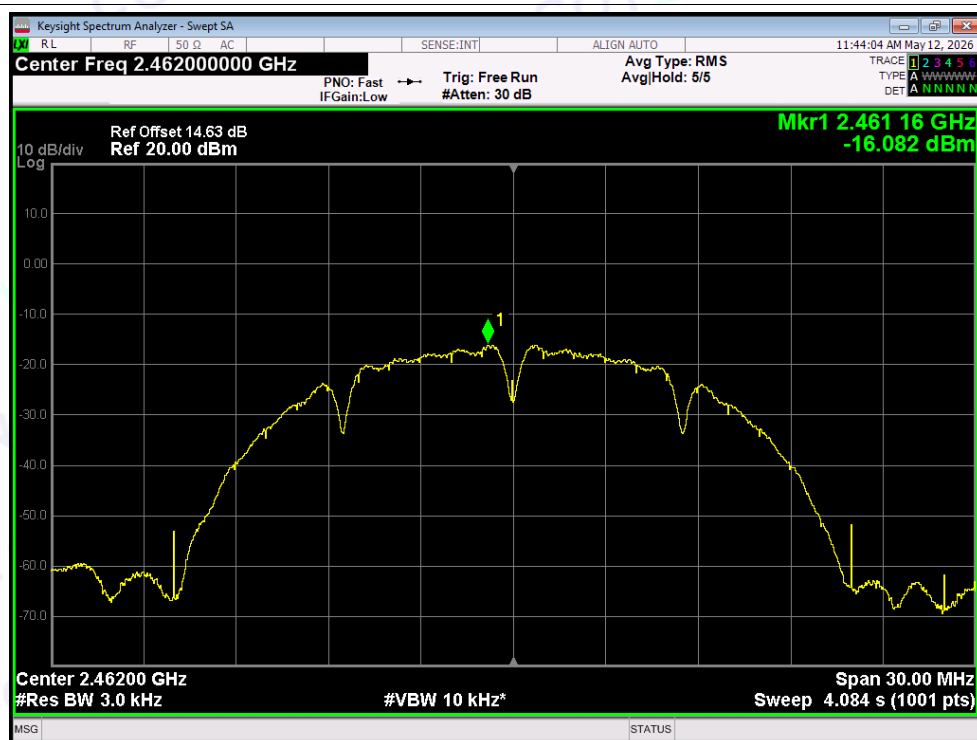
PSD NVNT b 2412MHz Ant1



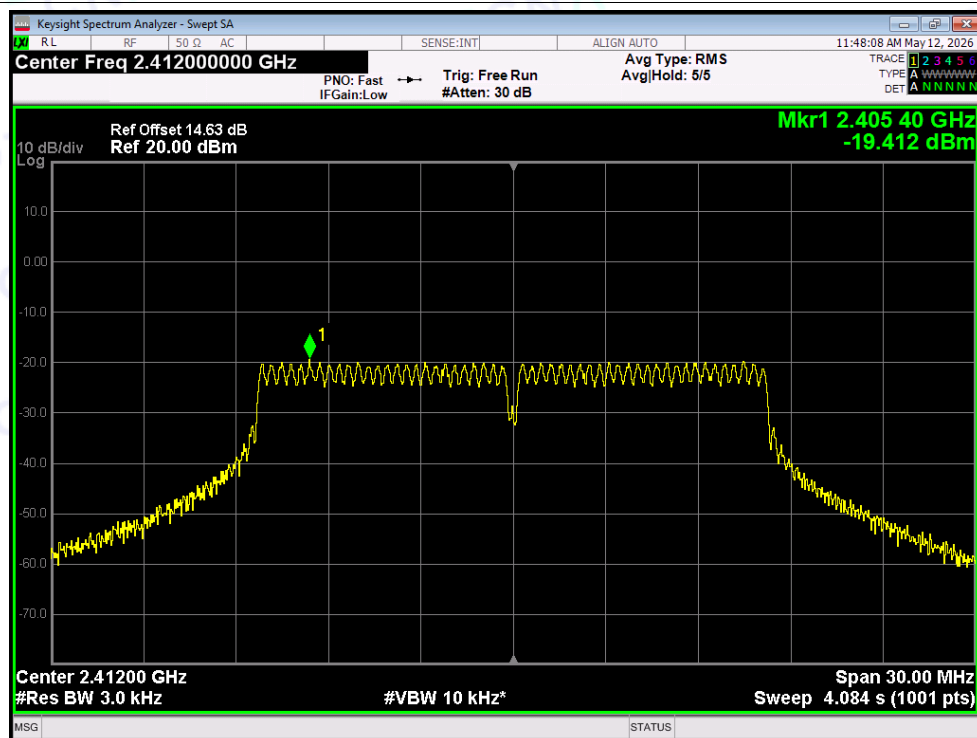
PSD NVNT b 2437MHz Ant1



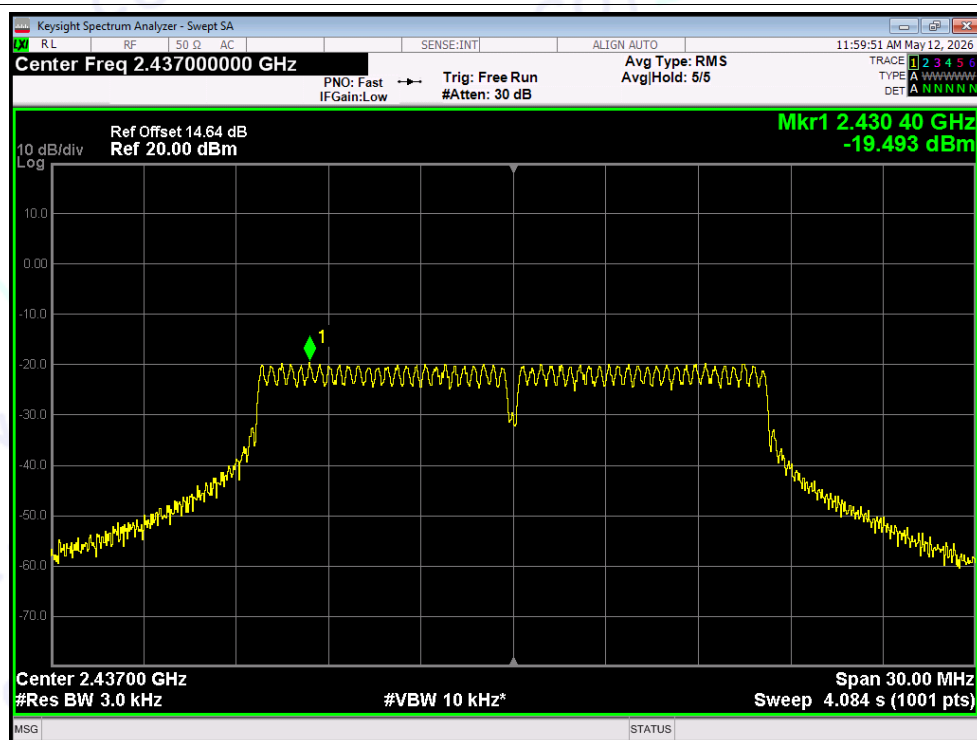
PSD NVNT b 2462MHz Ant1



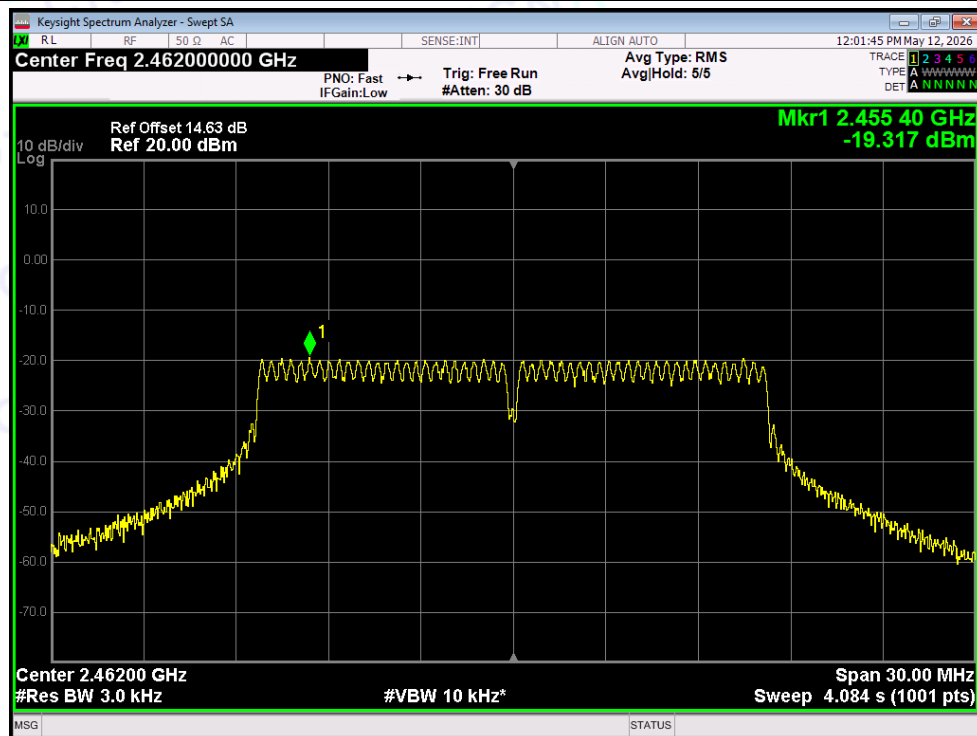
PSD NVNT g 2412MHz Ant1



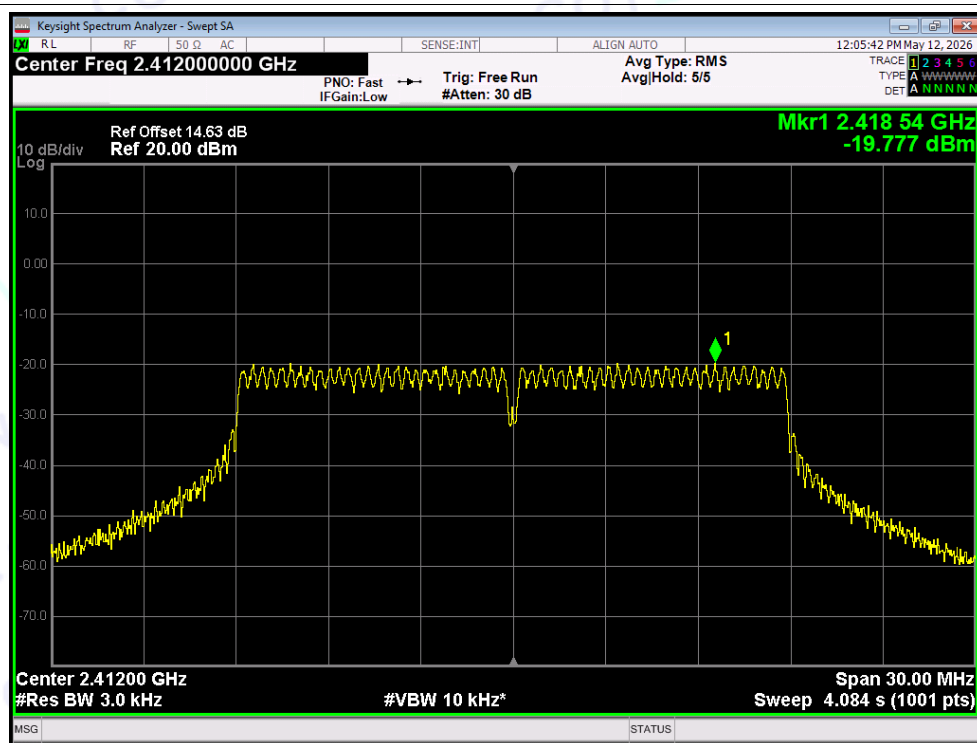
PSD NVNT g 2437MHz Ant1



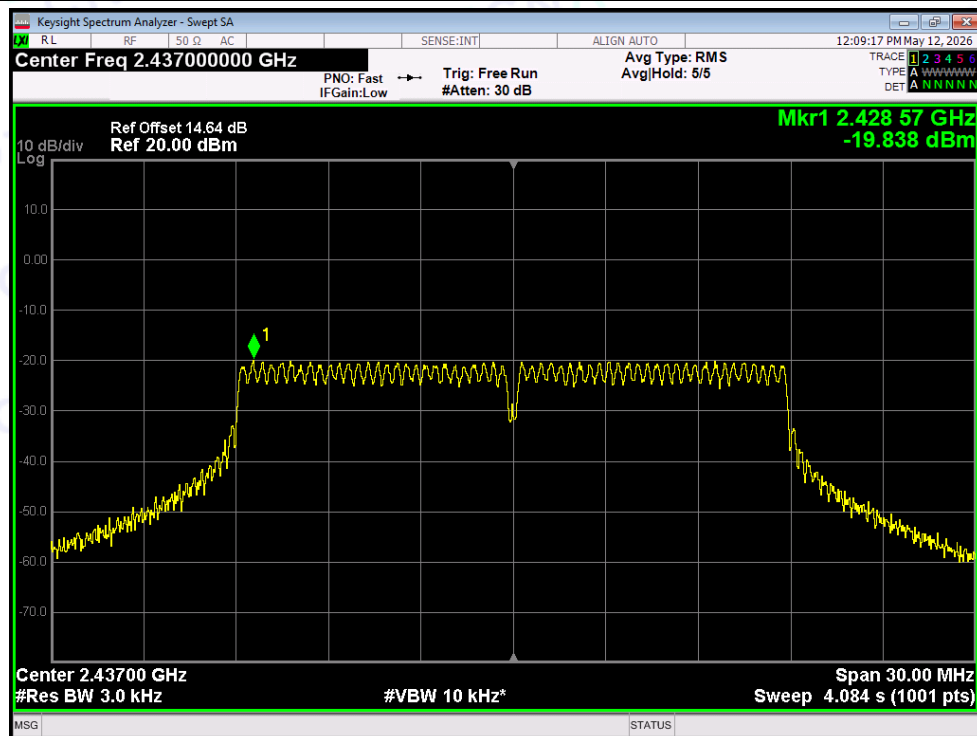
PSD NVNT g 2462MHz Ant1



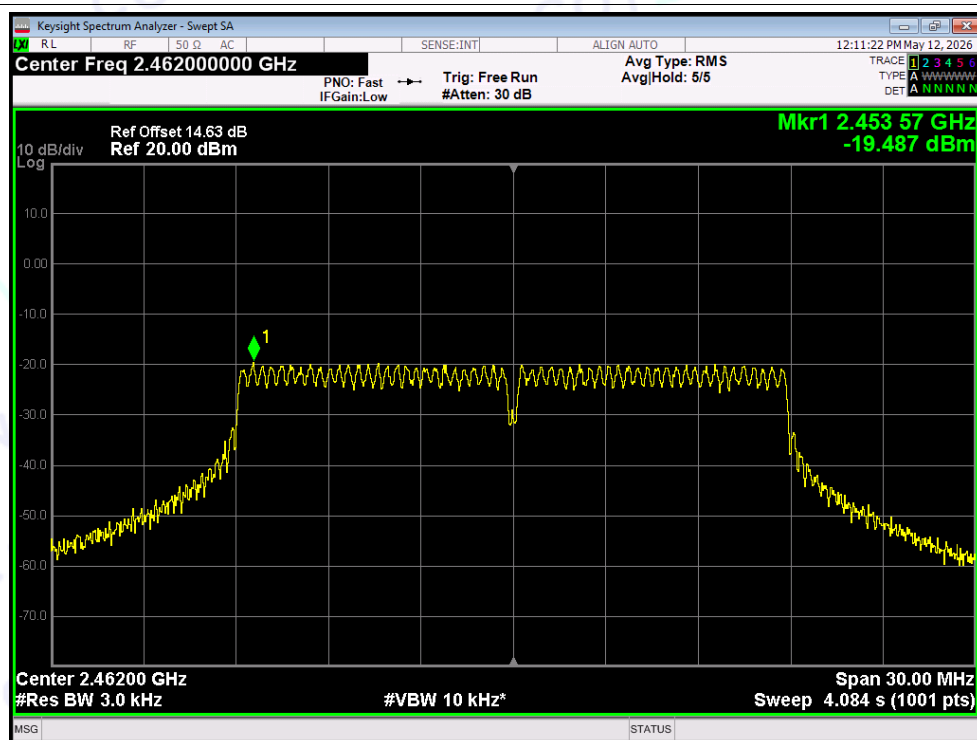
PSD NVNT n(HT20) 2412MHz Ant1



PSD NVNT n(HT20) 2437MHz Ant1



PSD NVNT n(HT20) 2462MHz Ant1

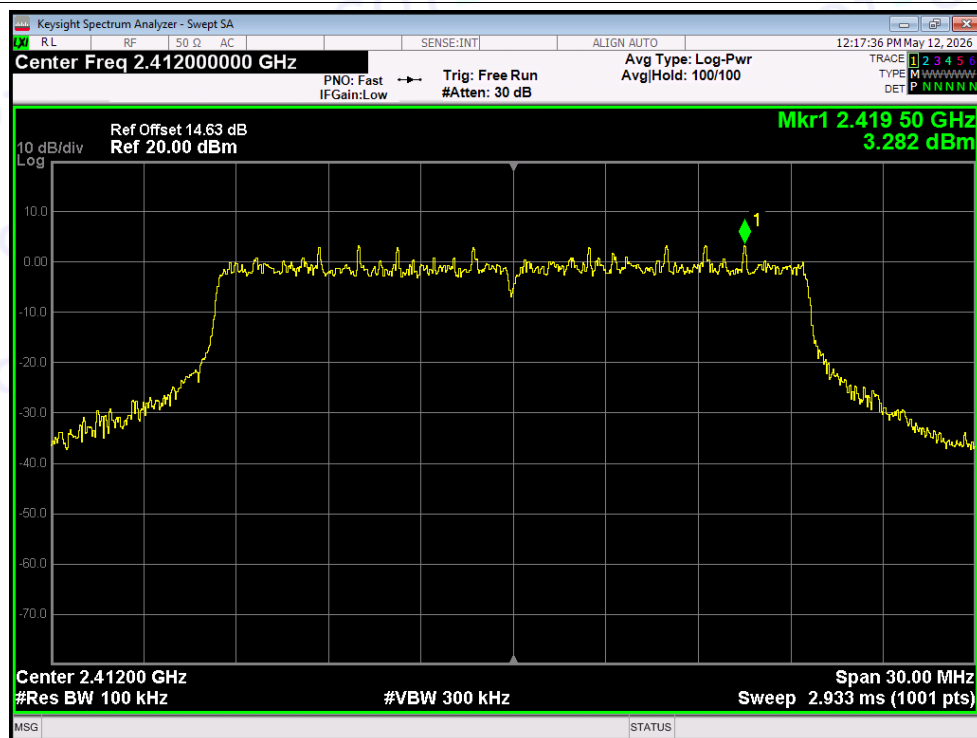


