RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Smart Projector
Test Model:	M01 Pro
Sample ID:	202309-0009-4-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 19V
Test Engineer:	Zhou Zhen
Note: For a more detailed features description, please refer to the report TBR-C-202309-0009-9 The report only show the worst case data.	

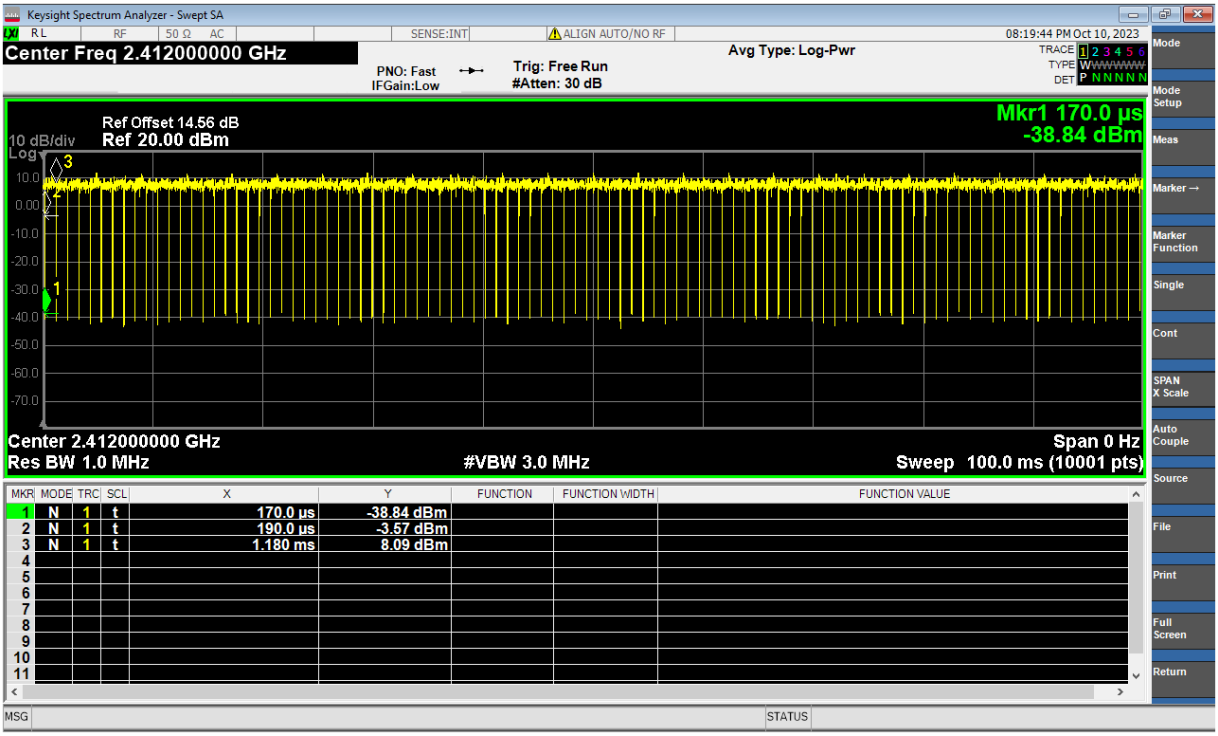
Contents

1. Duty Cycle

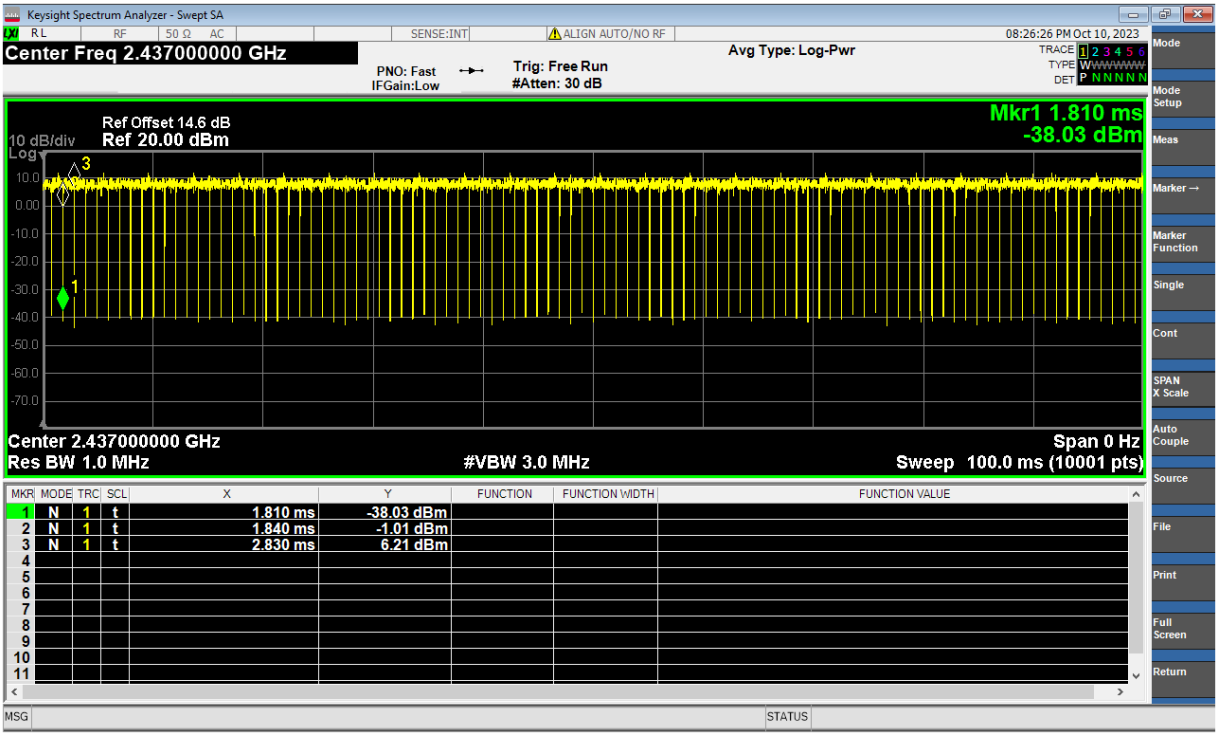
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	ax(VHT20)	2412	Ant1	98.02	0.09	0.01
NVNT	ax(VHT20)	2437	Ant1	97.06	0.13	1.01
NVNT	ax(VHT20)	2462	Ant1	97.06	0.13	1.01
NVNT	ax(VHT40)	2422	Ant1	96.36	0.16	1.89
NVNT	ax(VHT40)	2437	Ant1	98.2	0.08	0.01
NVNT	ax(VHT40)	2452	Ant1	96.3	0.16	1.92
NVNT	b	2412	Ant1	99.88	0.01	0.01
NVNT	b	2437	Ant1	99.95	0	0.01
NVNT	b	2462	Ant1	99.76	0.01	0.01
NVNT	g	2412	Ant1	99.29	0.03	0.01
NVNT	g	2437	Ant1	98.56	0.06	0.01
NVNT	g	2462	Ant1	98.55	0.06	0.01
NVNT	n(HT20)	2412	Ant1	97.71	0.1	0.78
NVNT	n(HT20)	2437	Ant1	98.86	0.05	0.01
NVNT	n(HT20)	2462	Ant1	98.47	0.07	0.01
NVNT	n(HT40)	2422	Ant1	98.51	0.07	0.01
NVNT	n(HT40)	2437	Ant1	99	0.04	0.01
NVNT	n(HT40)	2452	Ant1	97.01	0.13	1.54