6. Band Edge

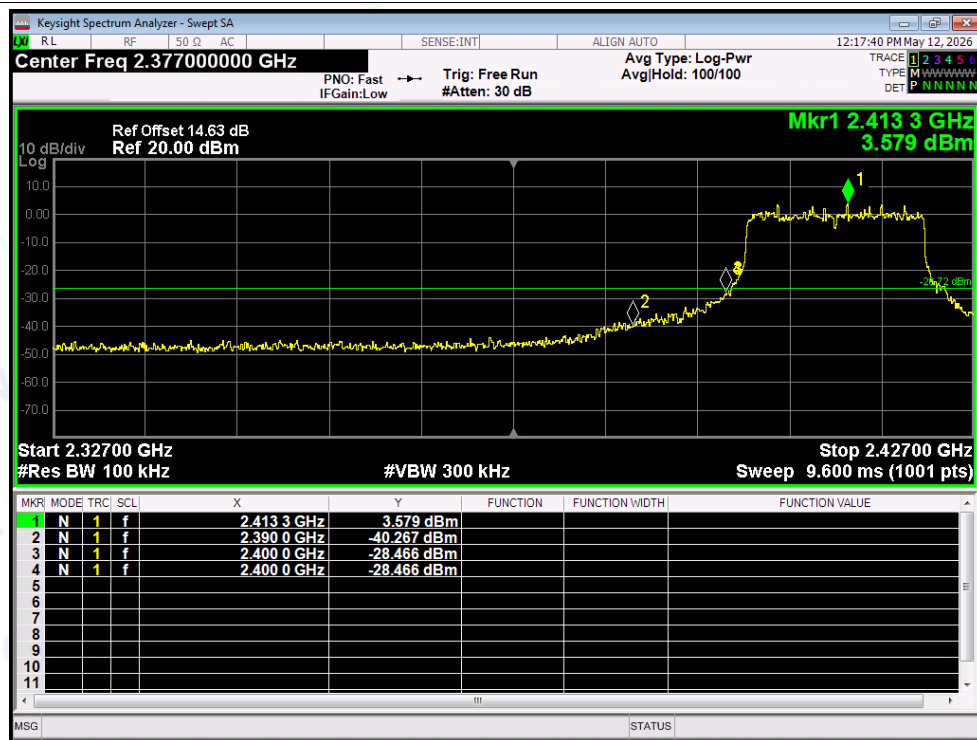
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-31.75	-30	Pass
NVNT	ax(VHT20)	2462	Ant1	-42.85	-30	Pass
NVNT	b	2412	Ant1	-43.25	-30	Pass
NVNT	b	2462	Ant1	-48.48	-30	Pass
NVNT	g	2412	Ant1	-30.83	-30	Pass
NVNT	g	2462	Ant1	-46.13	-30	Pass
NVNT	n(HT20)	2412	Ant1	-30.33	-30	Pass
NVNT	n(HT20)	2462	Ant1	-44.26	-30	Pass

Test Graphs

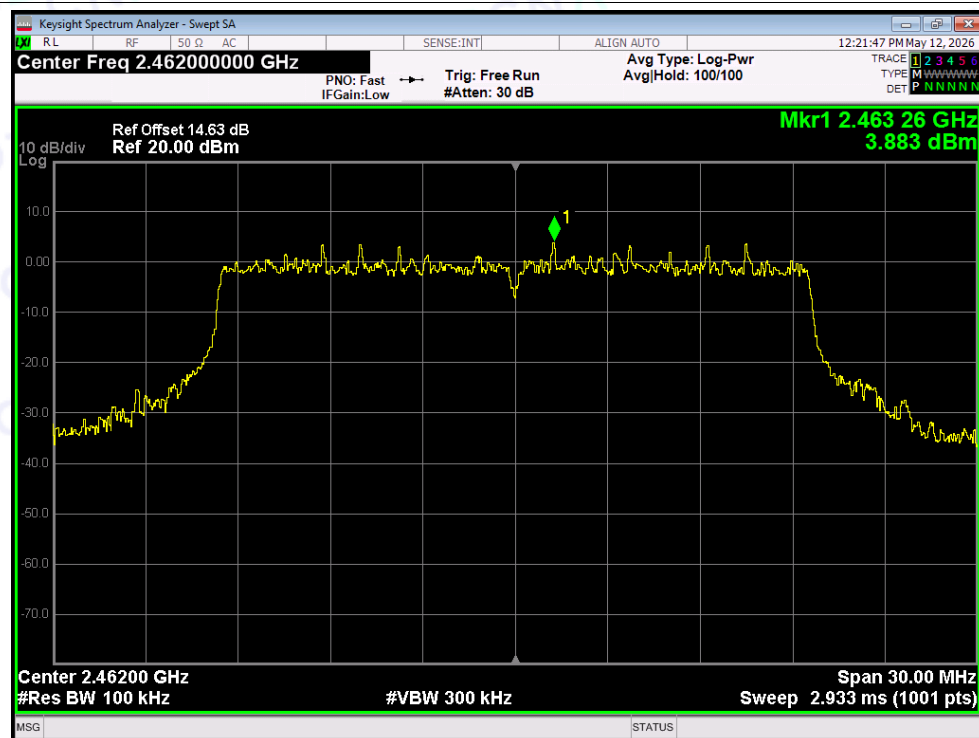
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Ref



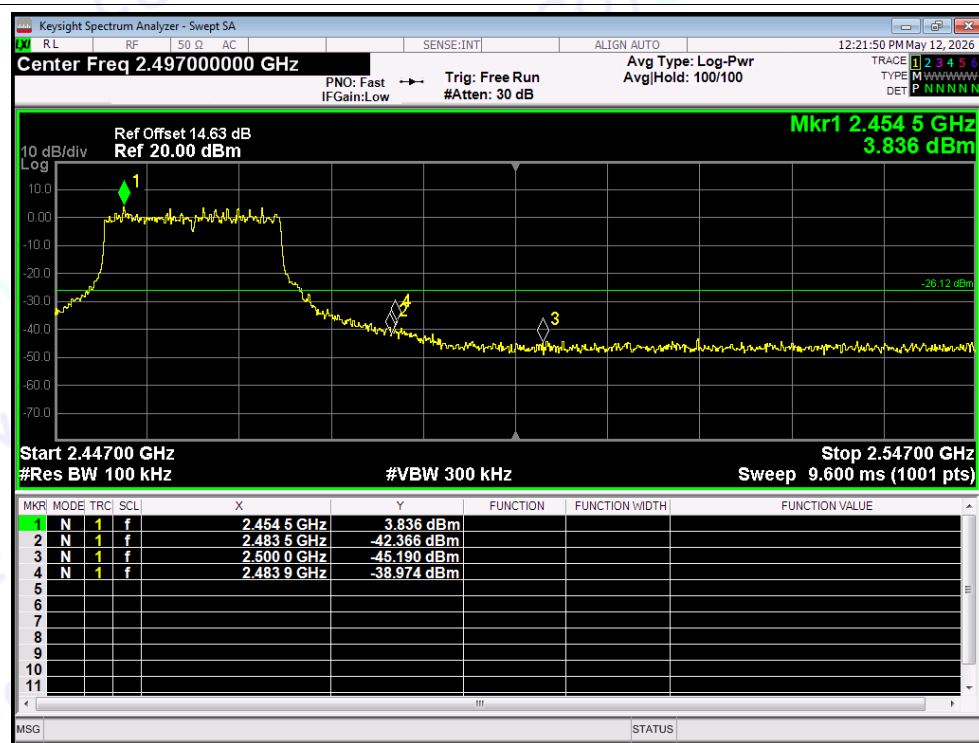
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Emission