Test Graphs

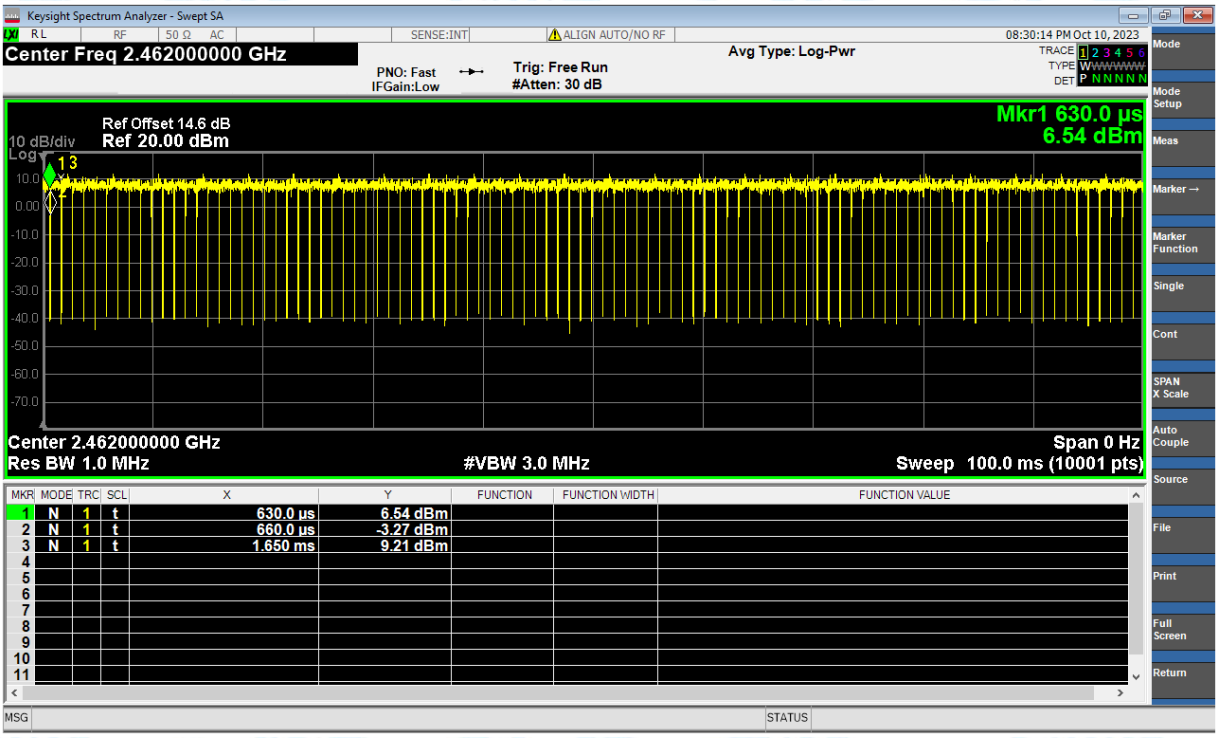
Duty Cycle NVNT ax(VHT20) 2412MHz Ant1



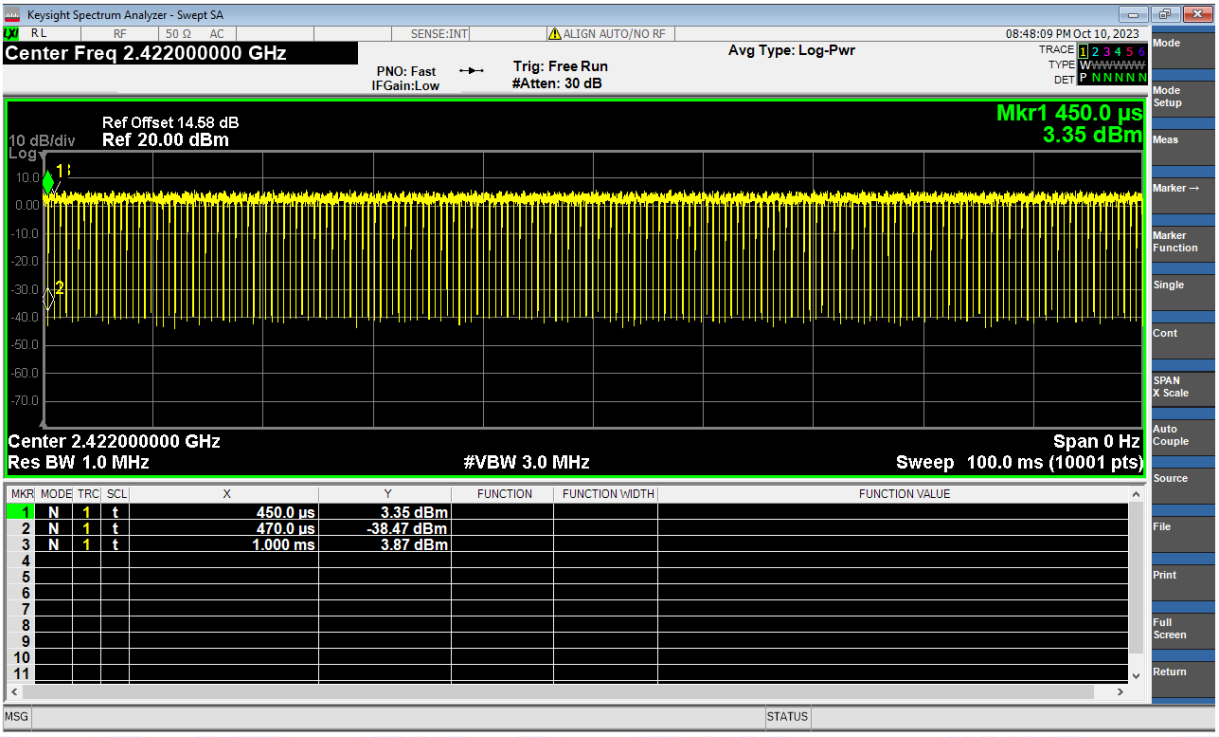
Duty Cycle NVNT ax(VHT20) 2437MHz Ant1



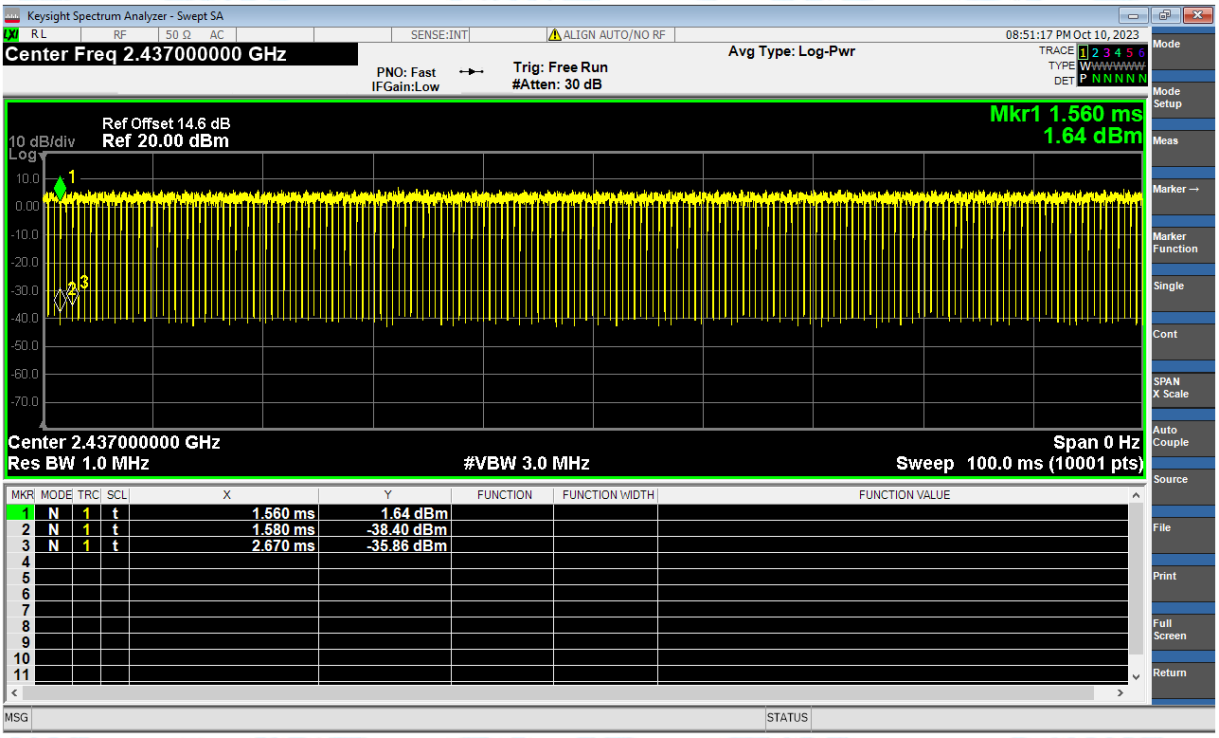
Duty Cycle NVNT ax(VHT20) 2462MHz Ant1



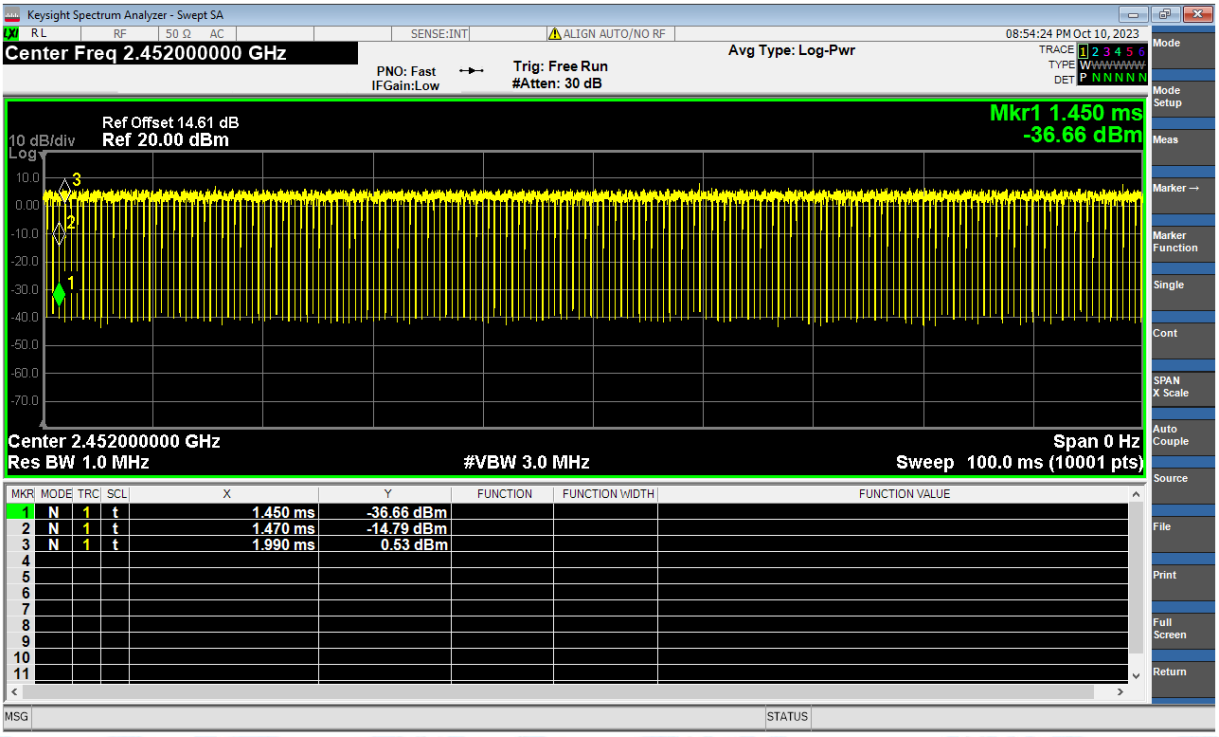
Duty Cycle NVNT ax(VHT40) 2422MHz Ant1



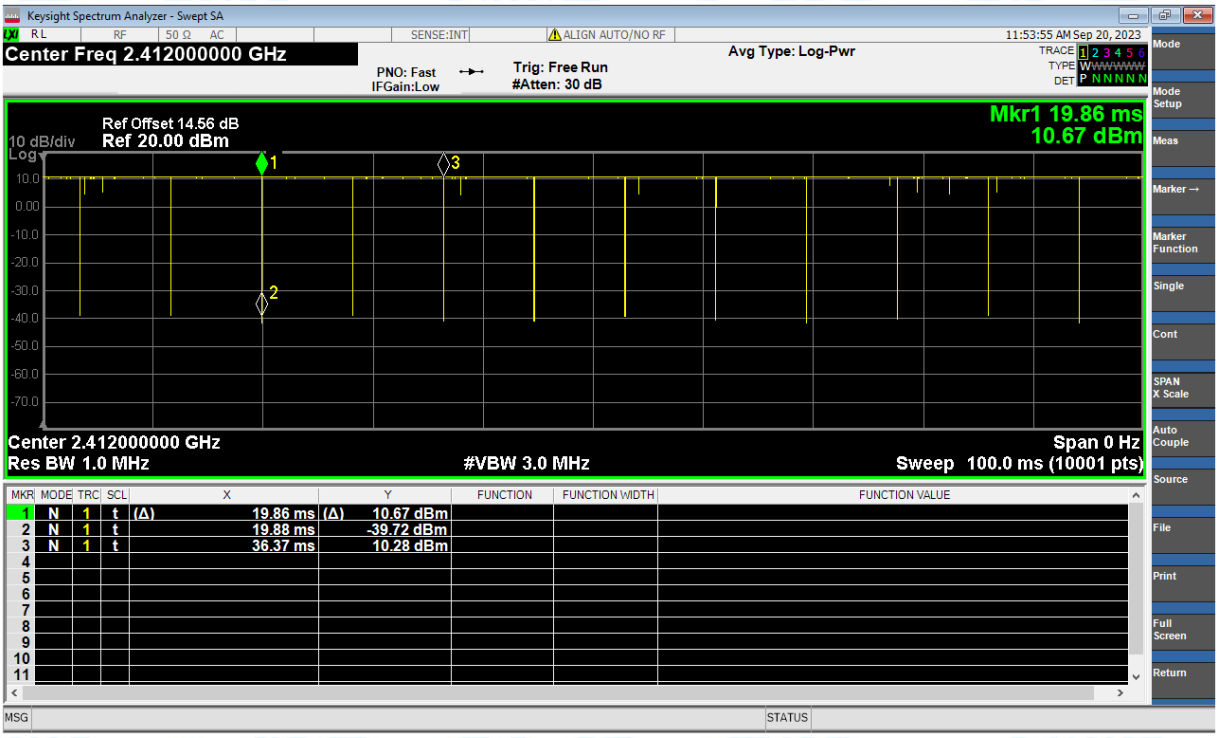
Duty Cycle NVNT ax(VHT40) 2437MHz Ant1



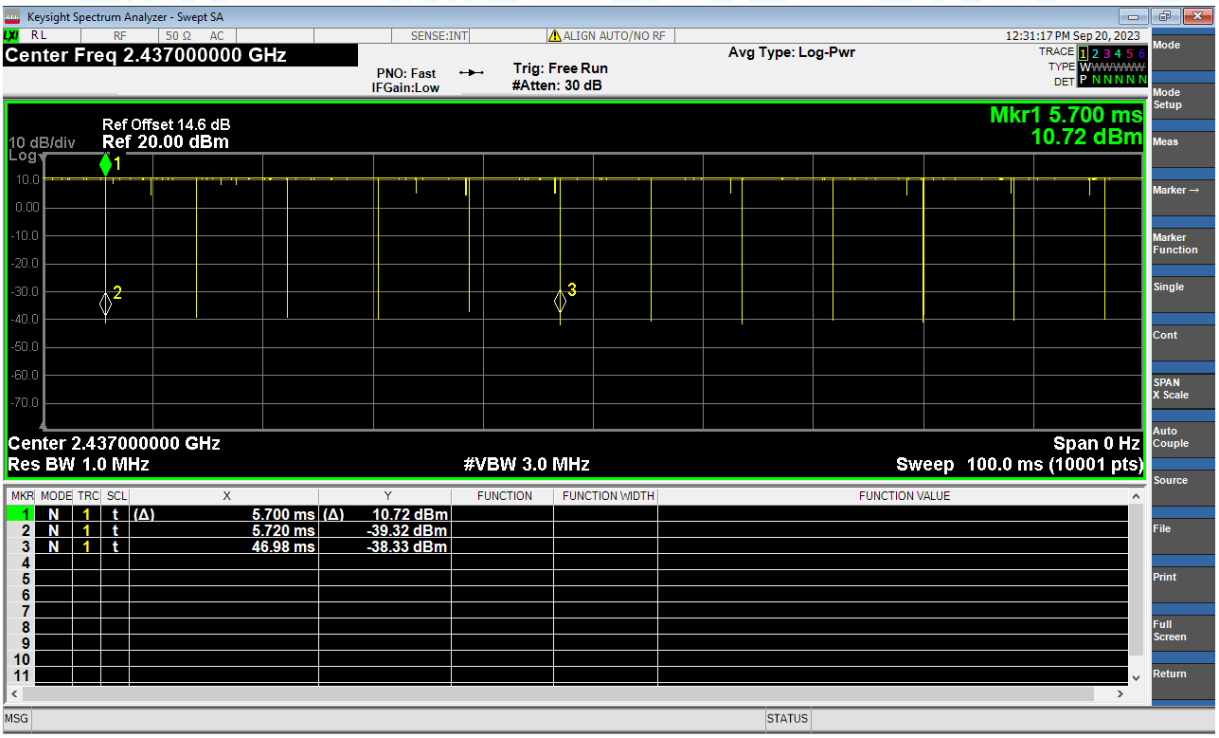
Duty Cycle NVNT ax(VHT40) 2452MHz Ant1



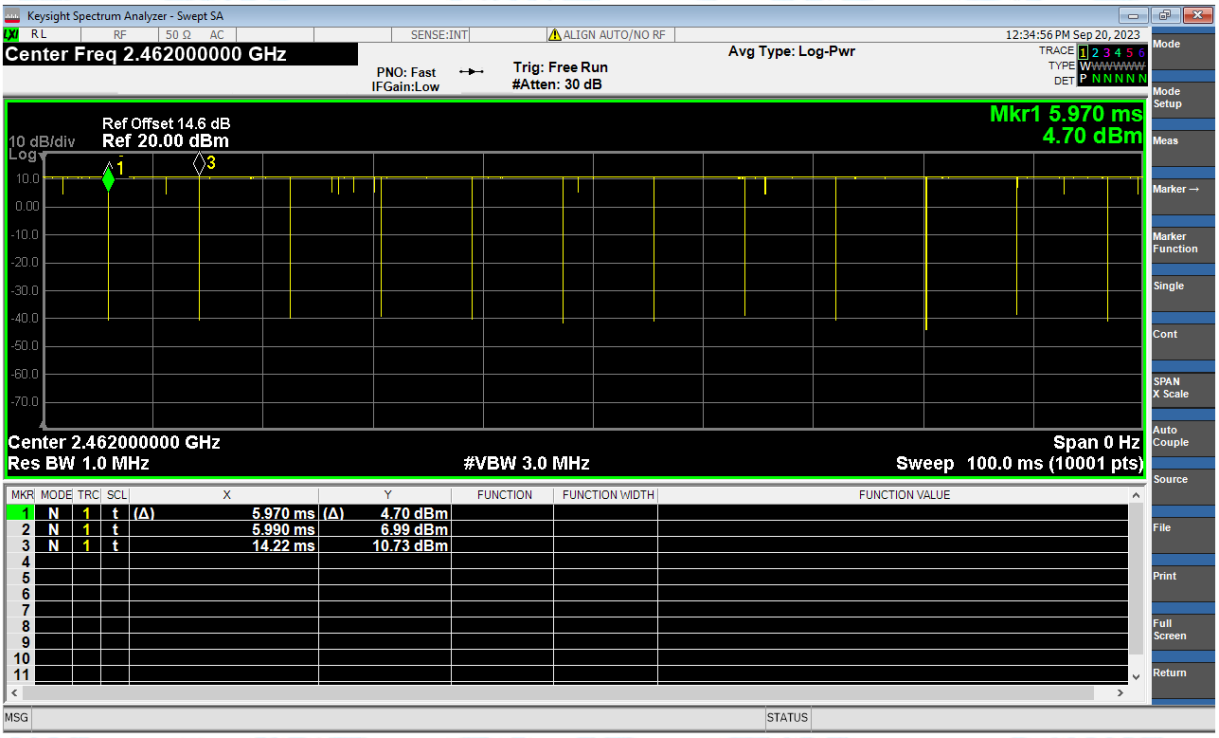
Duty Cycle NVNT b 2412MHz Ant1



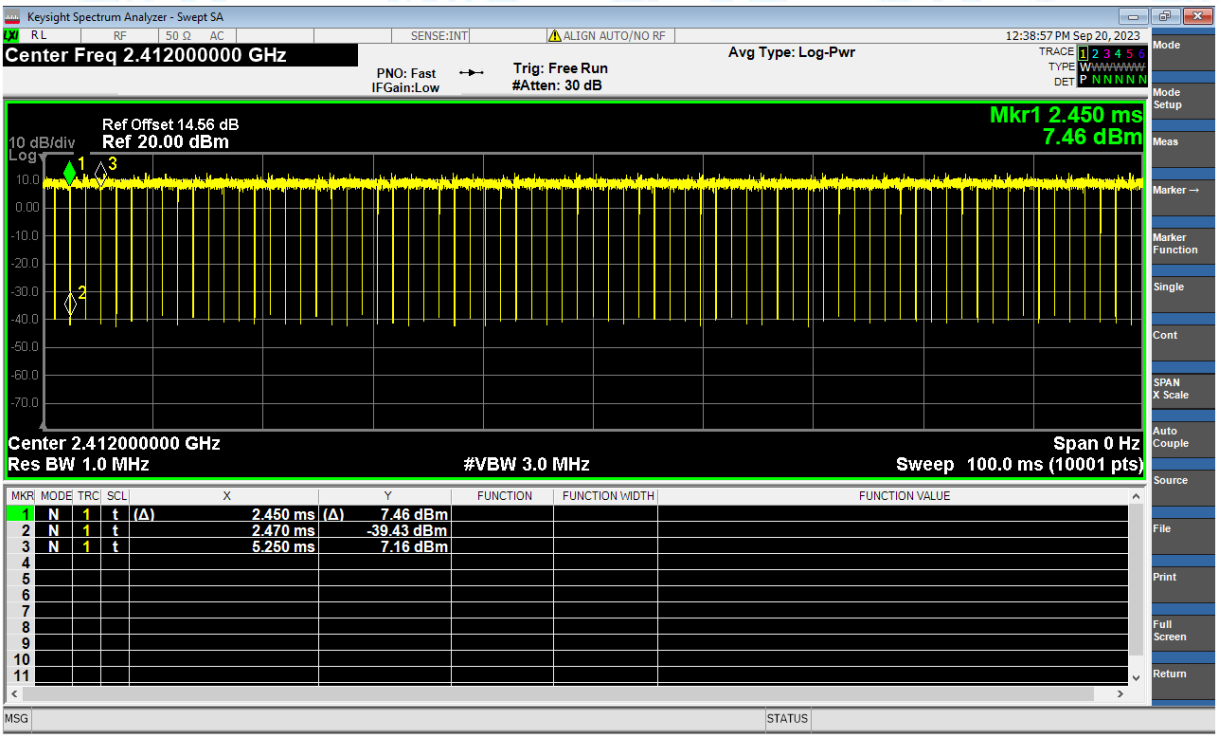
Duty Cycle NVNT b 2437MHz Ant1



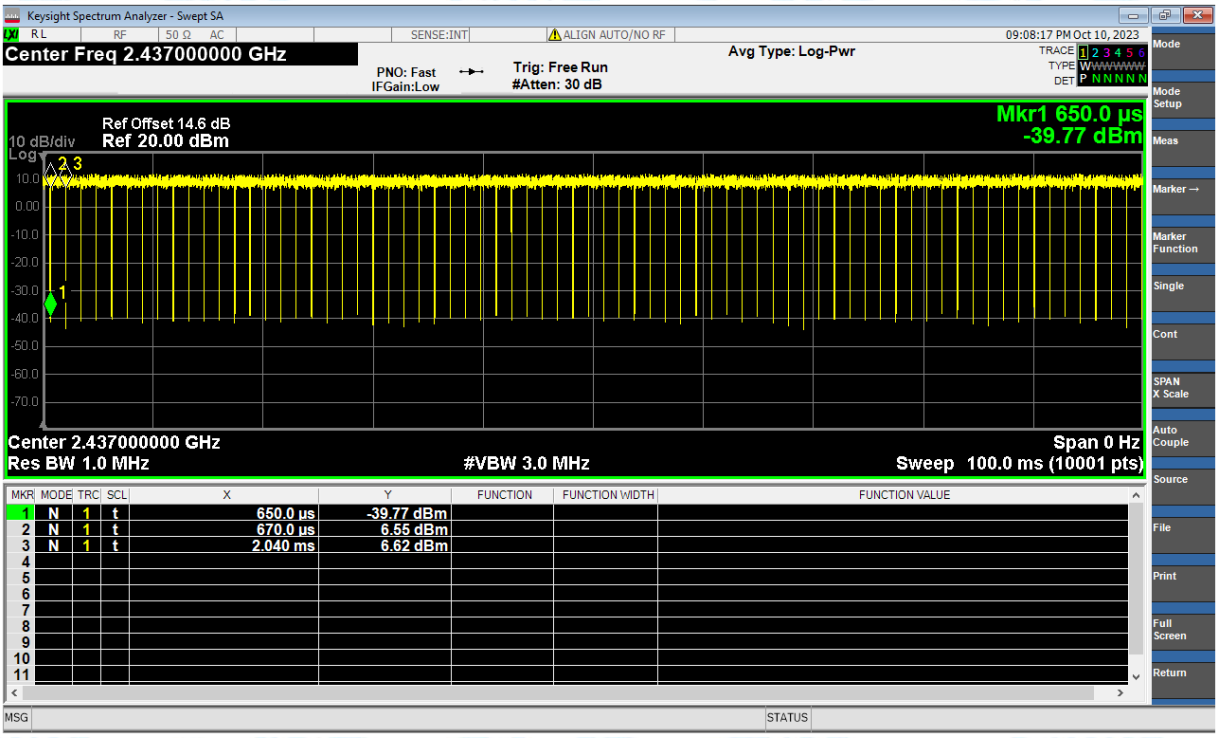
Duty Cycle NVNT b 2462MHz Ant1



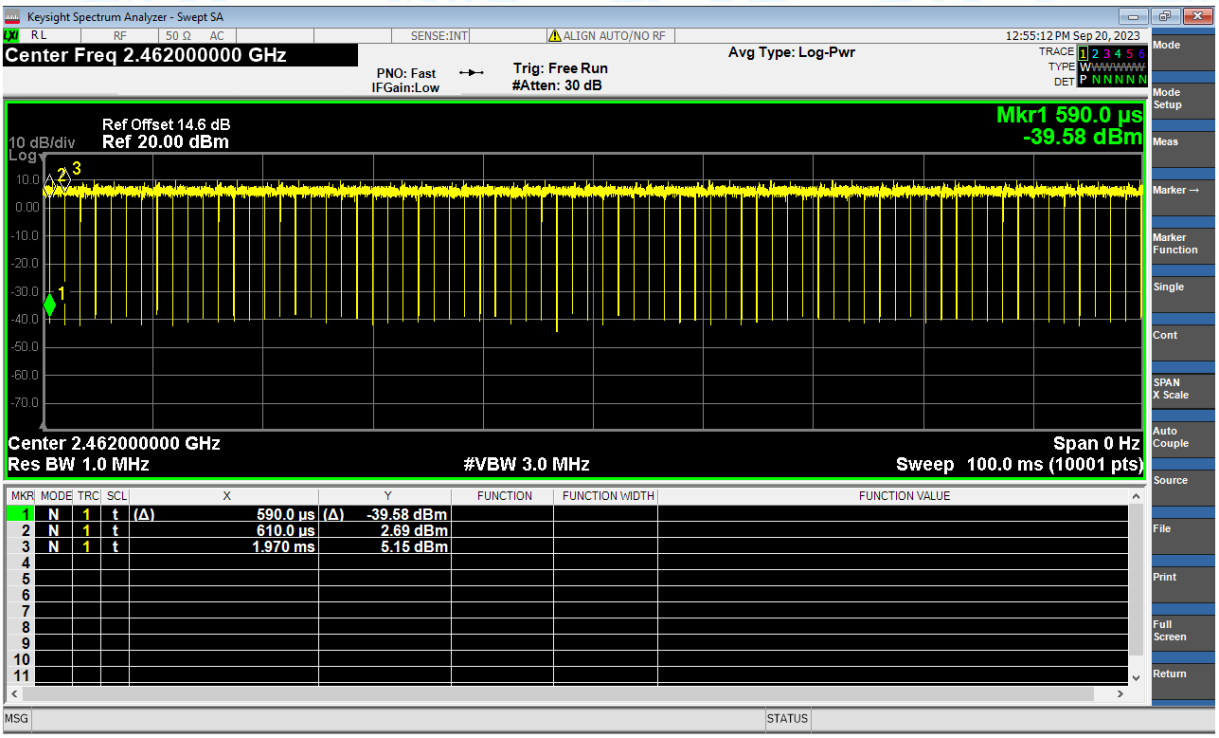
Duty Cycle NVNT g 2412MHz Ant1



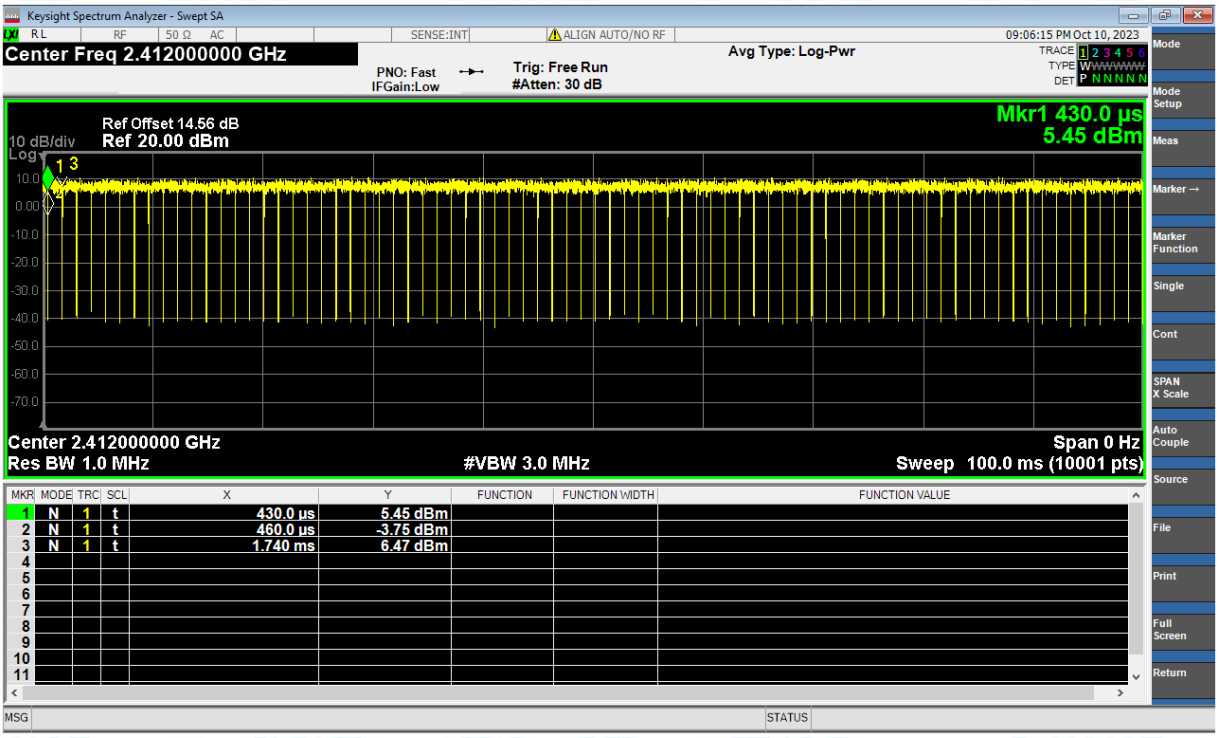
Duty Cycle NVNT g 2437MHz Ant1



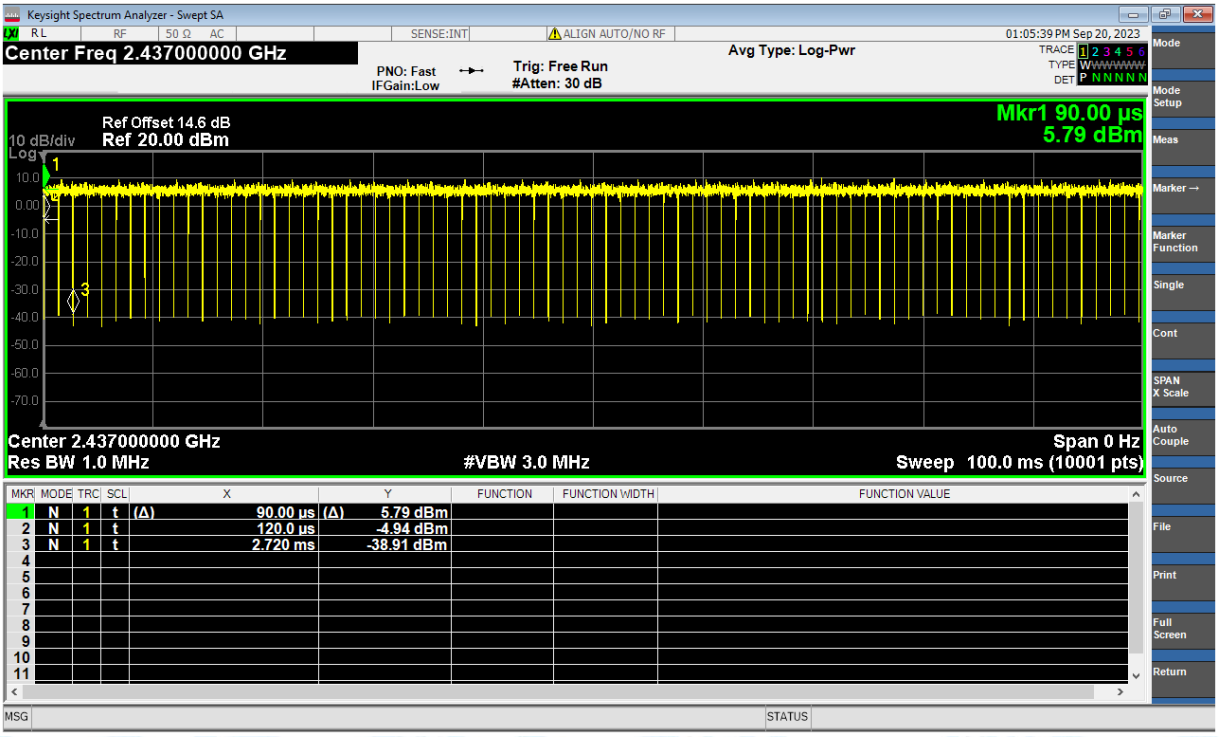
Duty Cycle NVNT g 2462MHz Ant1