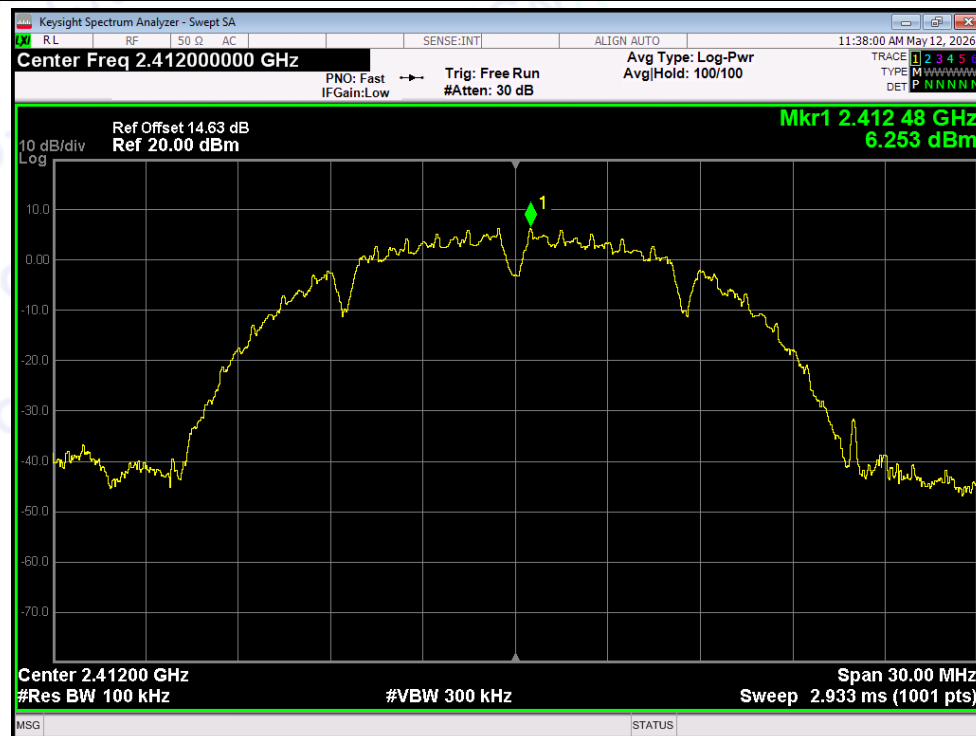
Band Edge NVNT ax(VHT20) 2462MHz Ant1 Ref



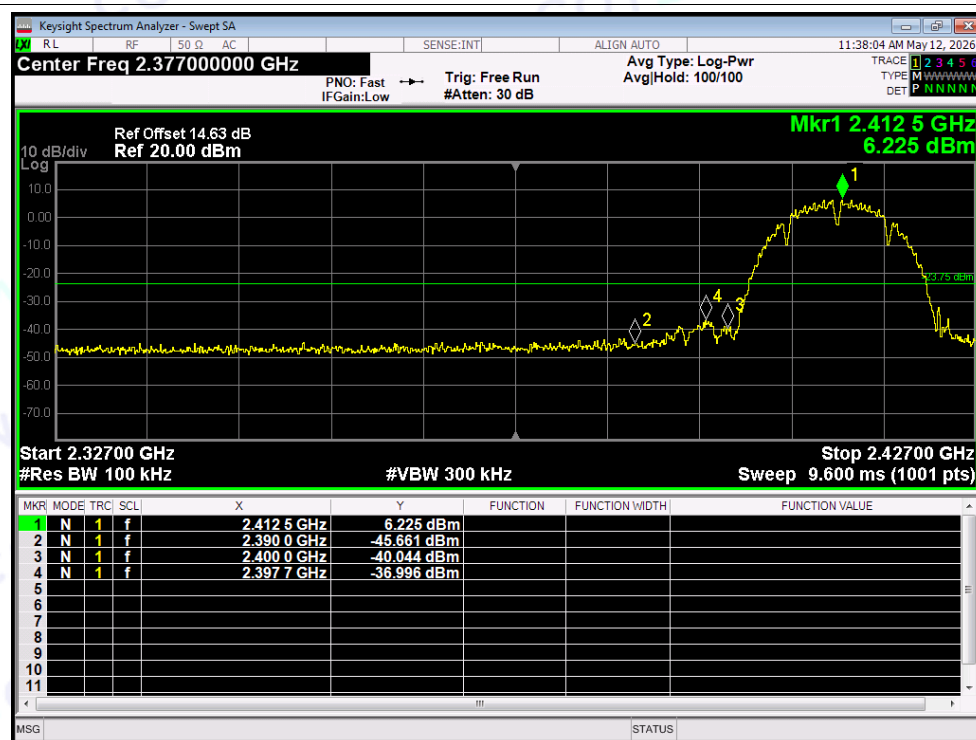
Band Edge NVNT ax(VHT20) 2462MHz Ant1 Emission



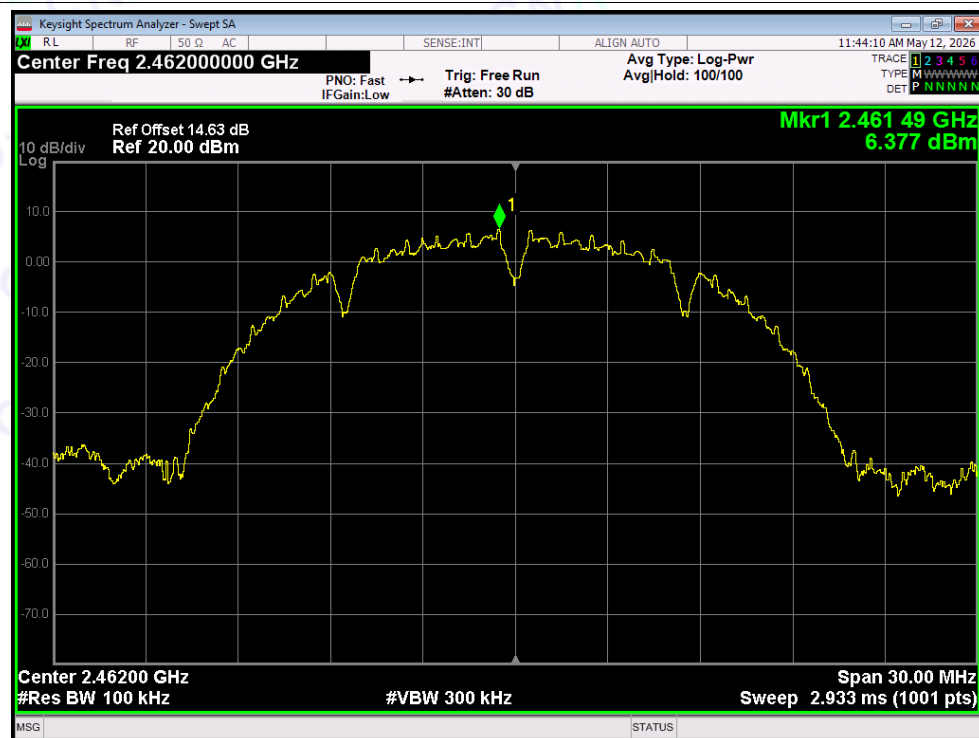
Band Edge NVNT b 2412MHz Ant1 Ref



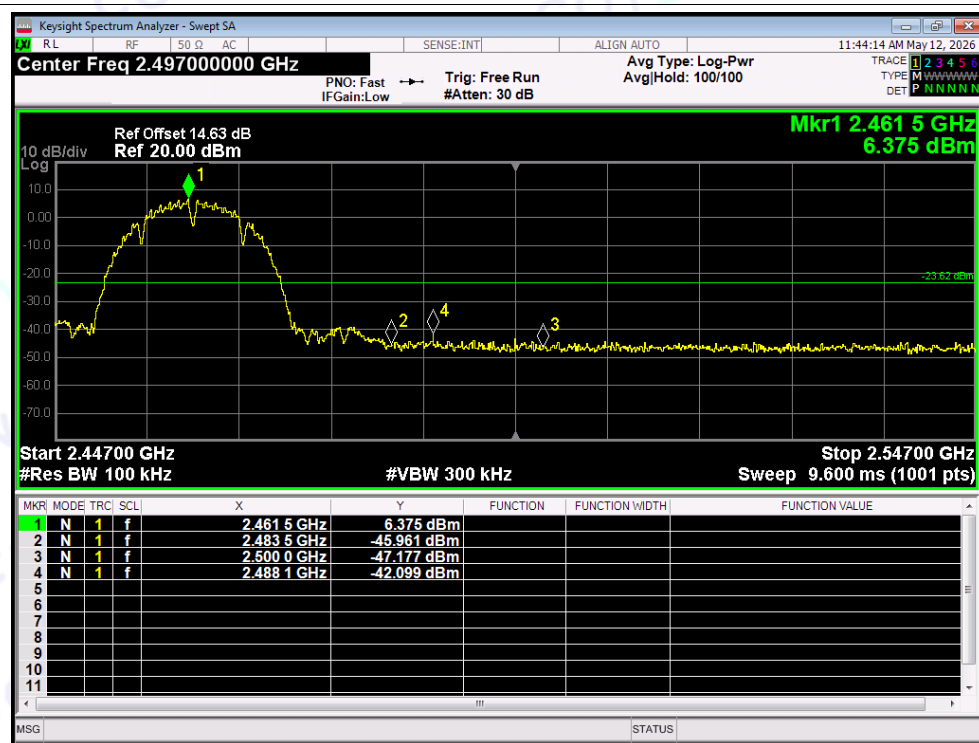
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