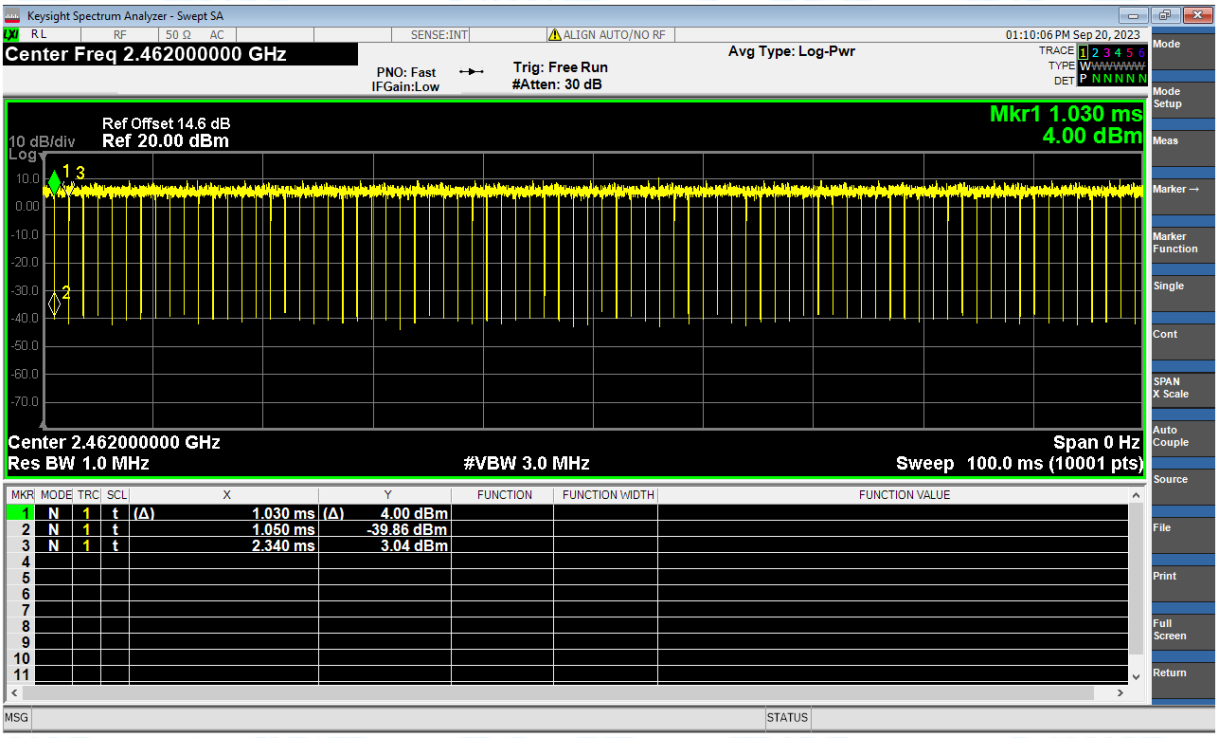
Duty Cycle NVNT n(HT20) 2412MHz Ant1



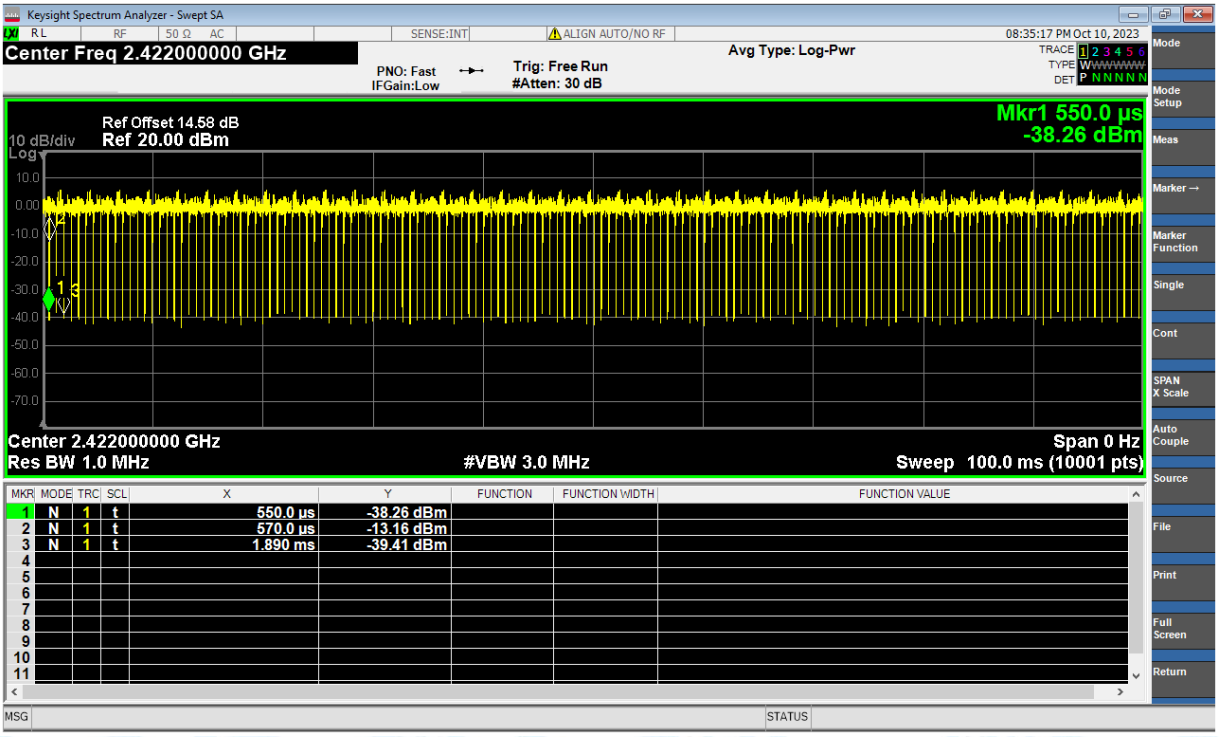
Duty Cycle NVNT n(HT20) 2437MHz Ant1



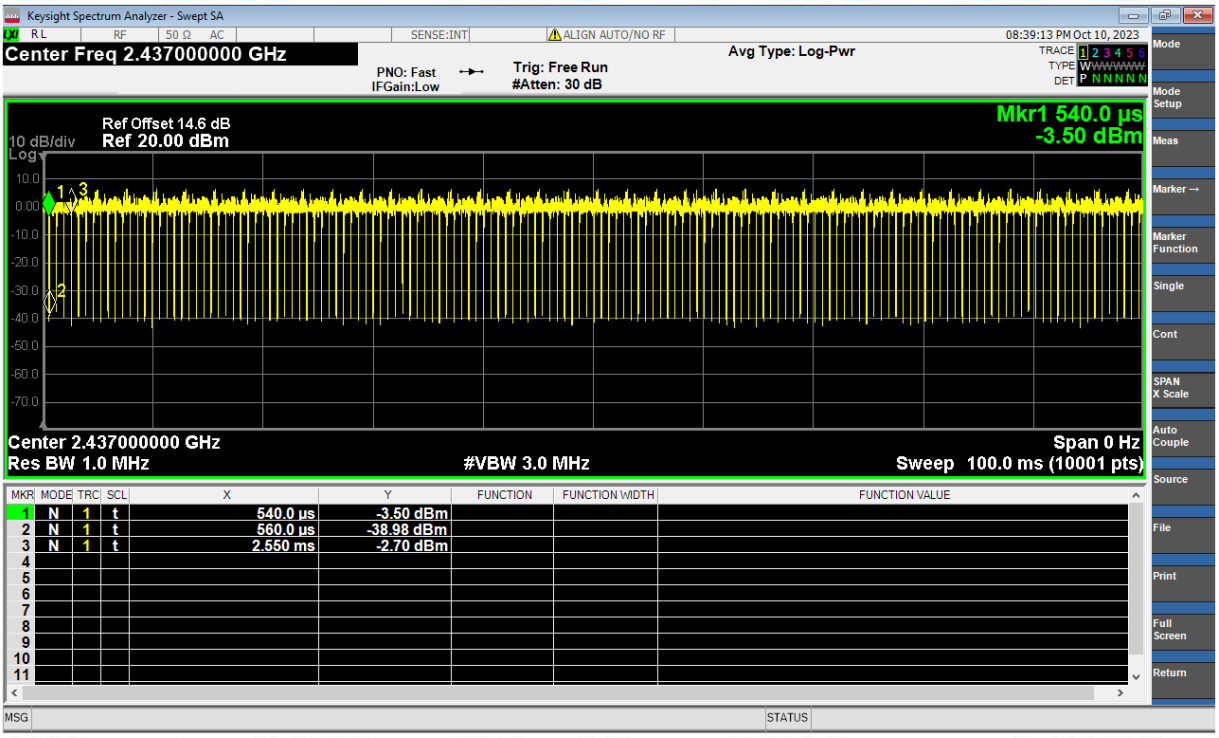
Duty Cycle NVNT n(HT20) 2462MHz Ant1



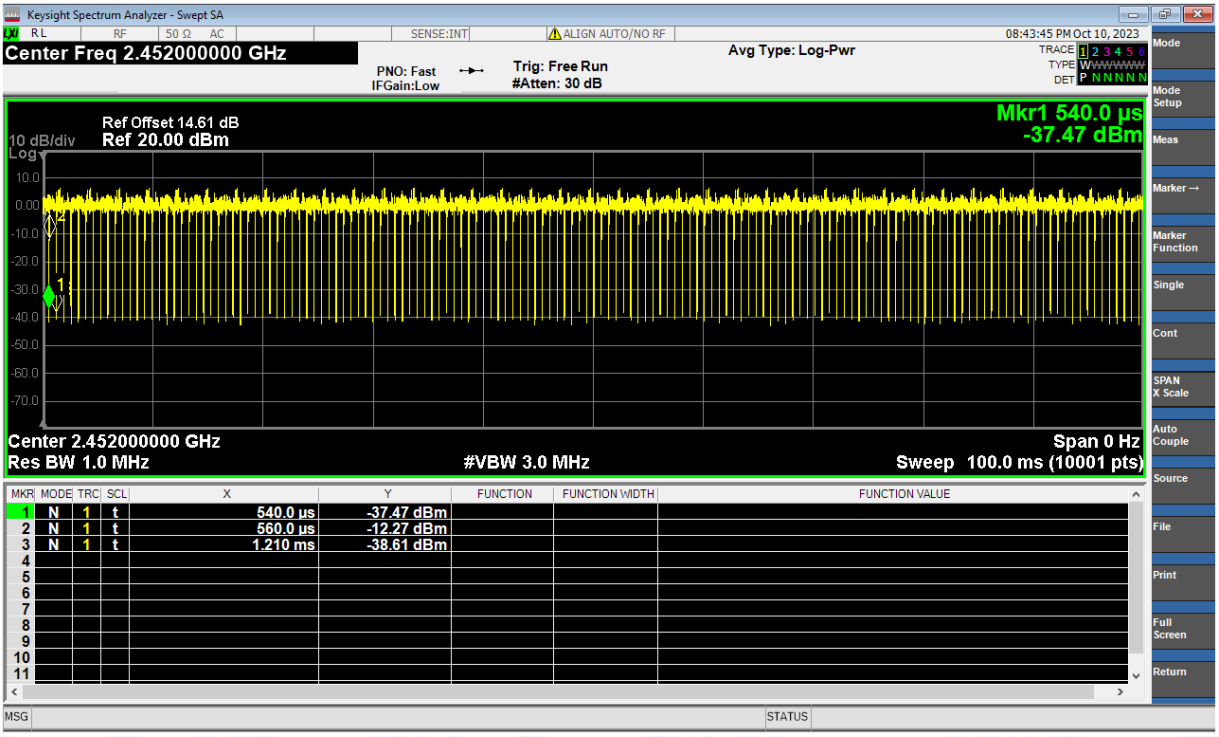
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



2. Maximum Conducted Output Power

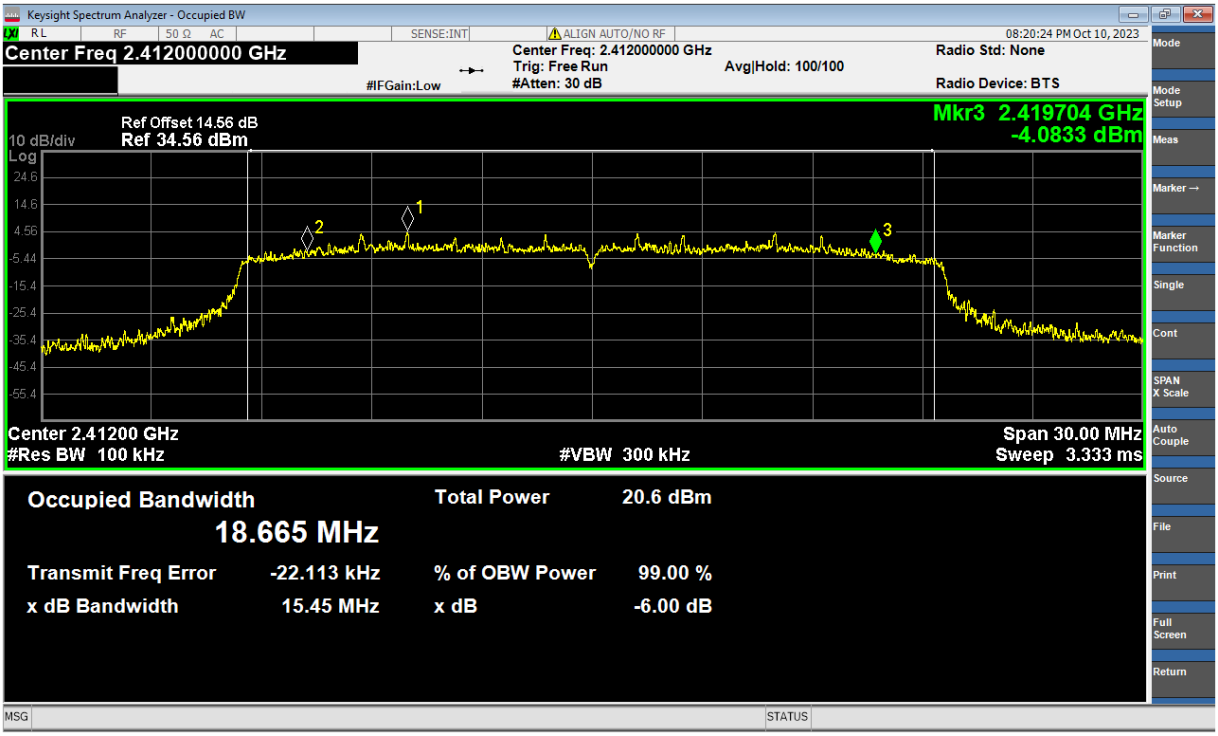
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	ax(VHT20)	2412	Ant1	14.620	30	Pass
NVNT	ax(VHT20)	2437	Ant1	14.680	30	Pass
NVNT	ax(VHT20)	2462	Ant1	14.665	30	Pass
NVNT	ax(VHT40)	2422	Ant1	13.777	30	Pass
NVNT	ax(VHT40)	2437	Ant1	14.254	30	Pass
NVNT	ax(VHT40)	2452	Ant1	14.464	30	Pass
NVNT	b	2412	Ant1	15.344	30	Pass
NVNT	b	2437	Ant1	15.415	30	Pass
NVNT	b	2462	Ant1	15.423	30	Pass
NVNT	g	2412	Ant1	15.817	30	Pass
NVNT	g	2437	Ant1	13.084	30	Pass
NVNT	g	2462	Ant1	13.083	30	Pass
NVNT	n(HT20)	2412	Ant1	14.128	30	Pass
NVNT	n(HT20)	2437	Ant1	12.978	30	Pass
NVNT	n(HT20)	2462	Ant1	13.031	30	Pass
NVNT	n(HT40)	2422	Ant1	13.874	30	Pass
NVNT	n(HT40)	2437	Ant1	14.343	30	Pass
NVNT	n(HT40)	2452	Ant1	14.504	30	Pass

3. -6dB Bandwidth

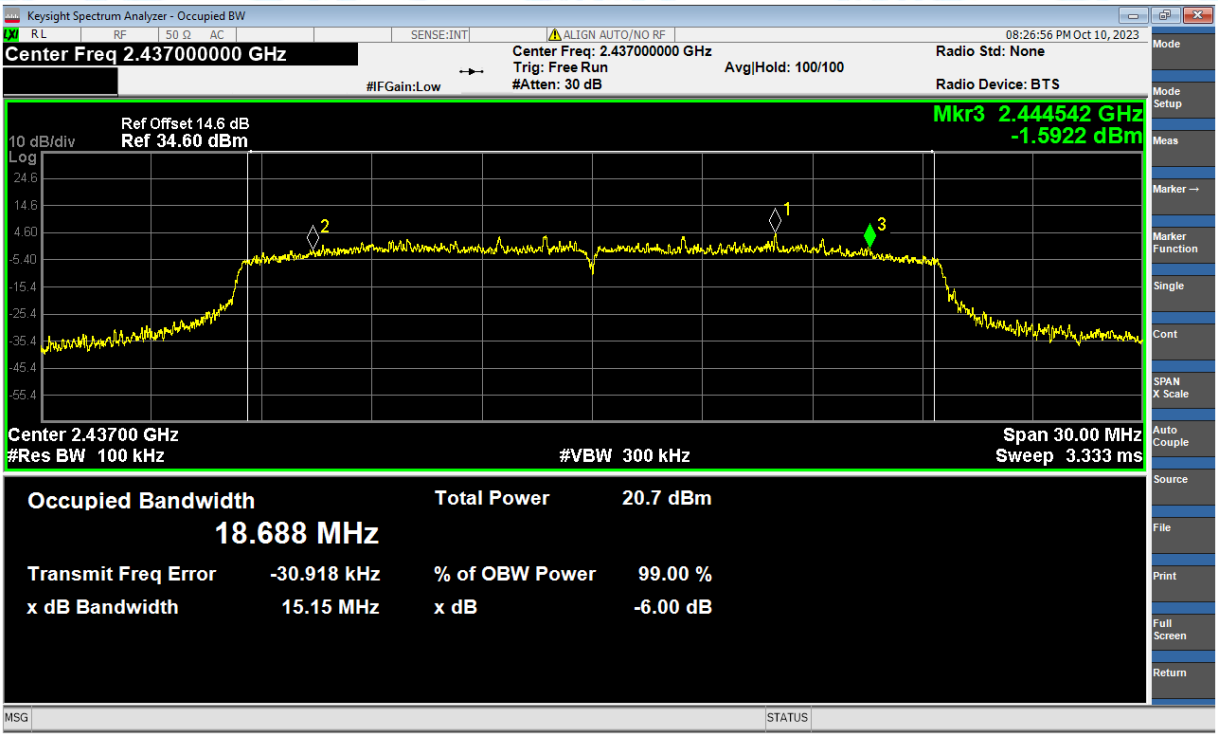
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	ax(VHT20)	2412	Ant1	15.45	0.5	Pass
NVNT	ax(VHT20)	2437	Ant1	15.15	0.5	Pass
NVNT	ax(VHT20)	2462	Ant1	15.05	0.5	Pass
NVNT	ax(VHT40)	2422	Ant1	35.84	0.5	Pass
NVNT	ax(VHT40)	2437	Ant1	35.99	0.5	Pass
NVNT	ax(VHT40)	2452	Ant1	36.01	0.5	Pass
NVNT	b	2412	Ant1	8.54	0.5	Pass
NVNT	b	2437	Ant1	7.81	0.5	Pass
NVNT	b	2462	Ant1	7.52	0.5	Pass
NVNT	g	2412	Ant1	14.42	0.5	Pass
NVNT	g	2437	Ant1	15.43	0.5	Pass
NVNT	g	2462	Ant1	14.72	0.5	Pass
NVNT	n(HT20)	2412	Ant1	15.14	0.5	Pass
NVNT	n(HT20)	2437	Ant1	15.68	0.5	Pass
NVNT	n(HT20)	2462	Ant1	15.33	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.44	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.05	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.15	0.5	Pass