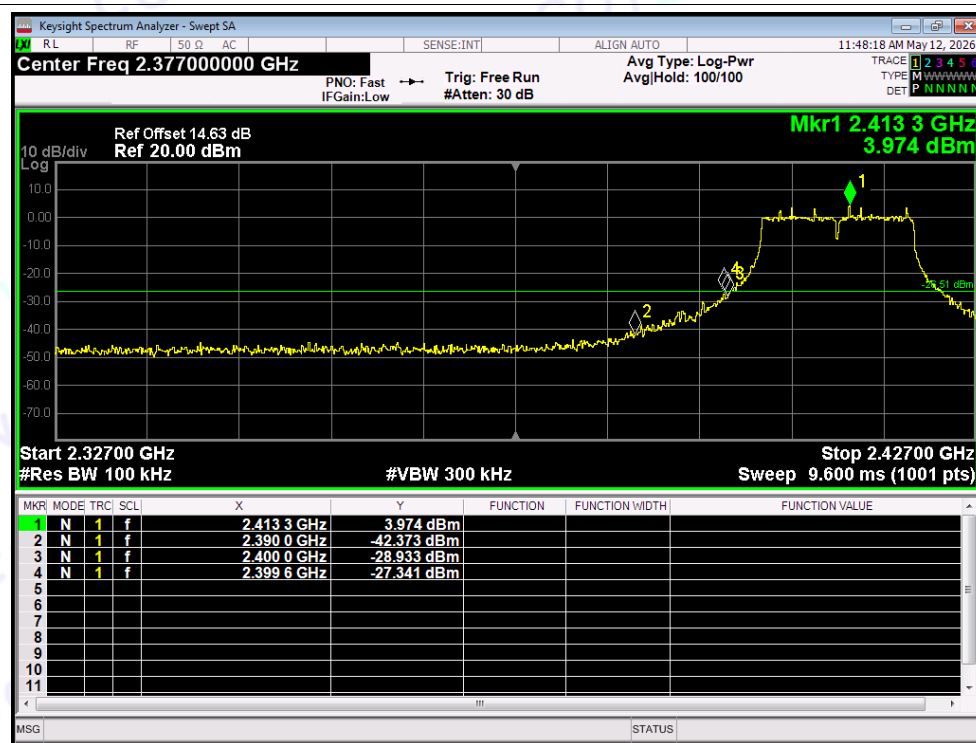
Band Edge NVNT b 2462MHz Ant1 Emission



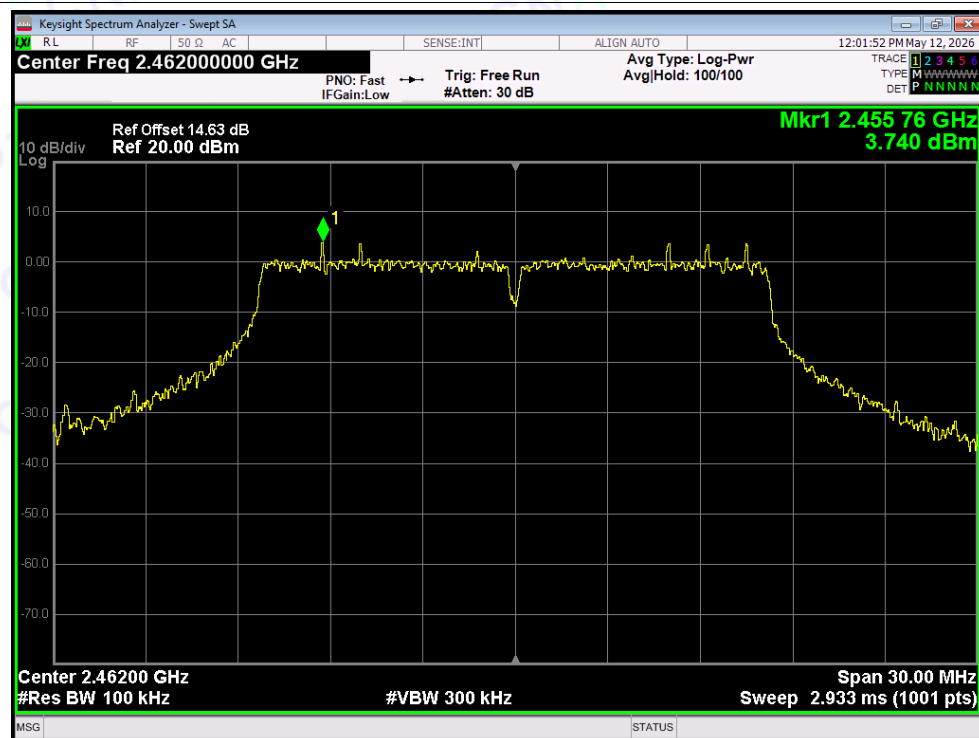
Band Edge NVNT g 2412MHz Ant1 Ref



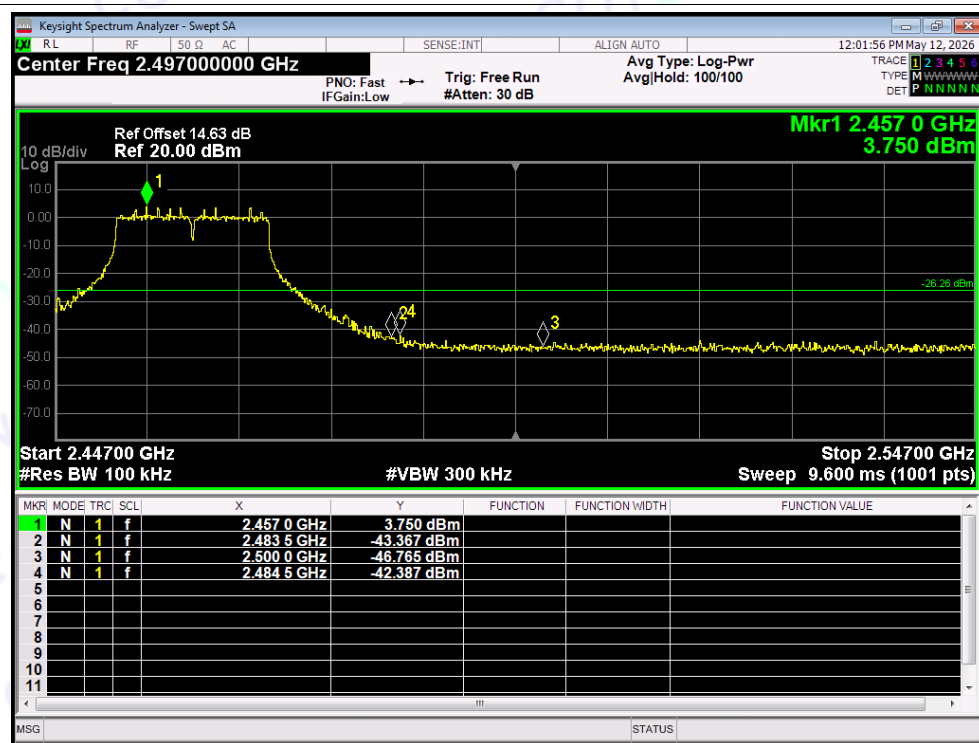
Band Edge NVNT g 2412MHz Ant1 Emission



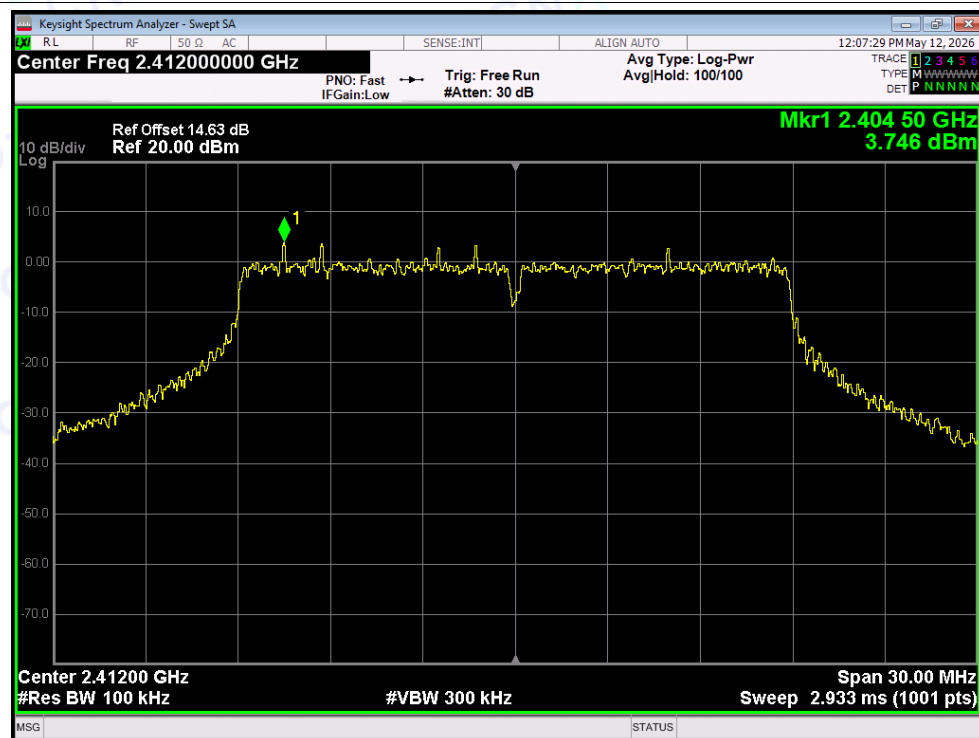
Band Edge NVNT g 2462MHz Ant1 Ref



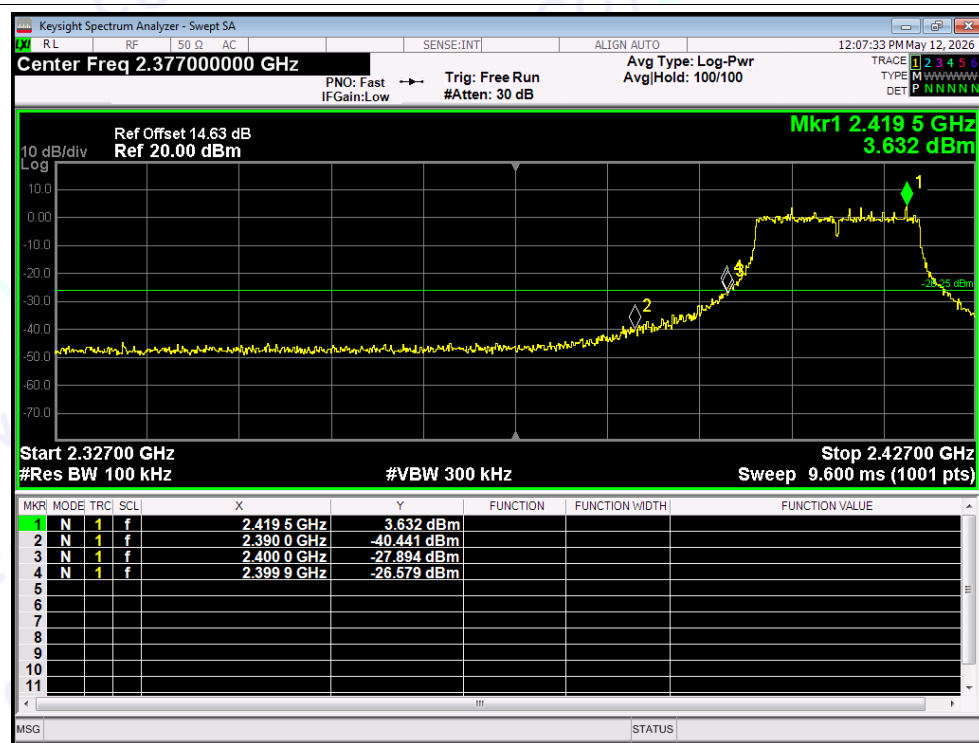
Band Edge NVNT g 2462MHz Ant1 Emission



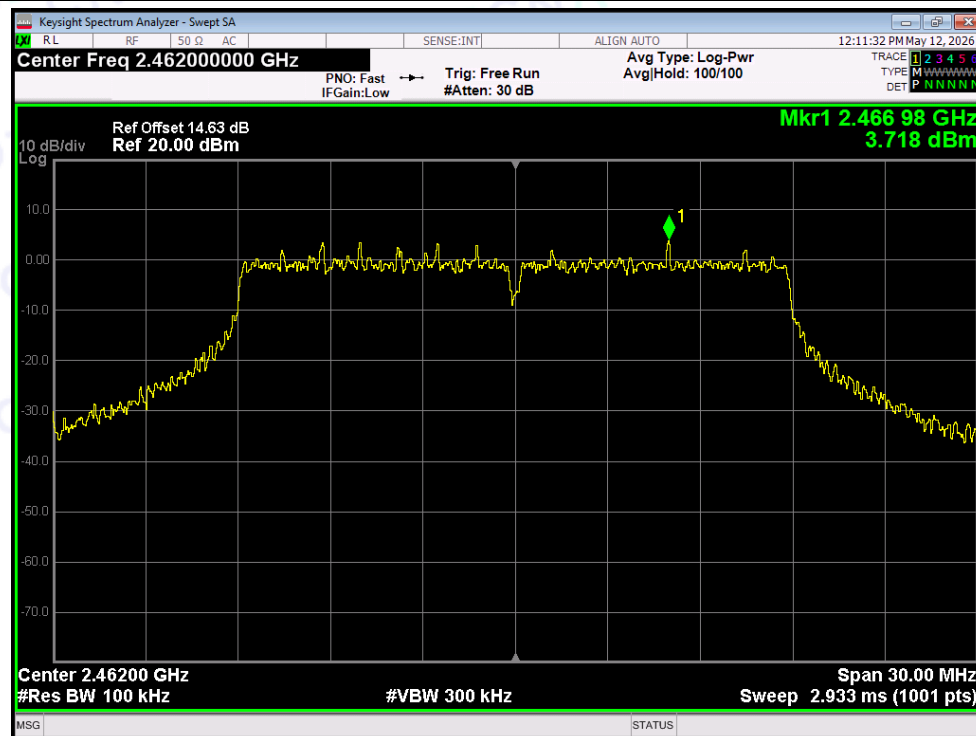
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



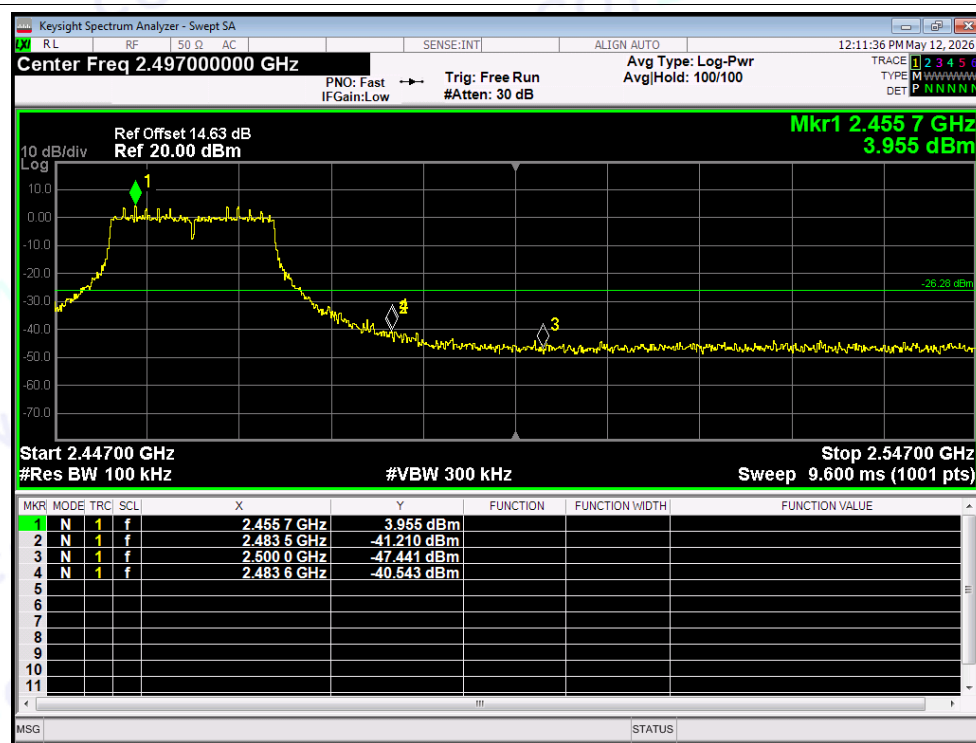
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



Band Edge NVNT n(HT20) 2462MHz Ant1 Emission

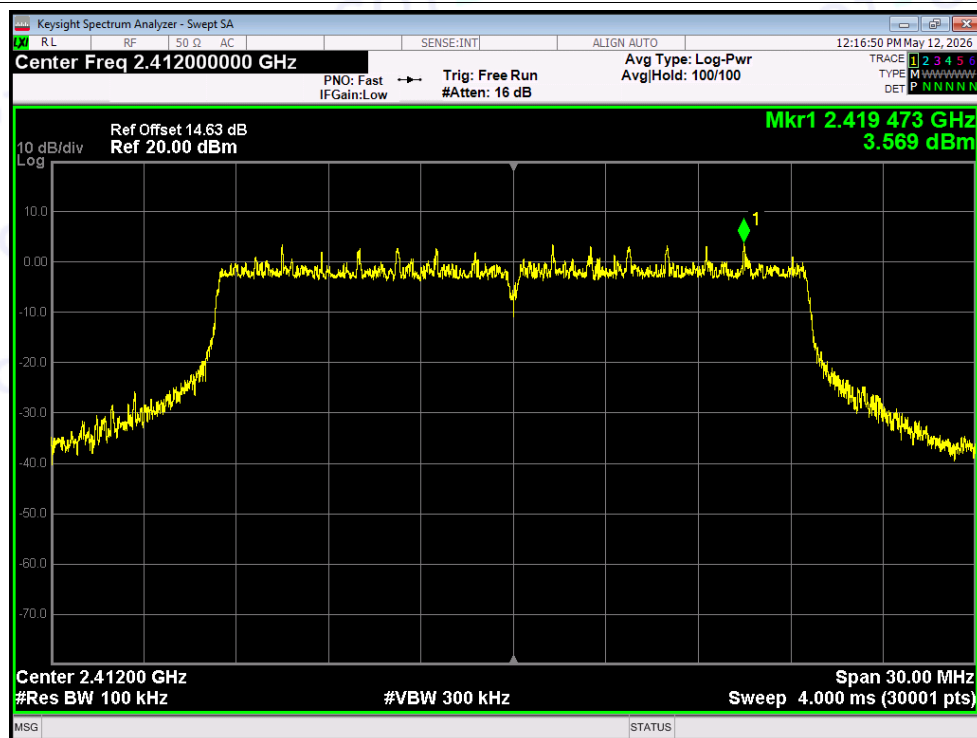


7. Conducted RF Spurious Emission

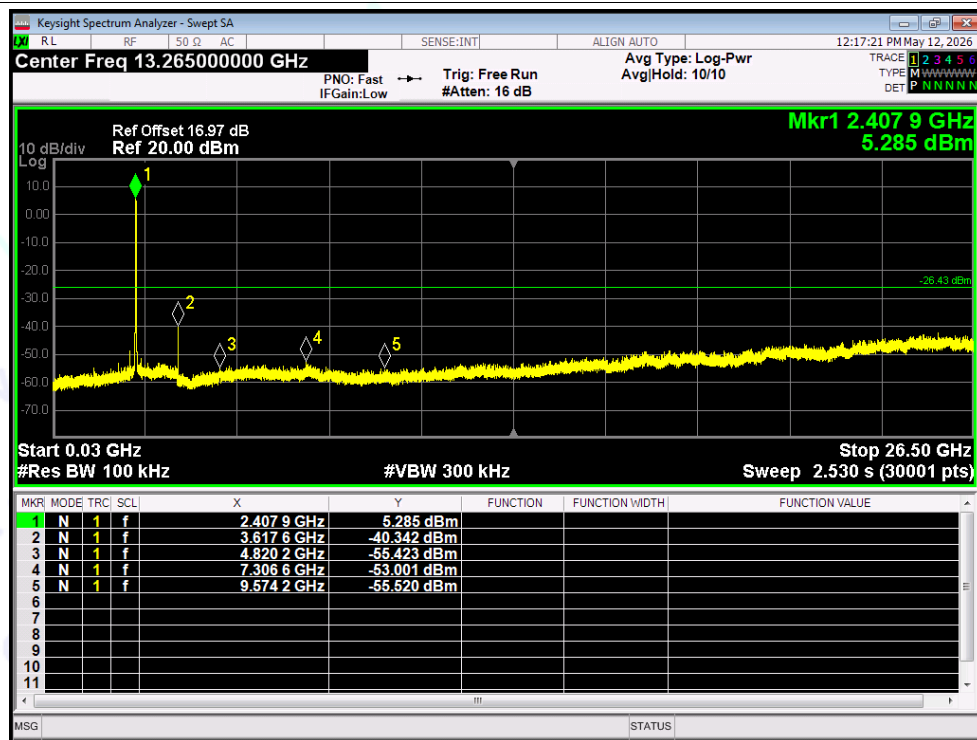
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-43.91	-30	Pass
NVNT	ax(VHT20)	2437	Ant1	-43.2	-30	Pass
NVNT	ax(VHT20)	2462	Ant1	-43.36	-30	Pass
NVNT	b	2412	Ant1	-46.85	-30	Pass
NVNT	b	2437	Ant1	-46.46	-30	Pass
NVNT	b	2462	Ant1	-46.13	-30	Pass
NVNT	g	2412	Ant1	-44.35	-30	Pass
NVNT	g	2437	Ant1	-43.2	-30	Pass
NVNT	g	2462	Ant1	-43.78	-30	Pass
NVNT	n(HT20)	2412	Ant1	-44.24	-30	Pass
NVNT	n(HT20)	2437	Ant1	-43.95	-30	Pass
NVNT	n(HT20)	2462	Ant1	-43.17	-30	Pass

Test Graphs

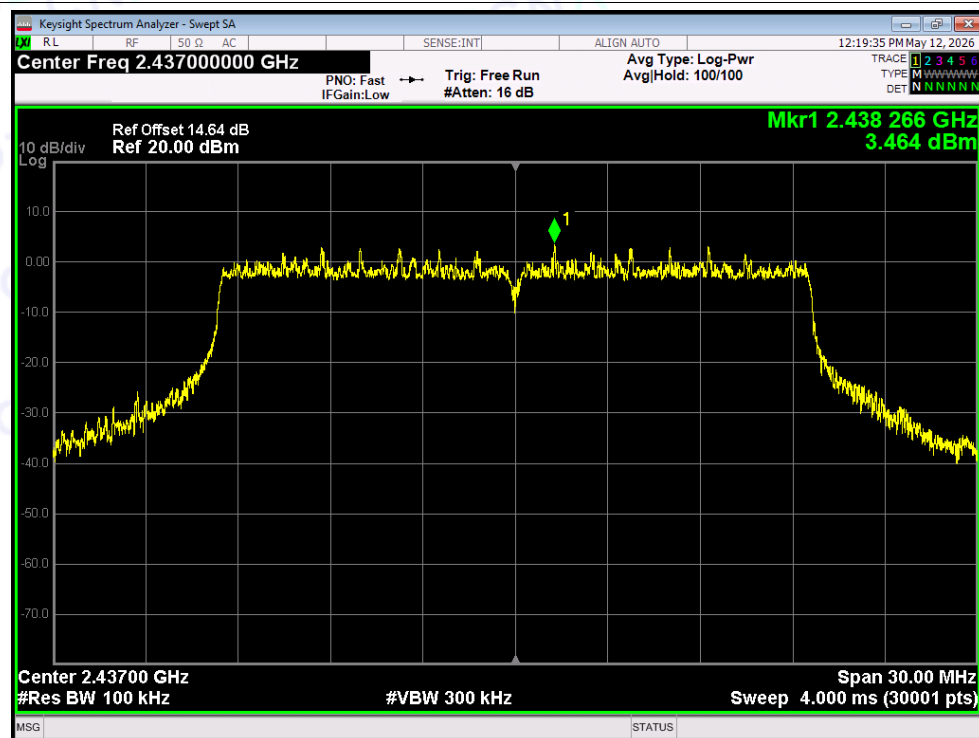
Tx. Spurious NVNT ax(VHT20) 2412MHz Ant1 Ref



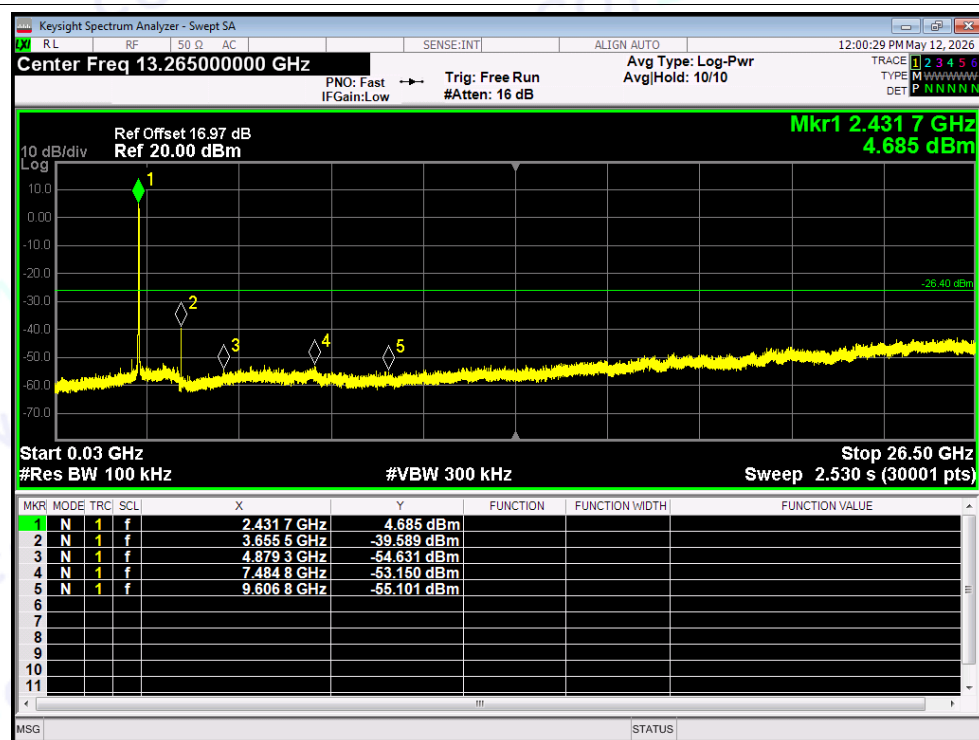
Tx. Spurious NVNT ax(VHT20) 2412MHz Ant1 Emission



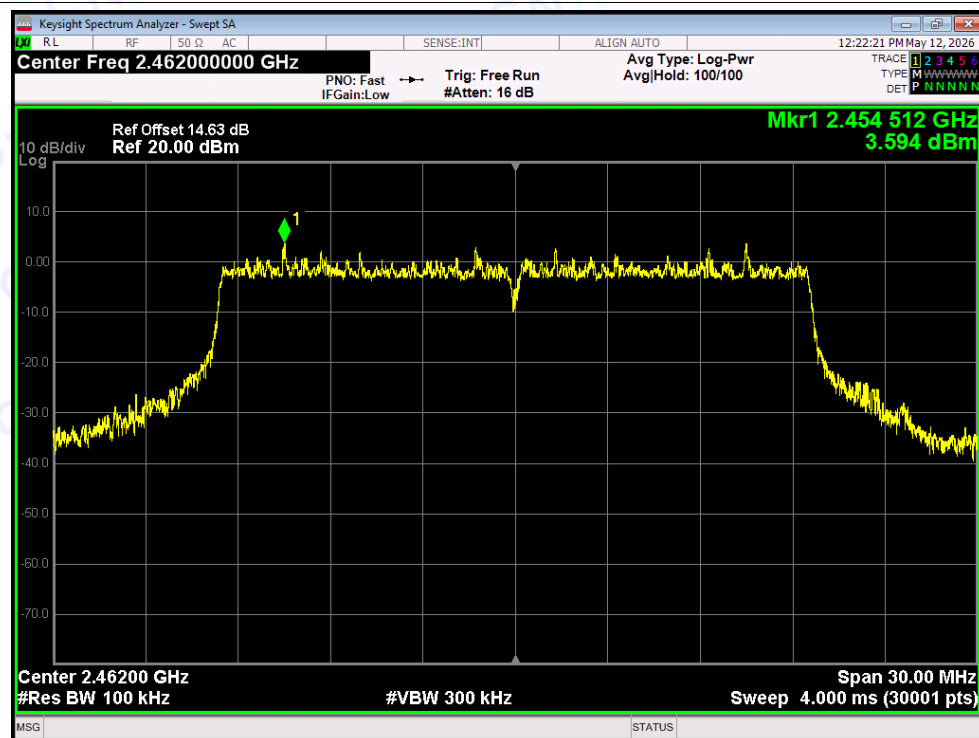
Tx. Spurious NVNT ax(VHT20) 2437MHz Ant1 Ref



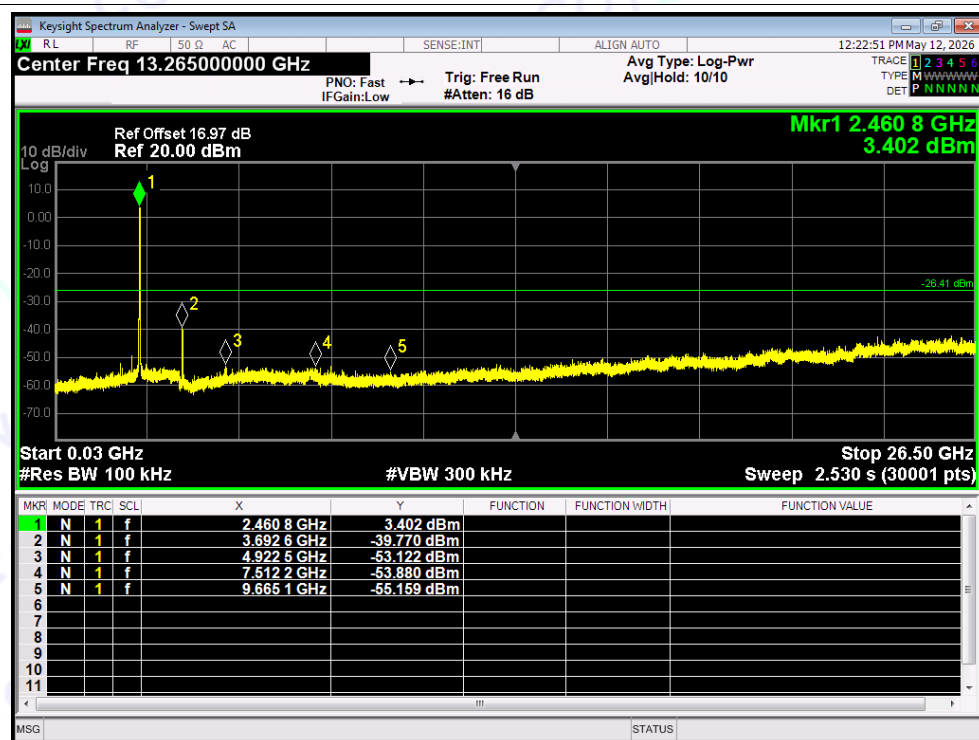
Tx. Spurious NVNT ax(VHT20) 2437MHz Ant1 Emission