Test Graphs

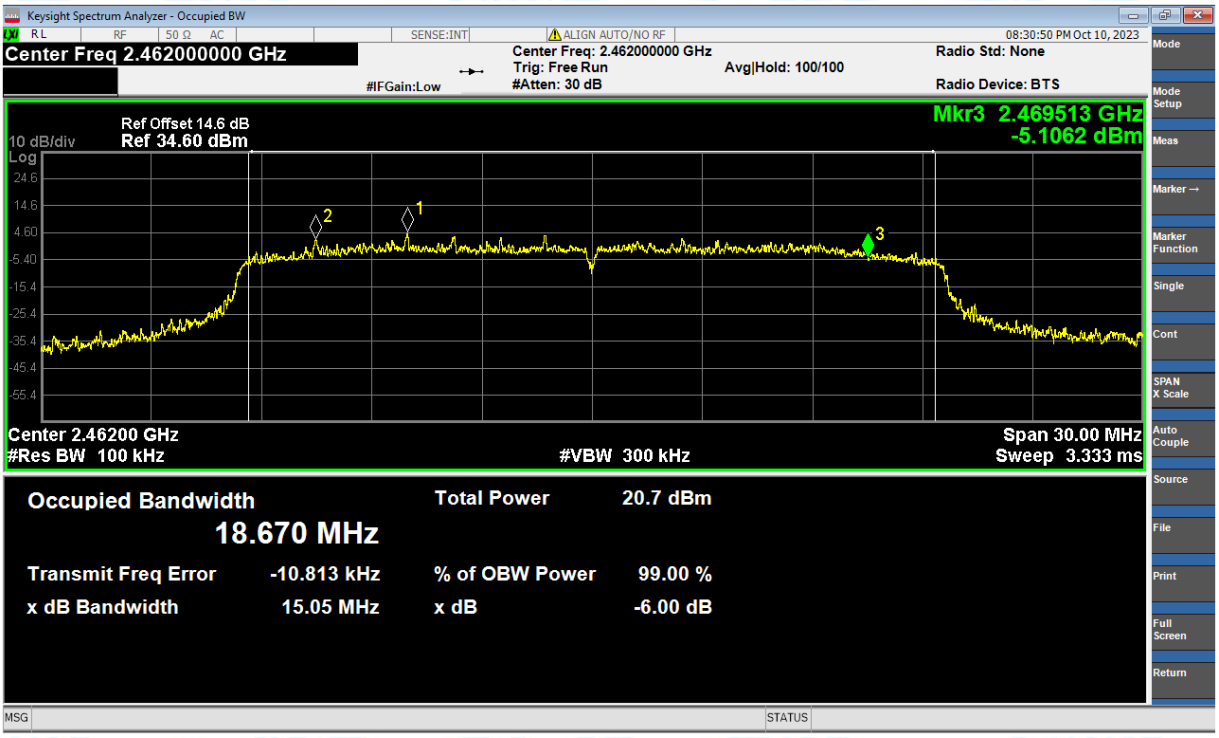
-6dB Bandwidth NVNT ax(VHT20) 2412MHz Ant1



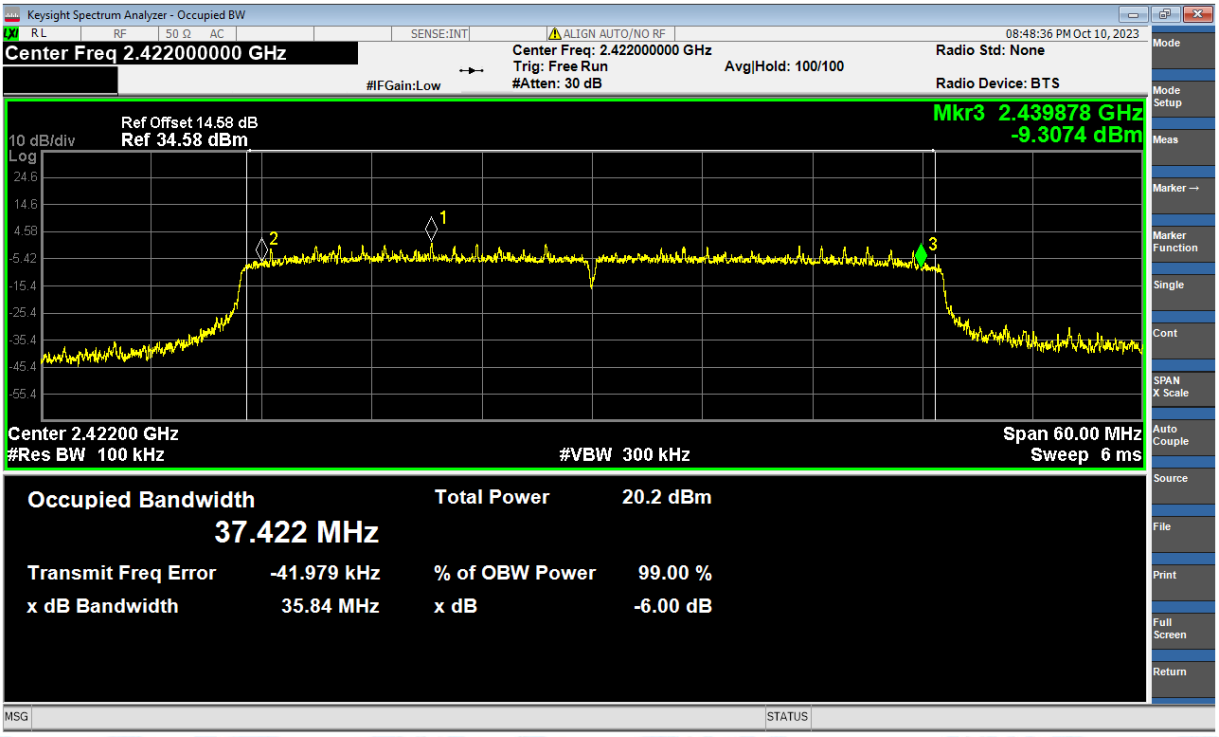
-6dB Bandwidth NVNT ax(VHT20) 2437MHz Ant1



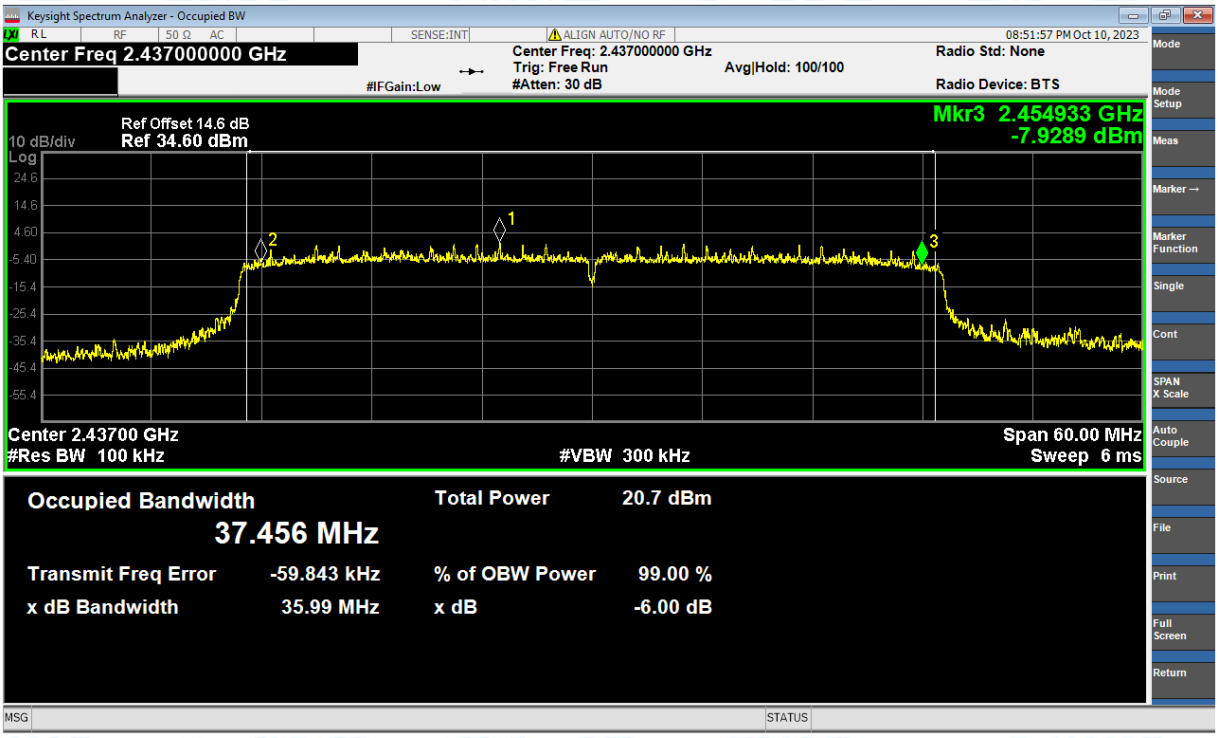
-6dB Bandwidth NVNT ax(VHT20) 2462MHz Ant1



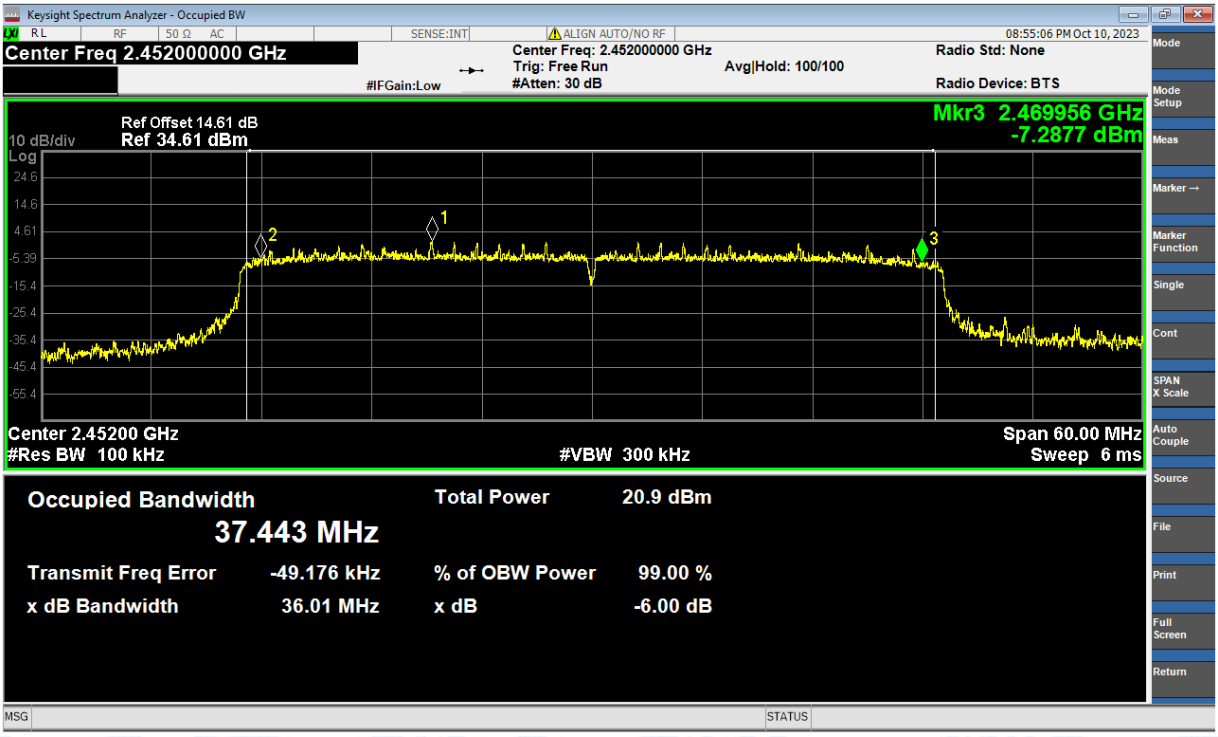
-6dB Bandwidth NVNT ax(VHT40) 2422MHz Ant1



-6dB Bandwidth NVNT ax(VHT40) 2437MHz Ant1

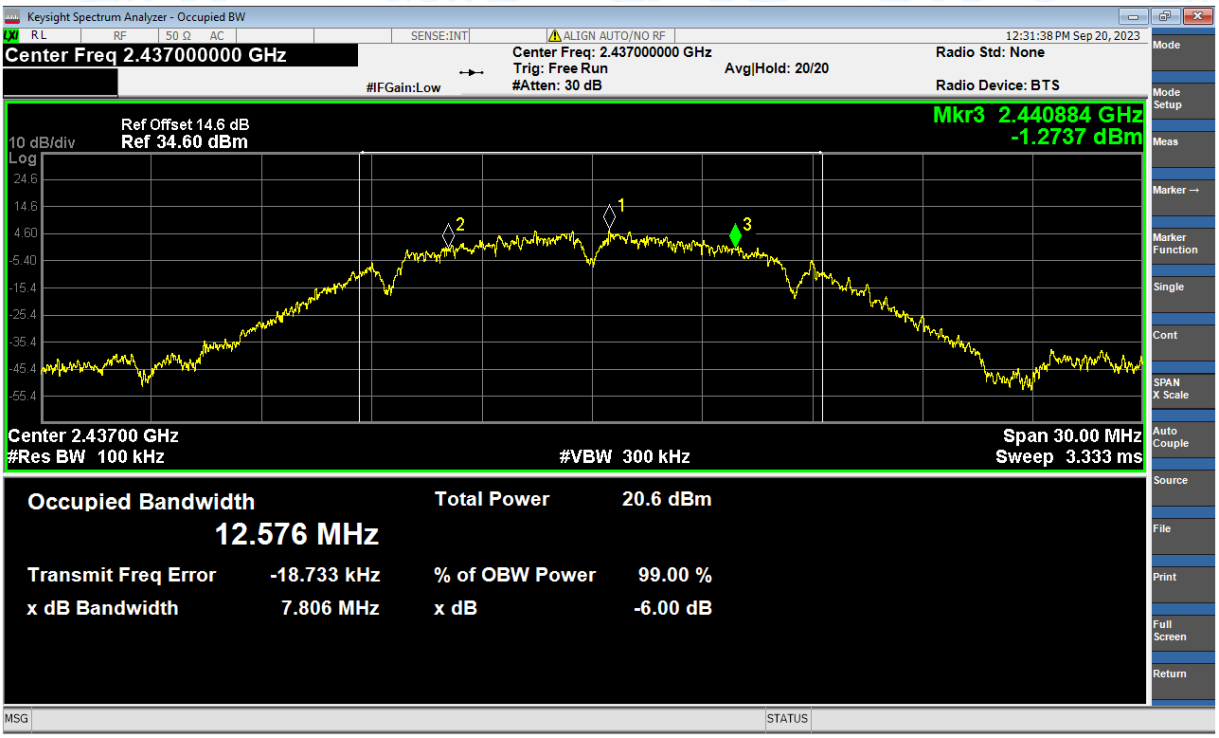


-6dB Bandwidth NVNT ax(VHT40) 2452MHz Ant1

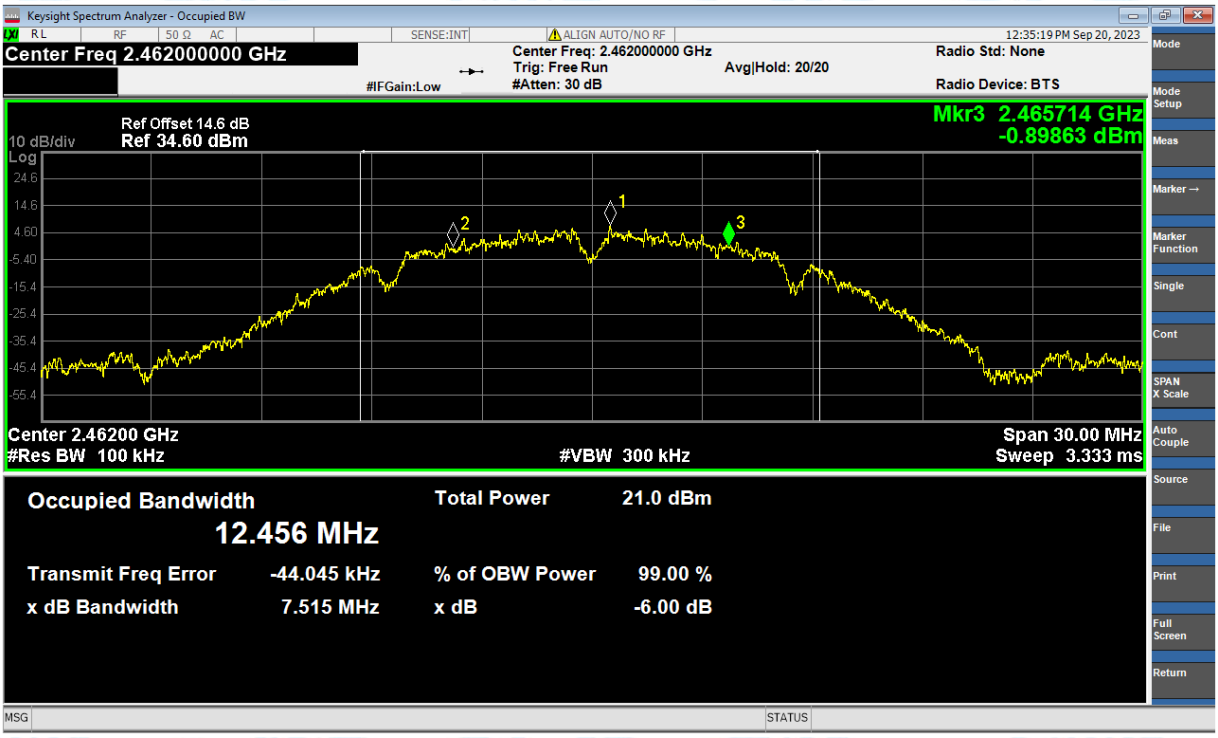


-6dB Bandwidth NVNT b 2412MHz Ant1

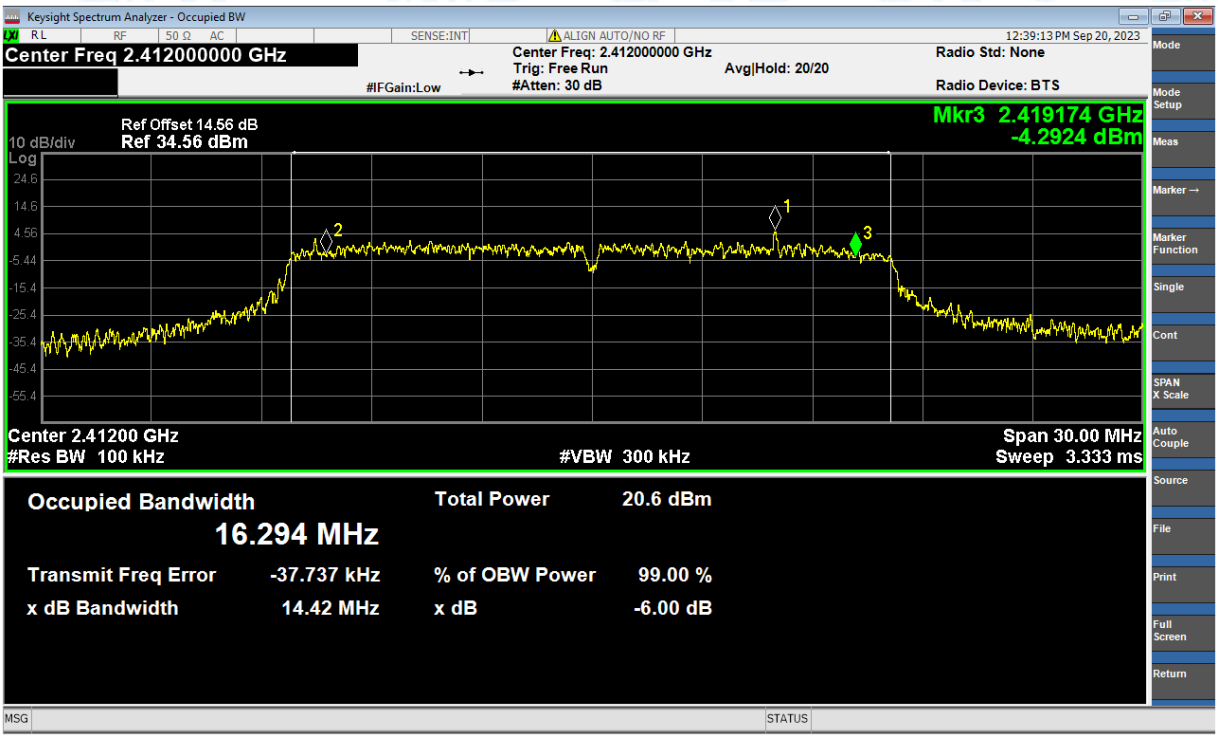
-6dB Bandwidth NVNT b 2437MHz Ant1



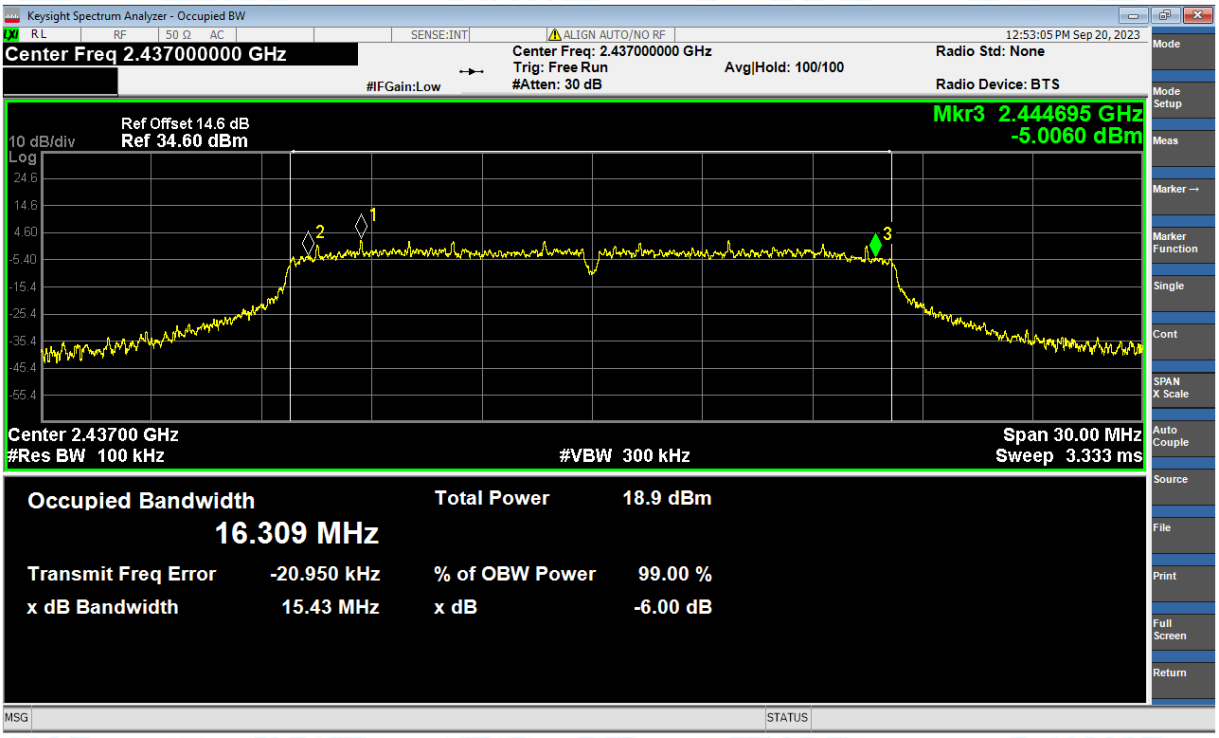
-6dB Bandwidth NVNT b 2462MHz Ant1



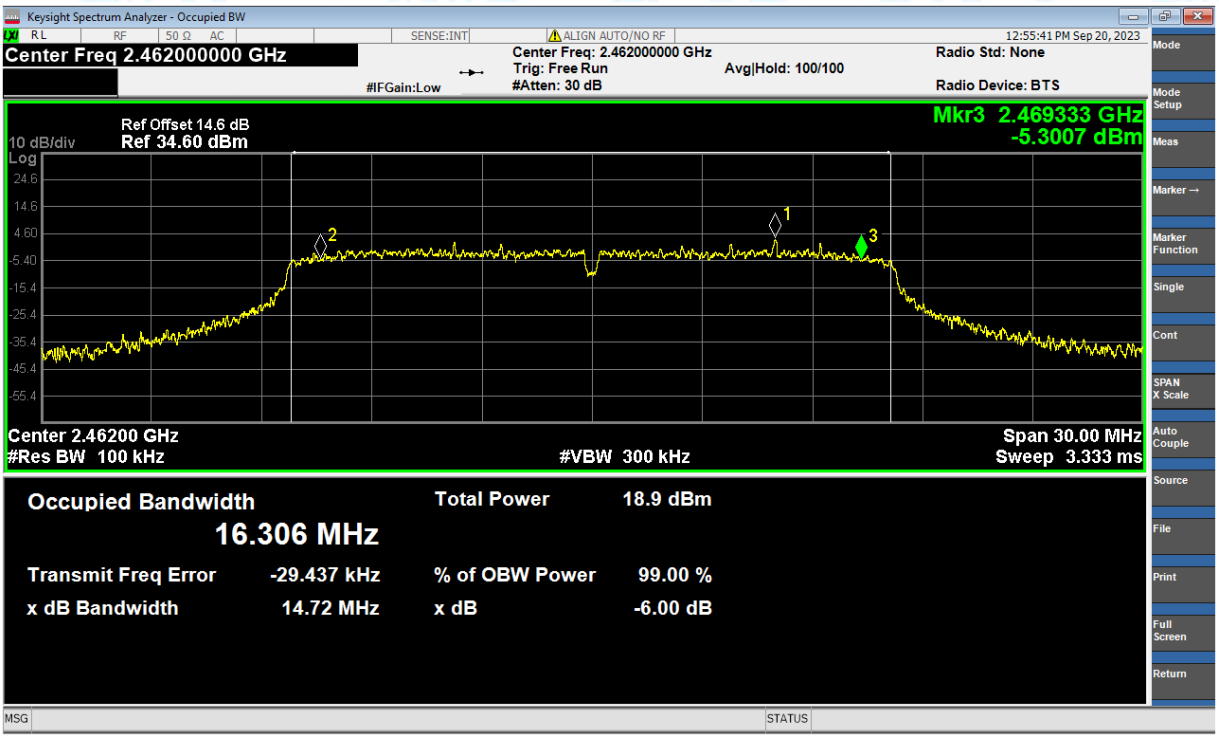
-6dB Bandwidth NVNT g 2412MHz Ant1



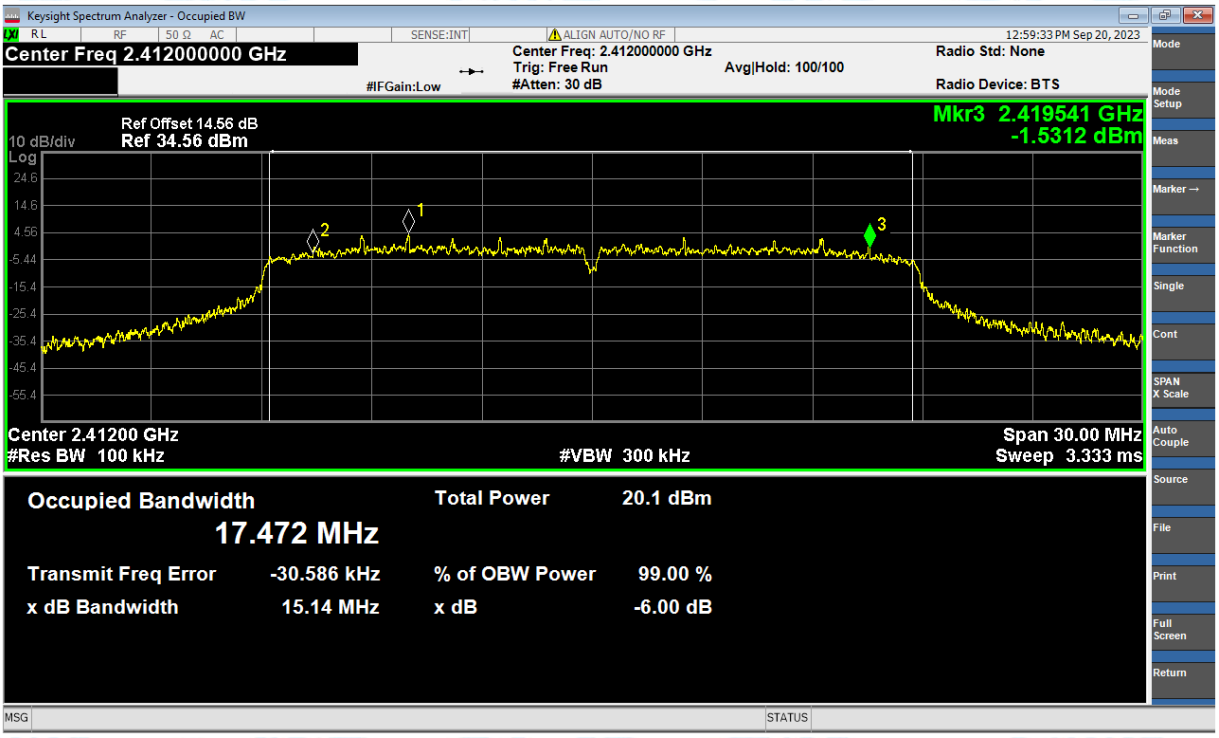
-6dB Bandwidth NVNT g 2437MHz Ant1



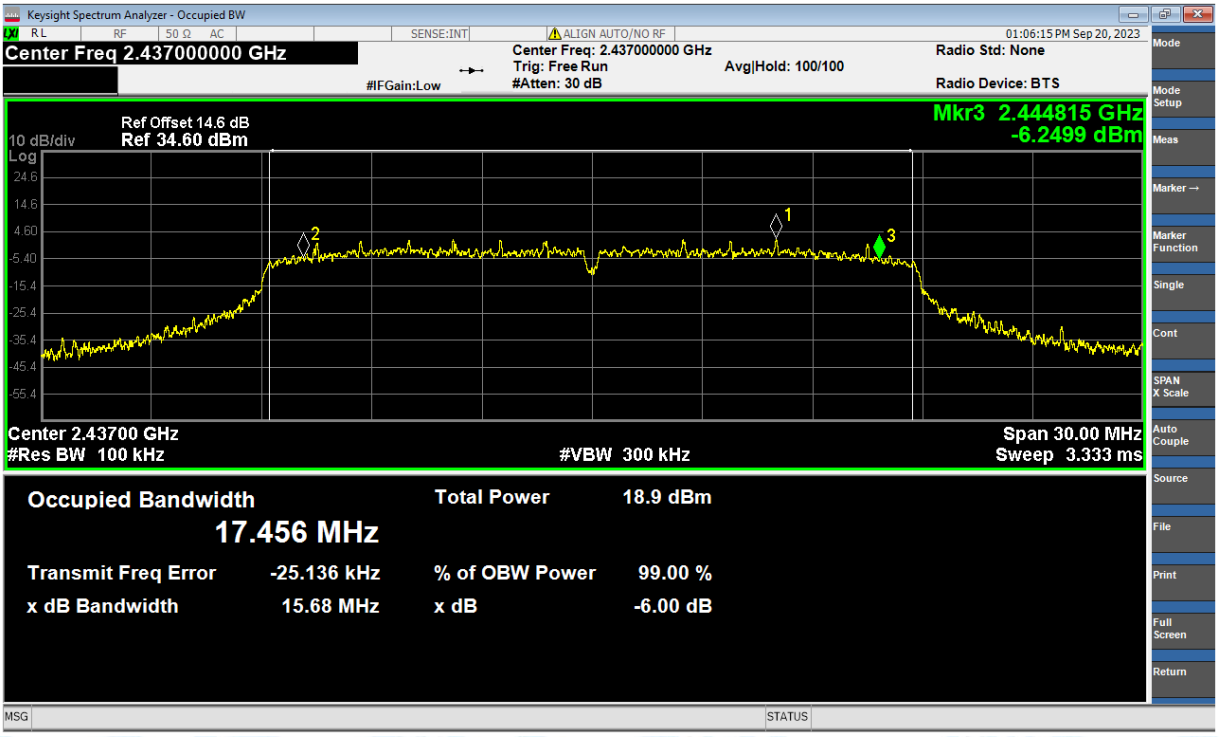
-6dB Bandwidth NVNT g 2462MHz Ant1



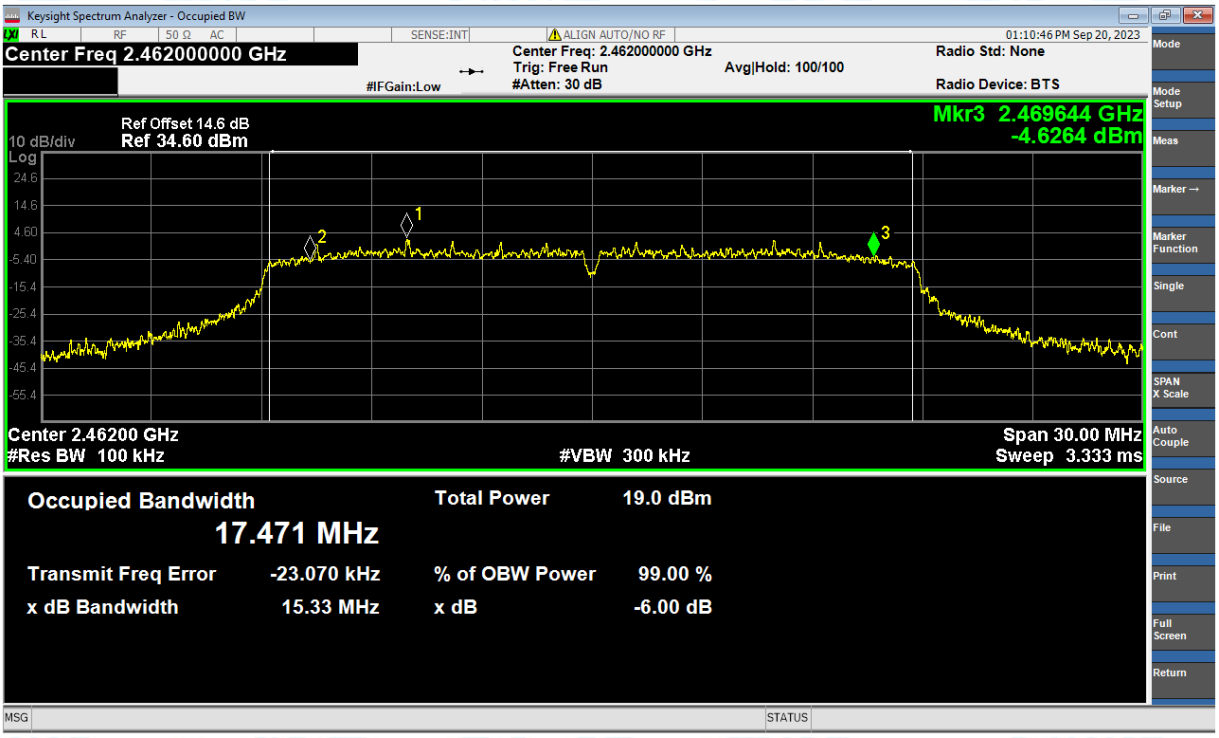
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