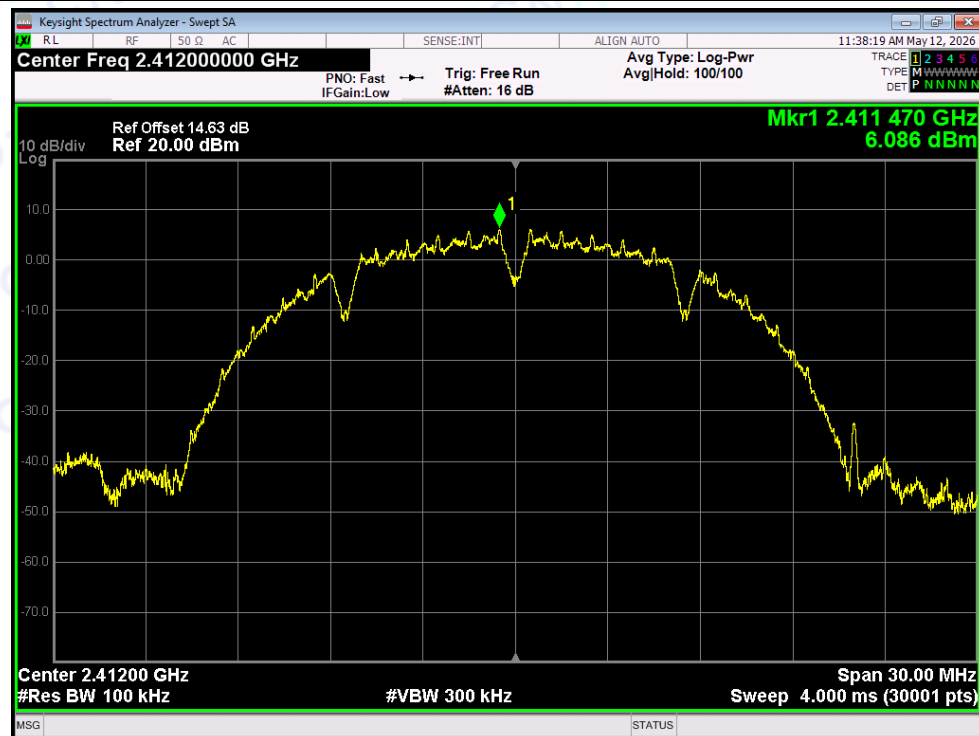
Tx. Spurious NVNT ax(VHT20) 2462MHz Ant1 Ref



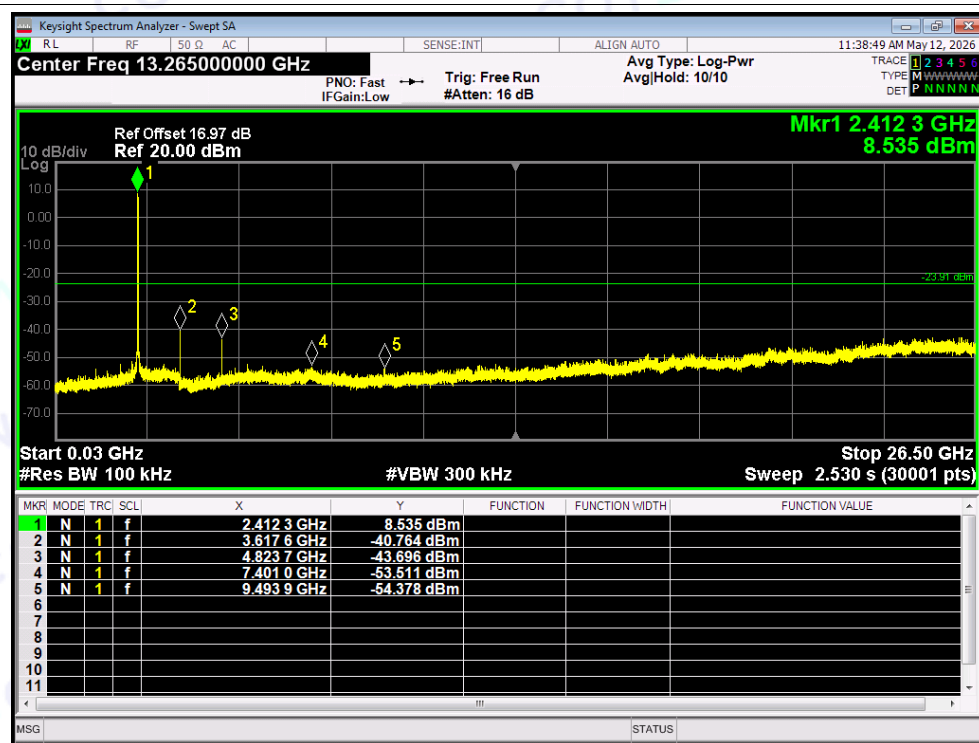
Tx. Spurious NVNT ax(VHT20) 2462MHz Ant1 Emission



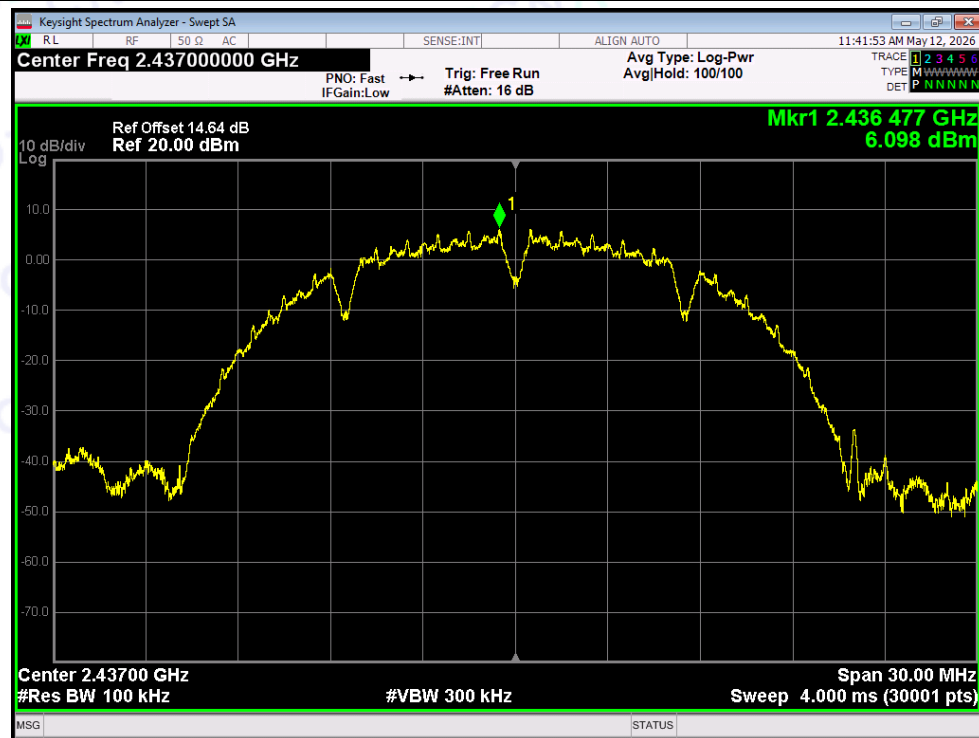
Tx. Spurious NVNT b 2412MHz Ant1 Ref



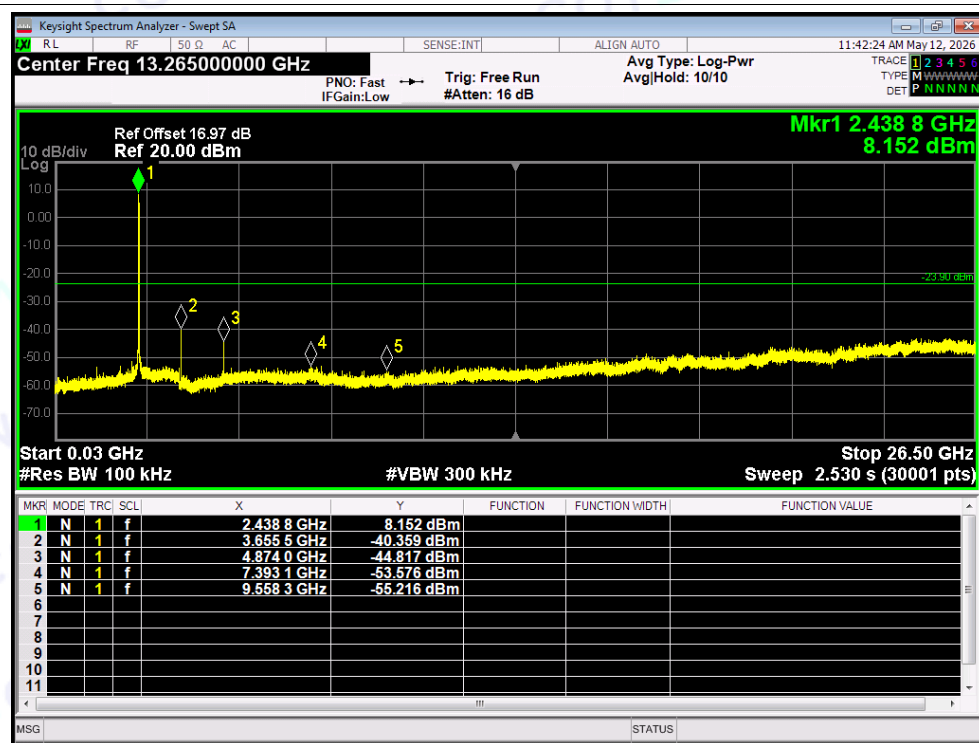
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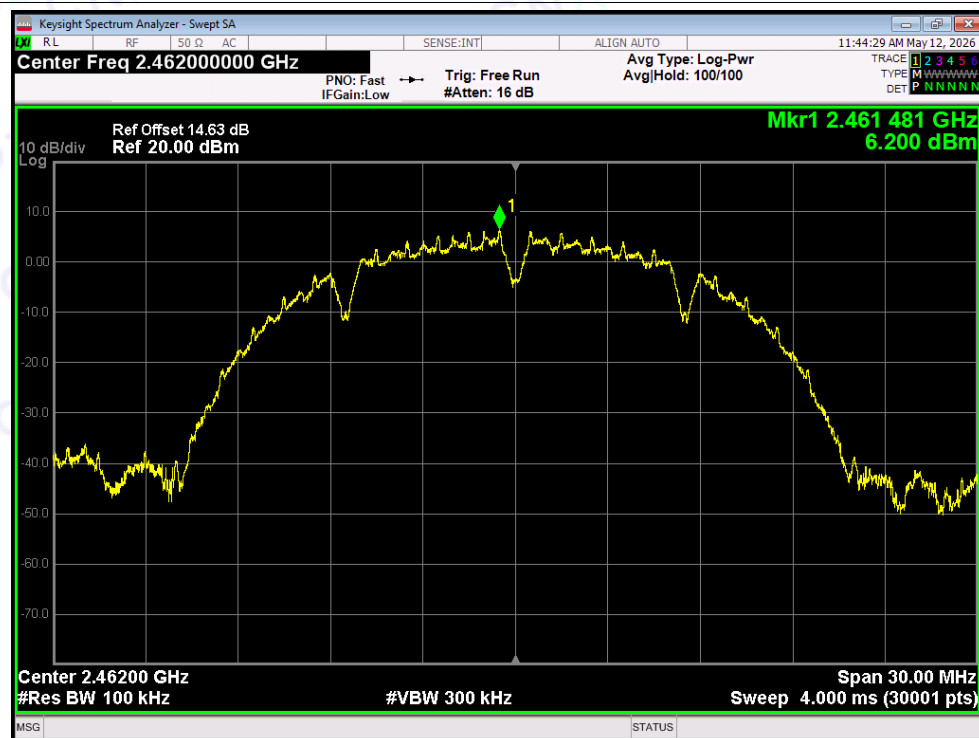
Tx. Spurious NVNT b 2437MHz Ant1 Ref



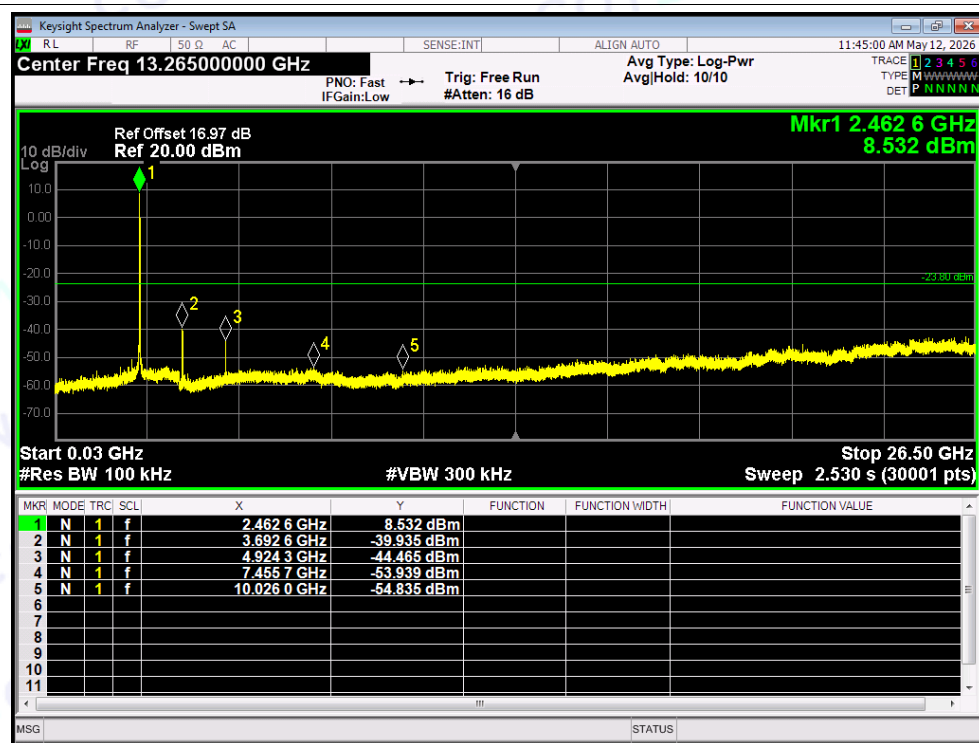
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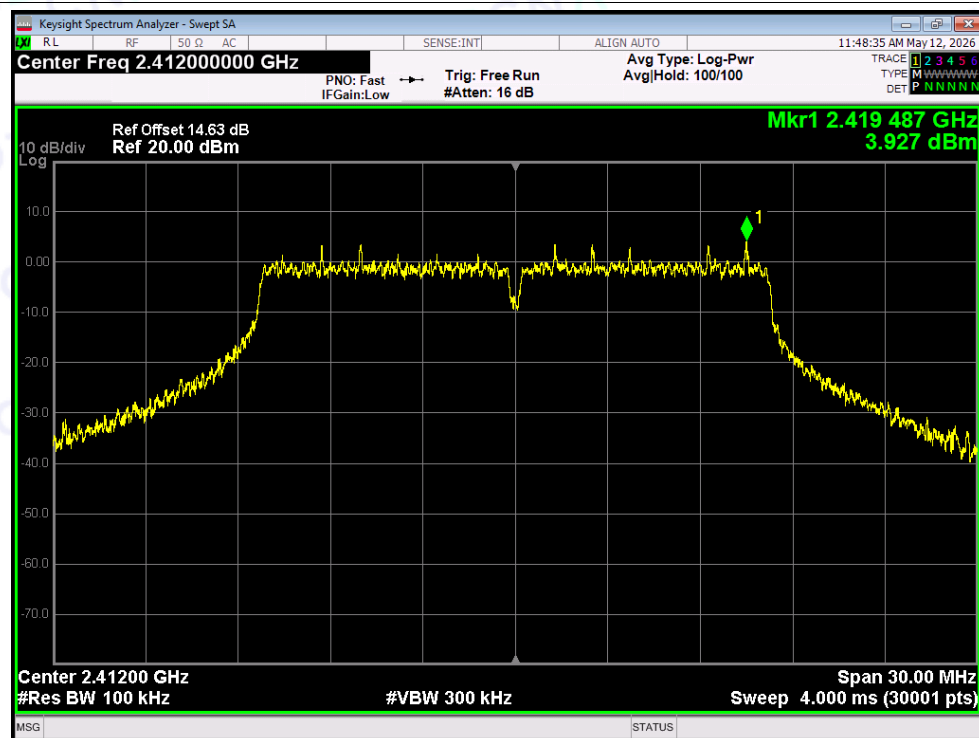
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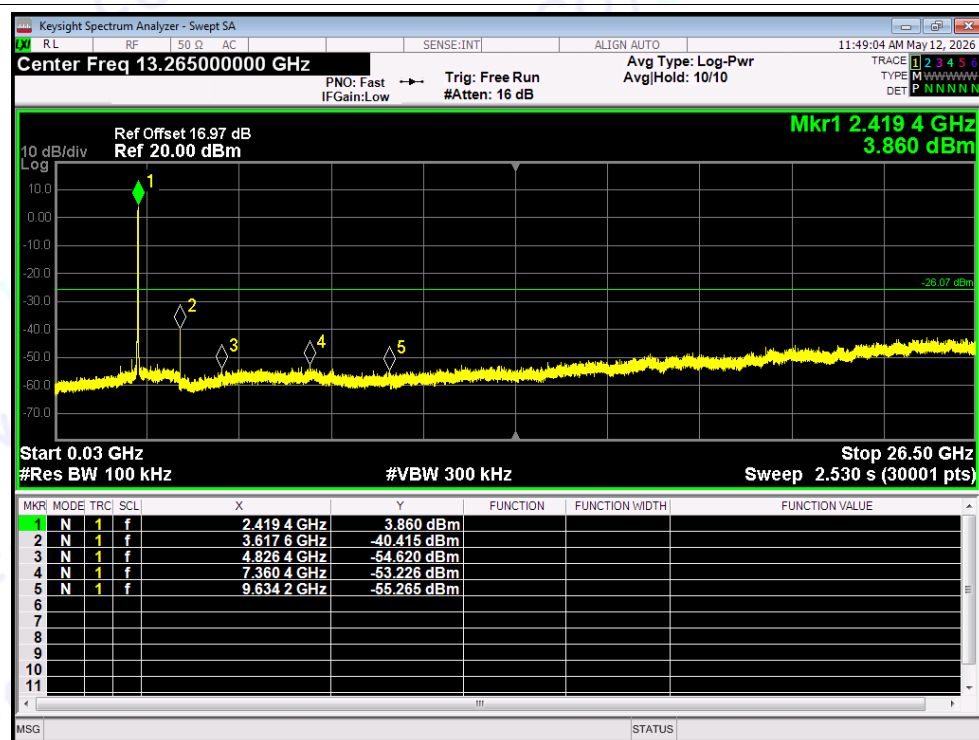
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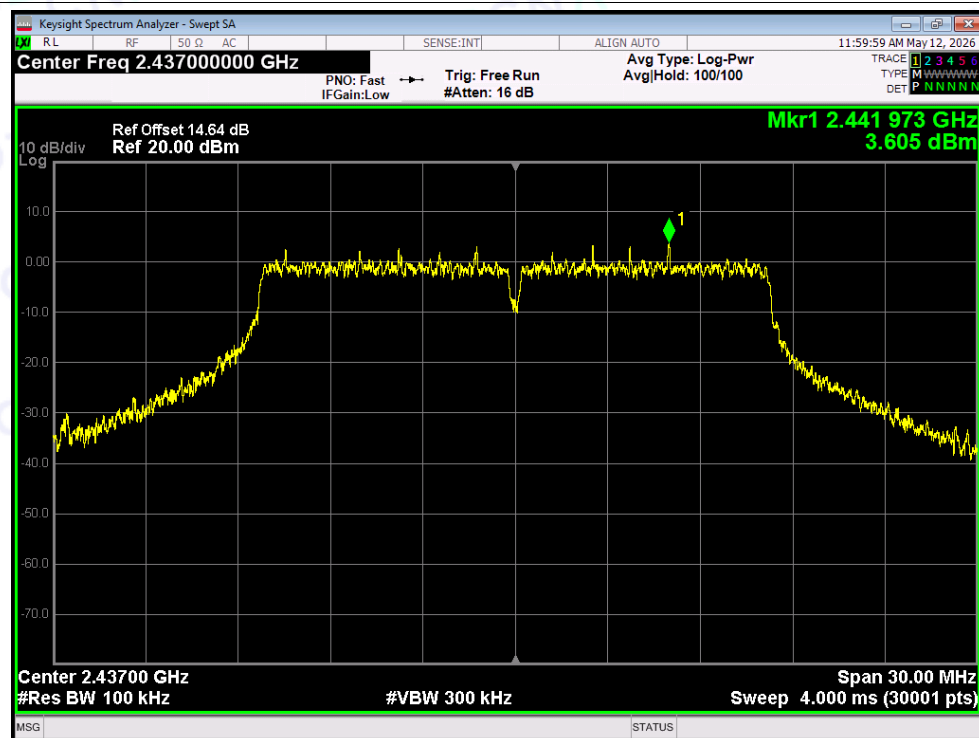
Tx. Spurious NVNT g 2412MHz Ant1 Ref



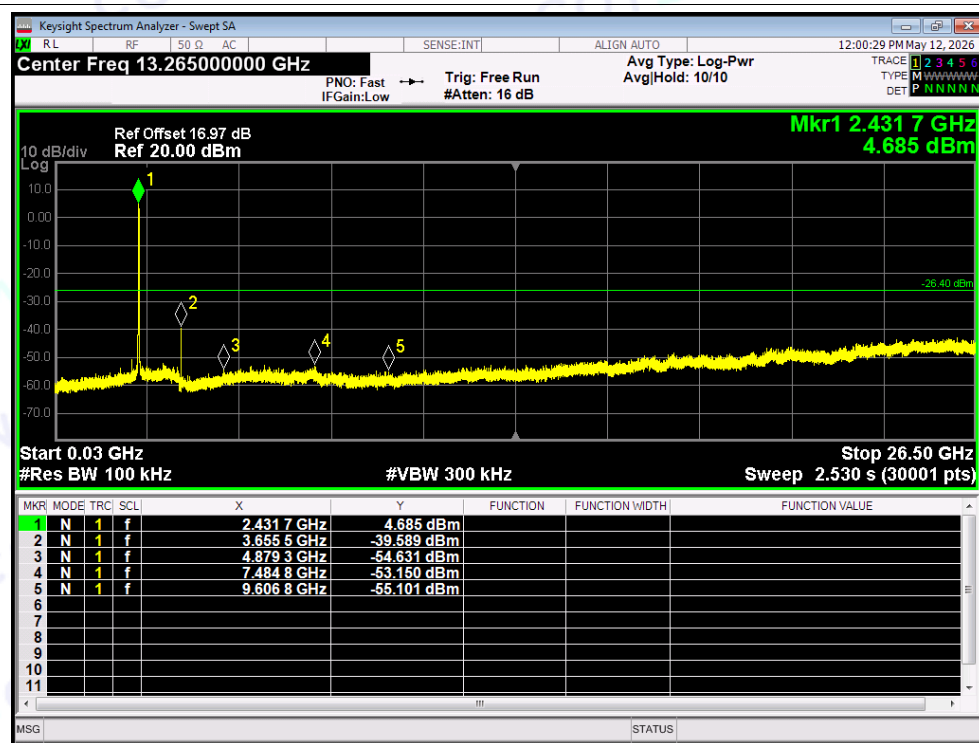
Tx. Spurious NVNT g 2412MHz Ant1 Emission



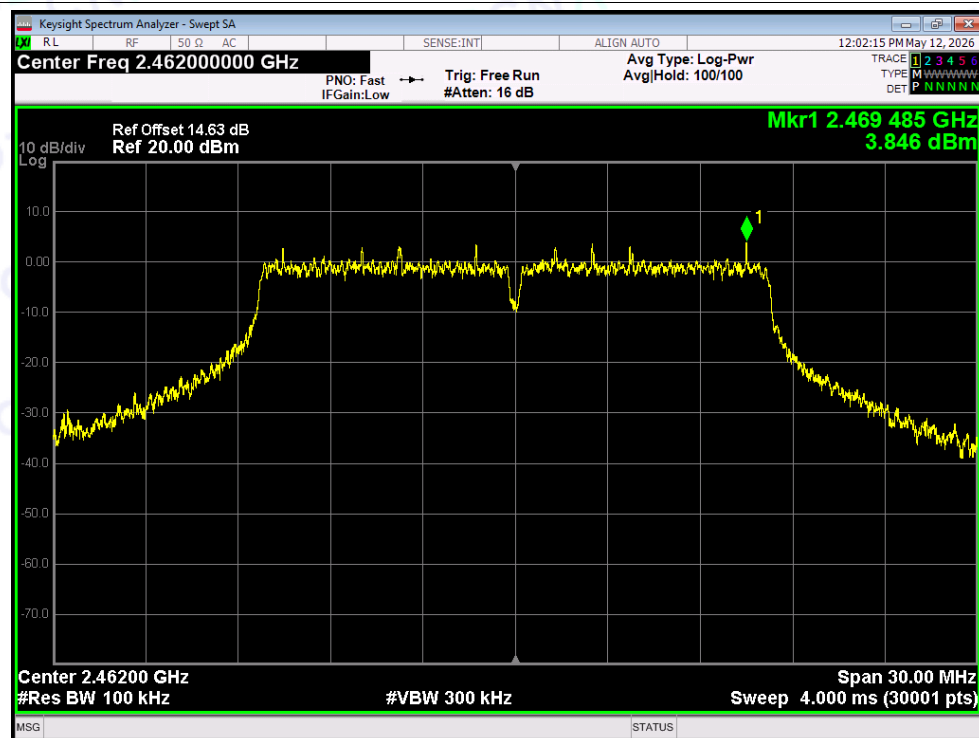
Tx. Spurious NVNT g 2437MHz Ant1 Ref



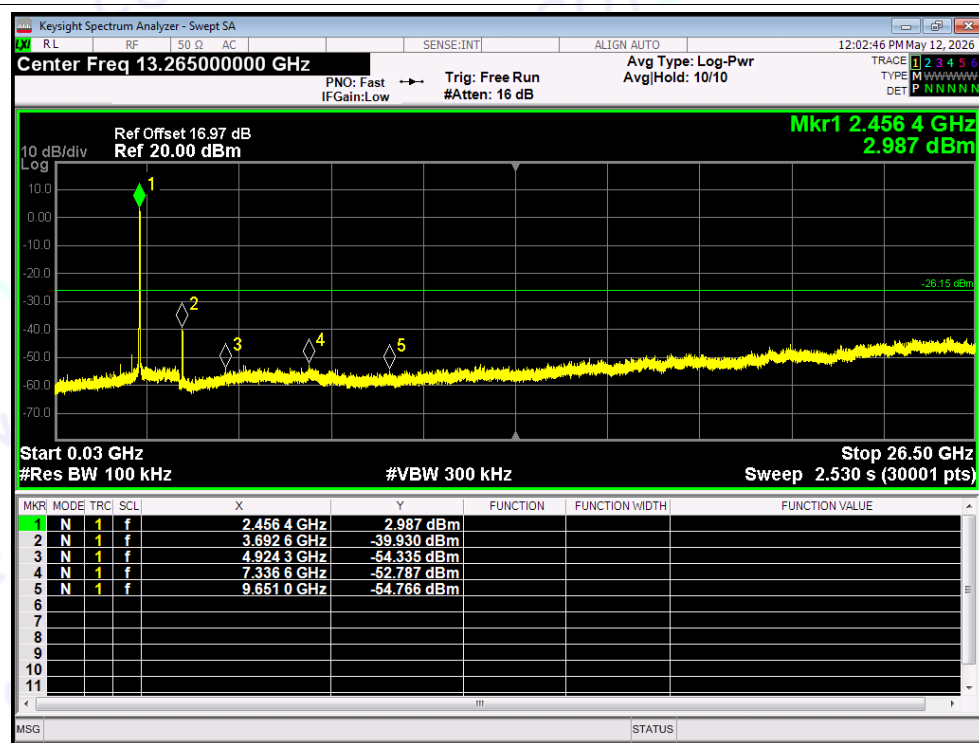
Tx. Spurious NVNT g 2437MHz Ant1 Emission



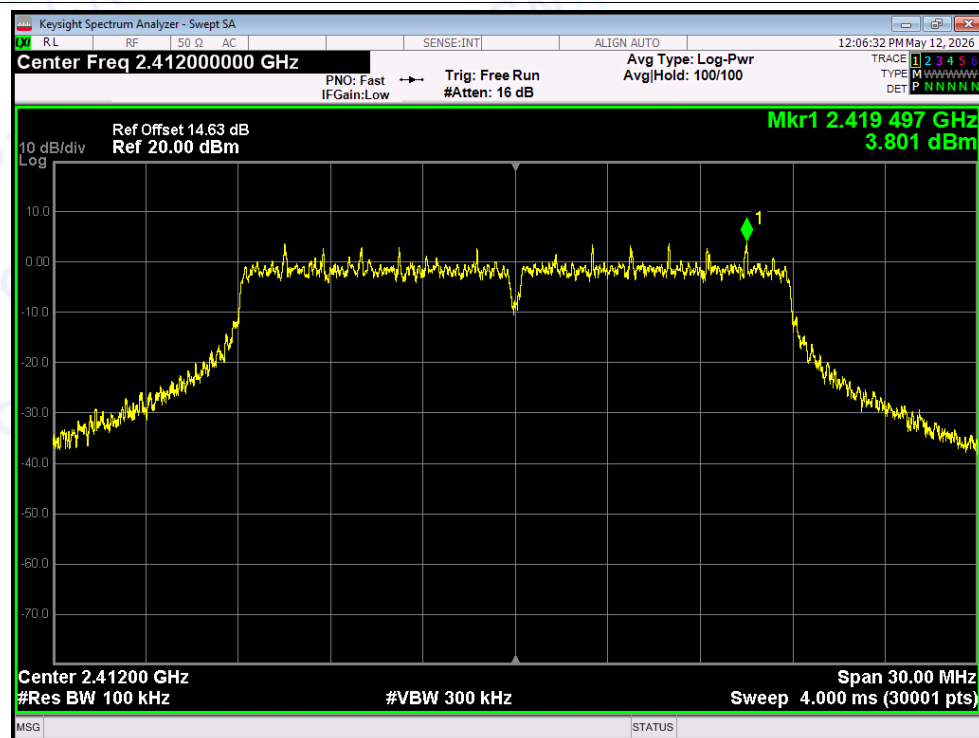
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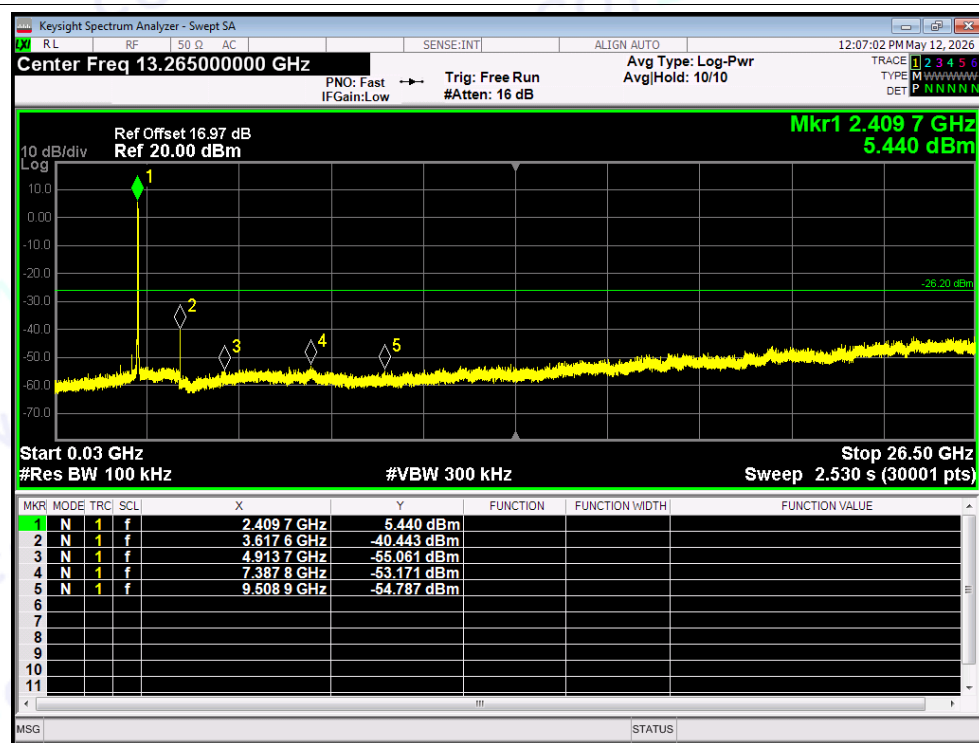
Tx. Spurious NVNT g 2462MHz Ant1 Emission



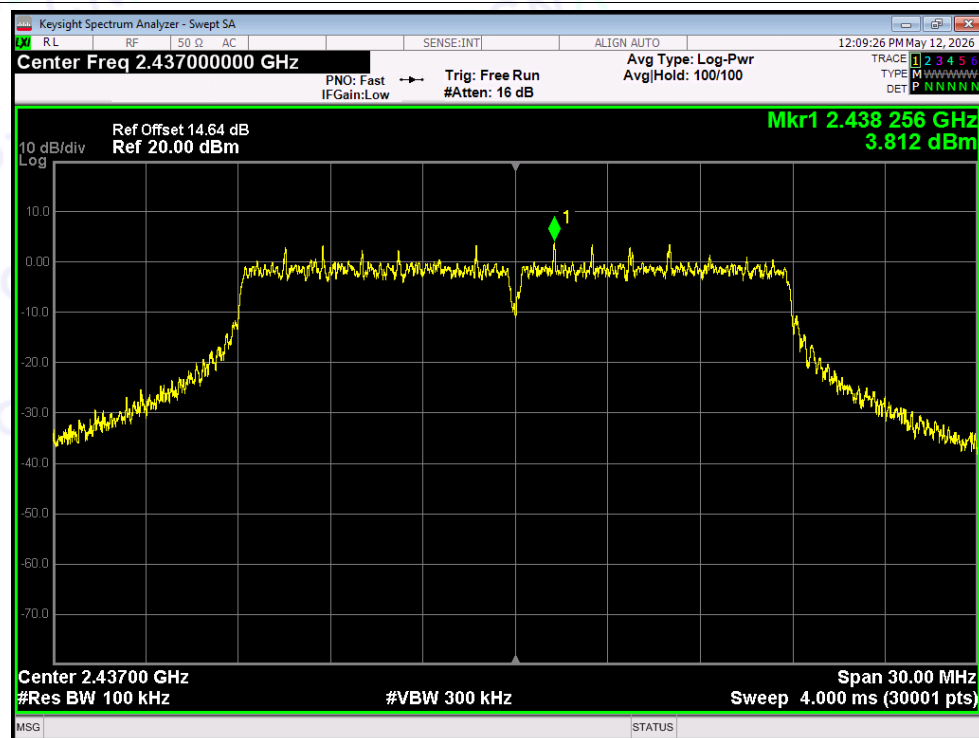
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



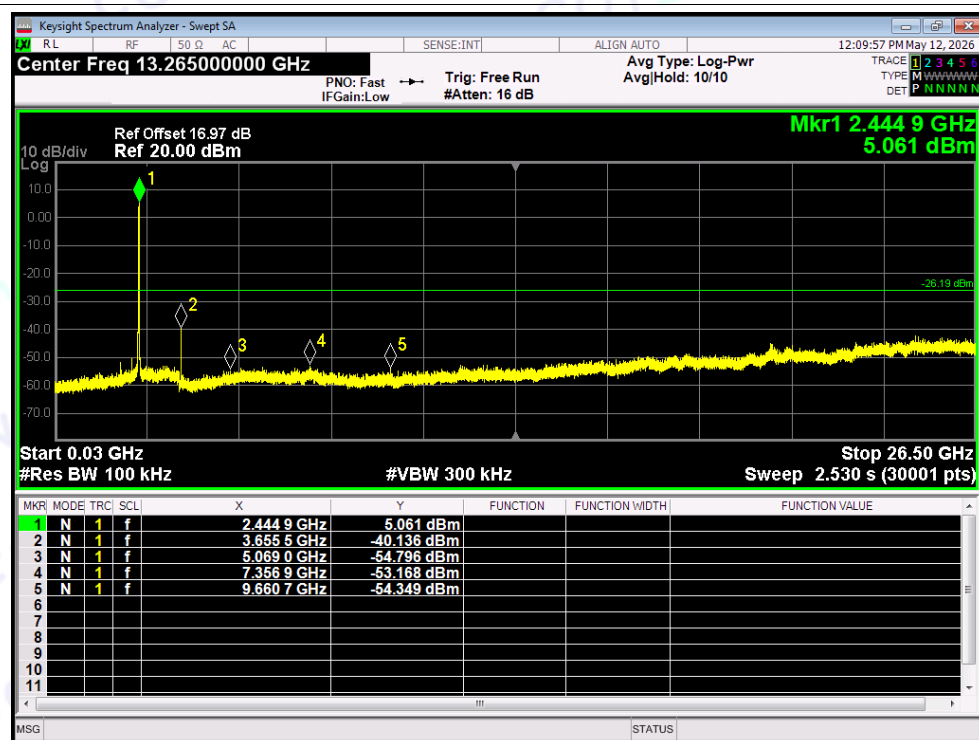
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



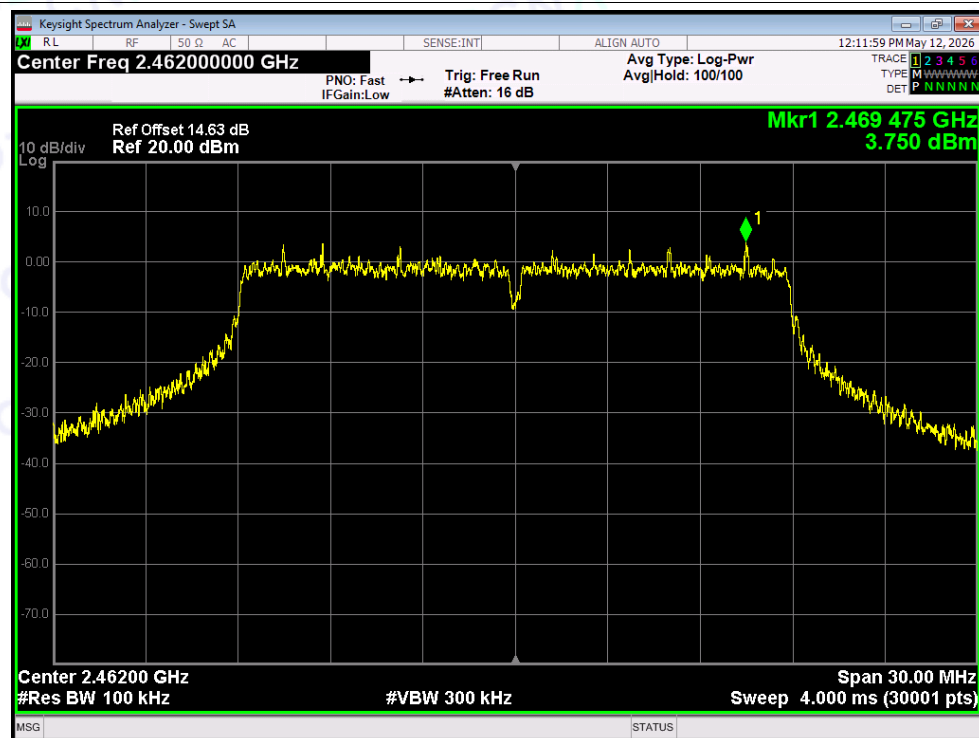
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission