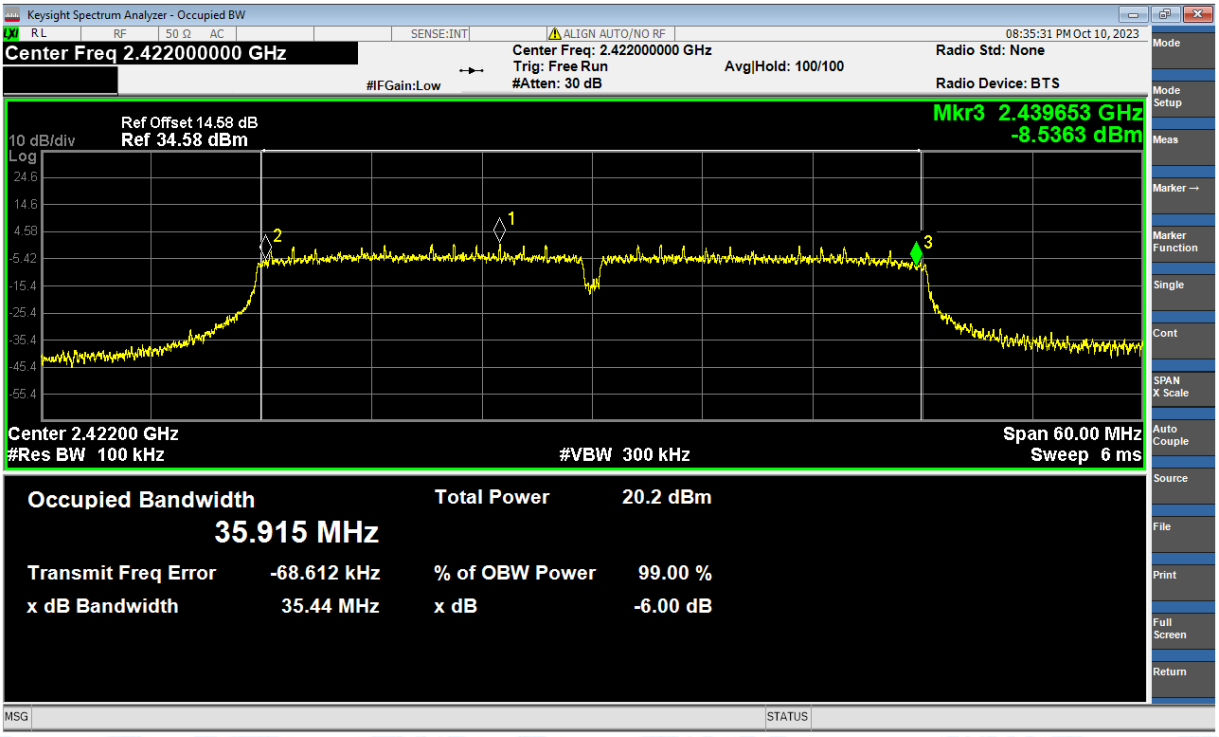
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



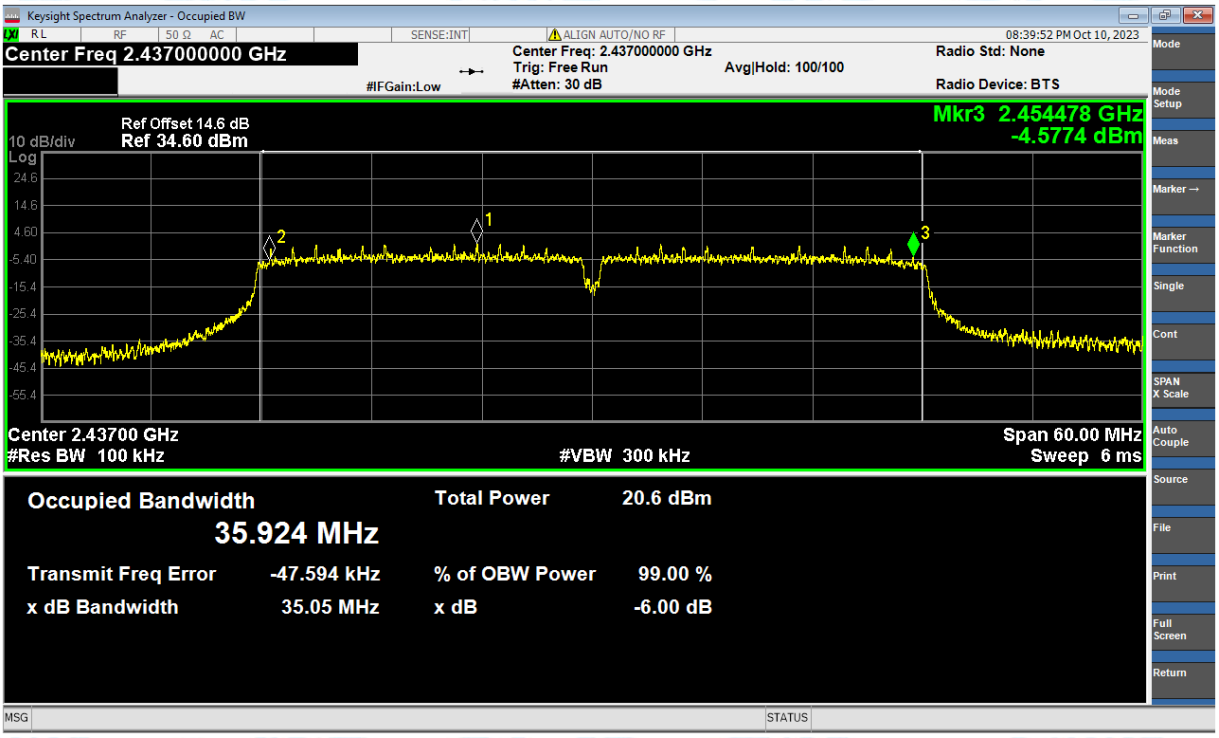
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



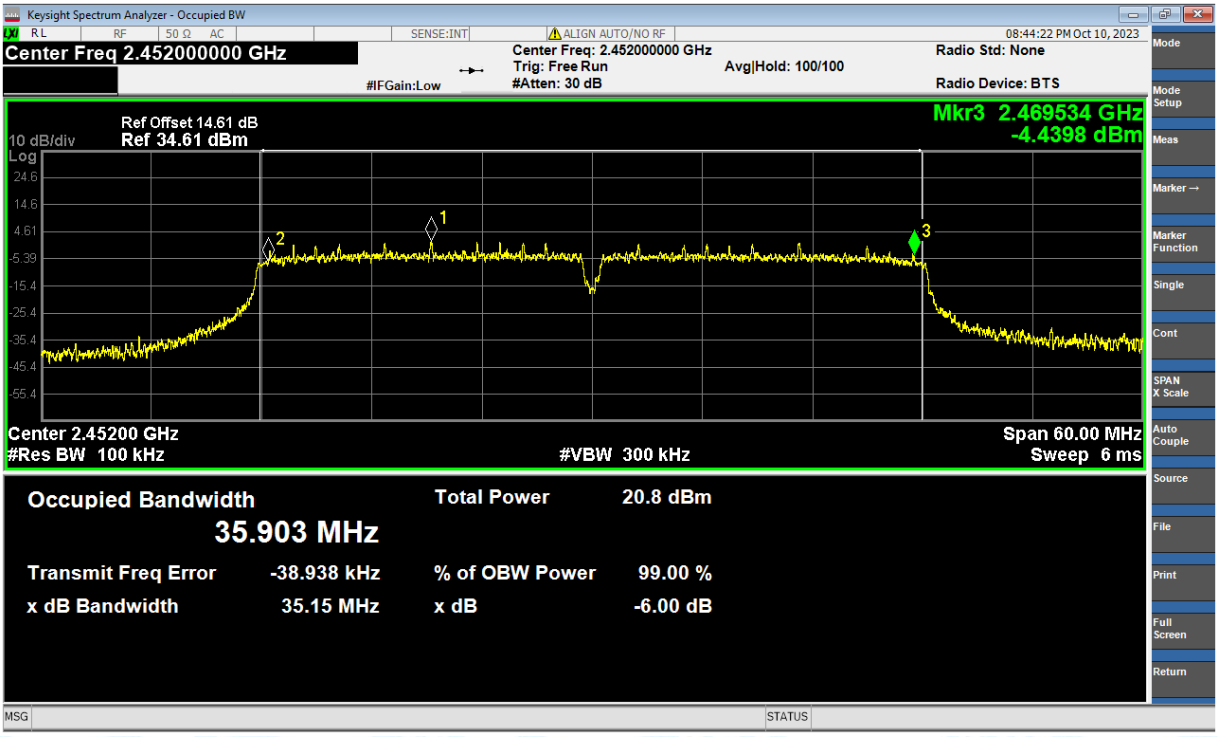
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1

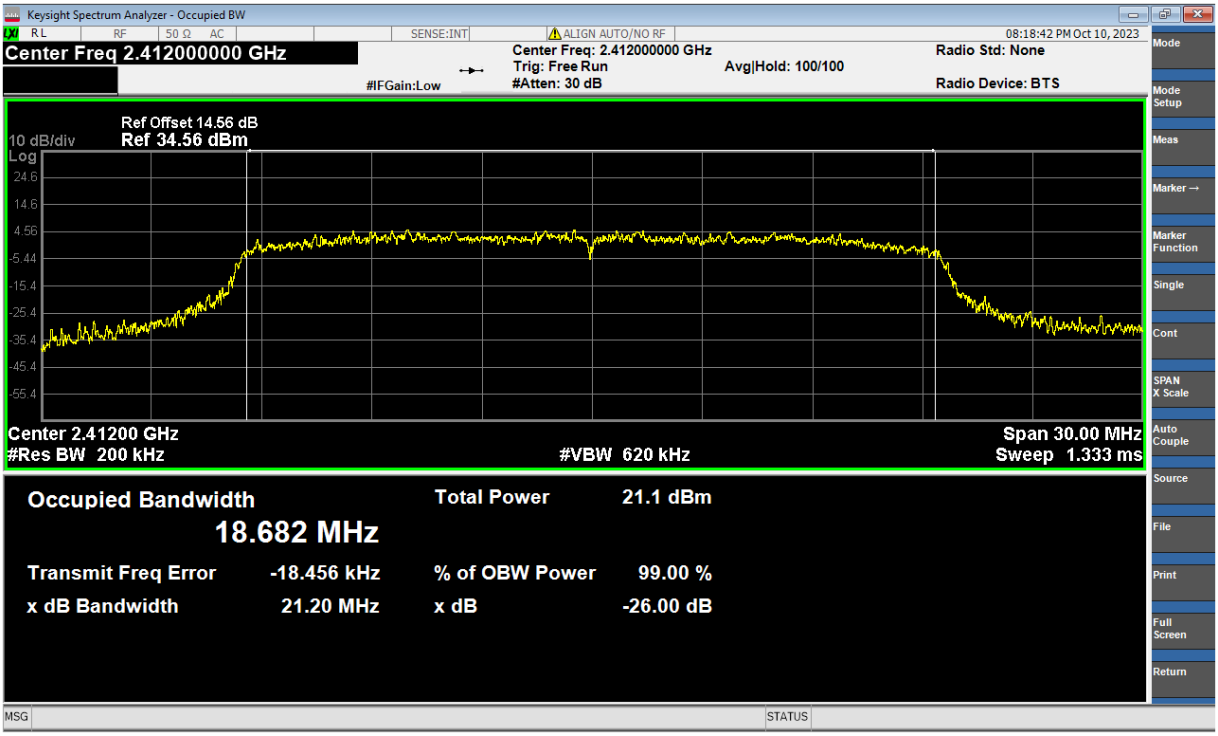


4. Occupied Channel Bandwidth

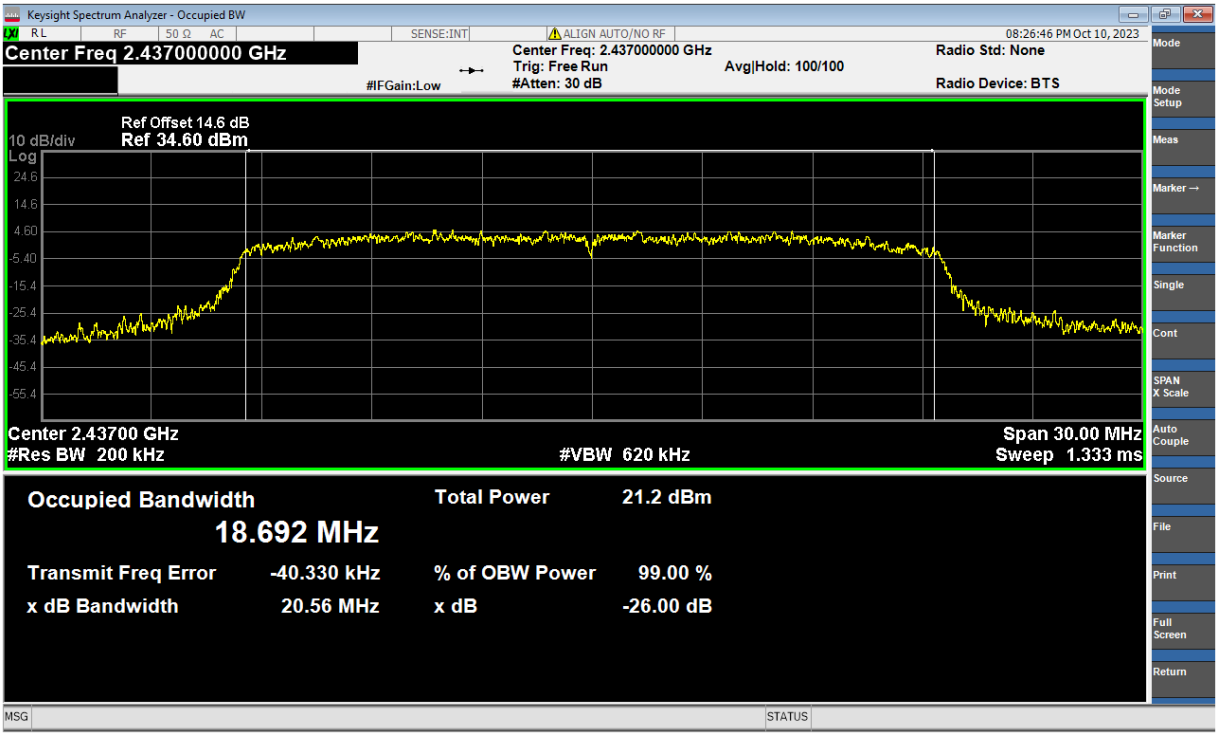
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	ax(VHT20)	2412	Ant1	18.682
NVNT	ax(VHT20)	2437	Ant1	18.692
NVNT	ax(VHT20)	2462	Ant1	18.709
NVNT	ax(VHT40)	2422	Ant1	37.613
NVNT	ax(VHT40)	2437	Ant1	37.576
NVNT	ax(VHT40)	2452	Ant1	37.546
NVNT	b	2412	Ant1	12.444
NVNT	b	2437	Ant1	12.572
NVNT	b	2462	Ant1	12.556
NVNT	g	2412	Ant1	16.378
NVNT	g	2437	Ant1	16.339
NVNT	g	2462	Ant1	16.332
NVNT	n(HT20)	2412	Ant1	17.462
NVNT	n(HT20)	2437	Ant1	17.417
NVNT	n(HT20)	2462	Ant1	17.438
NVNT	n(HT40)	2422	Ant1	36.057
NVNT	n(HT40)	2437	Ant1	36.093
NVNT	n(HT40)	2452	Ant1	36.08

Test Graphs

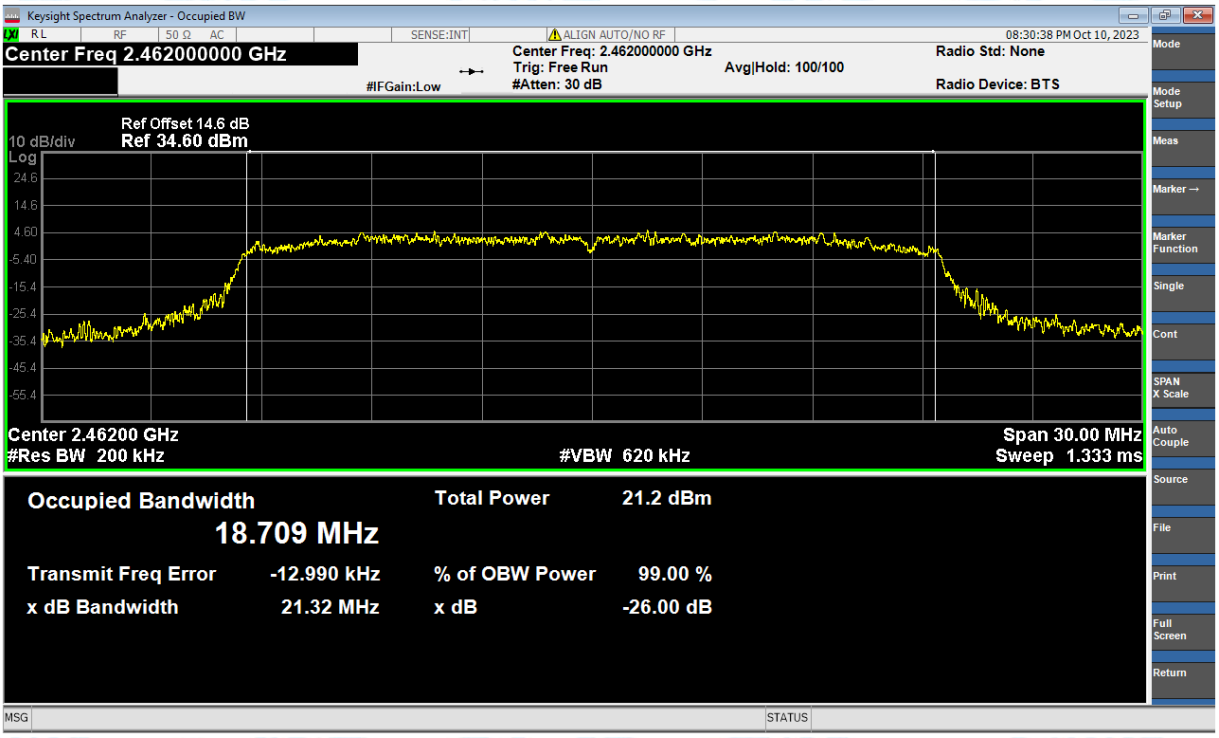
OBW NVNT ax(VHT20) 2412MHz Ant1



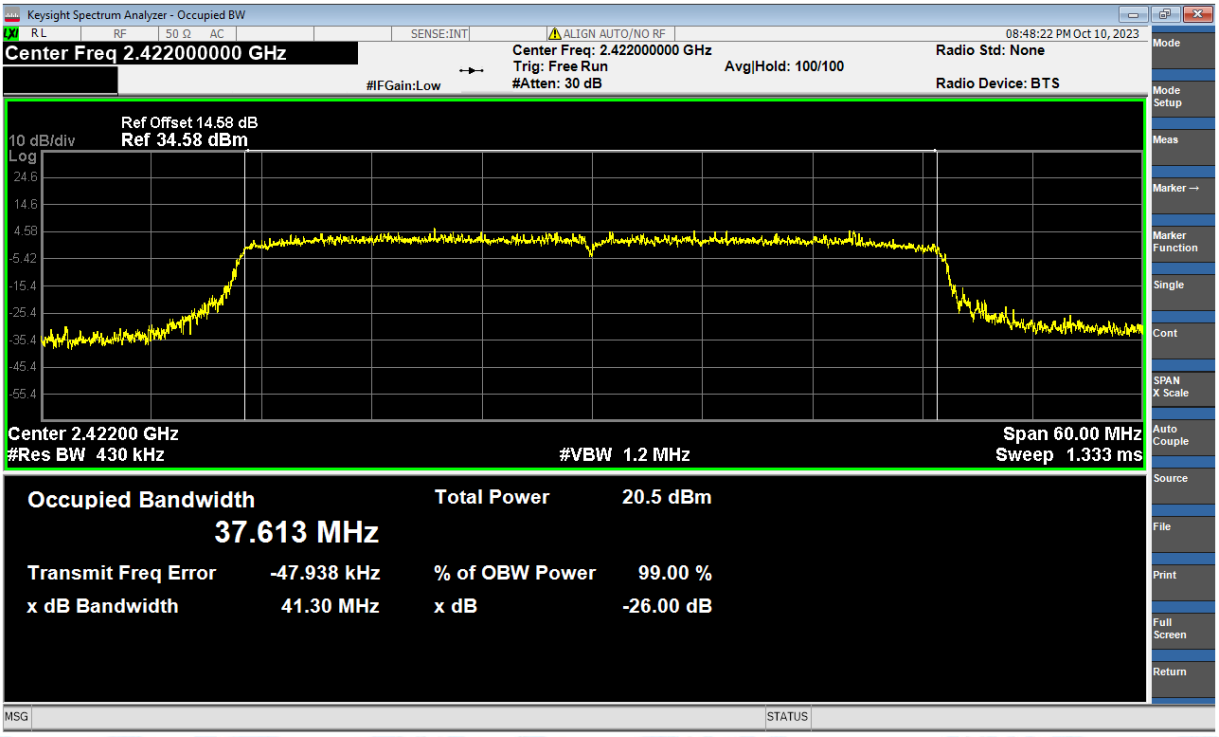
OBW NVNT ax(VHT20) 2437MHz Ant1



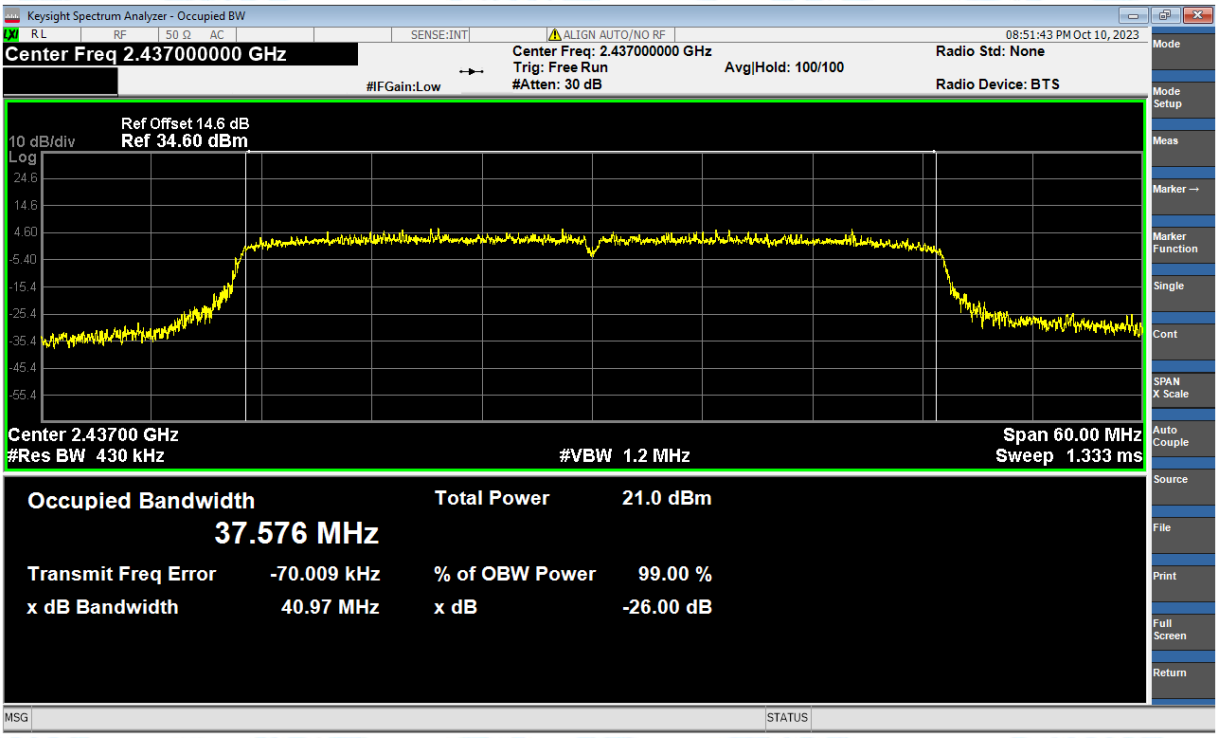
OBW NVNT ax(VHT20) 2462MHz Ant1



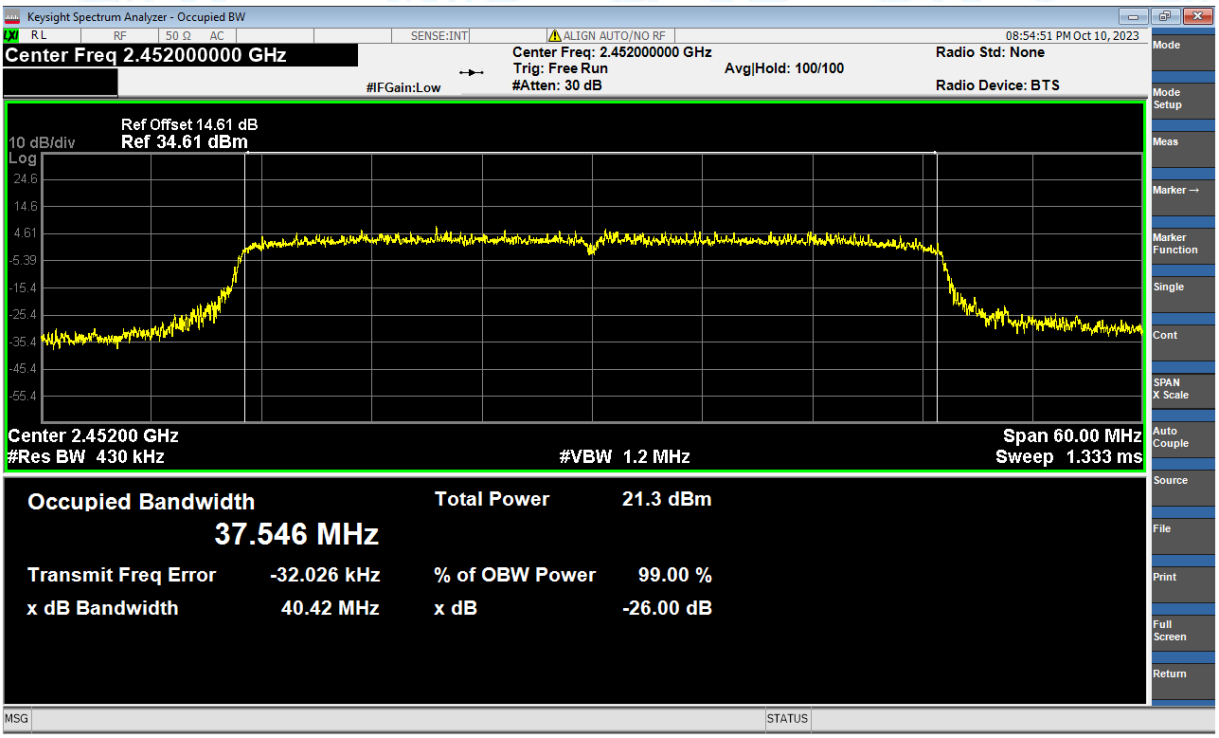
OBW NVNT ax(VHT40) 2422MHz Ant1



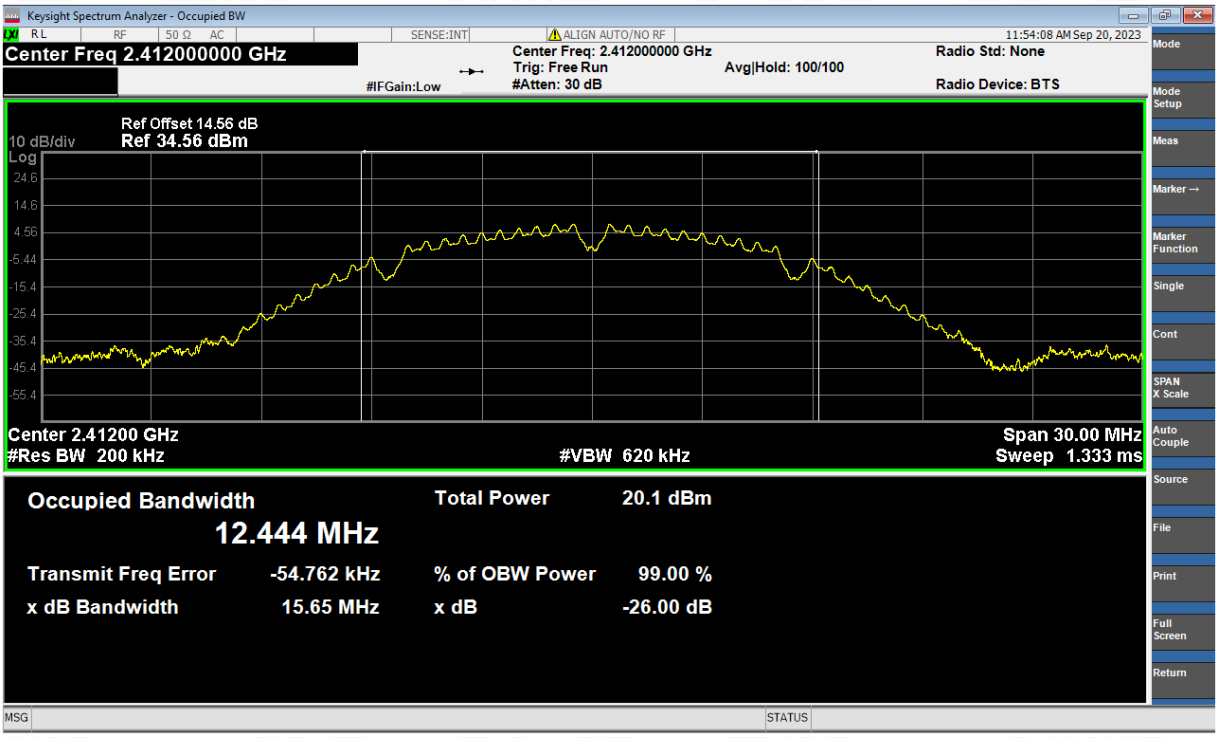
OBW NVNT ax(VHT40) 2437MHz Ant1



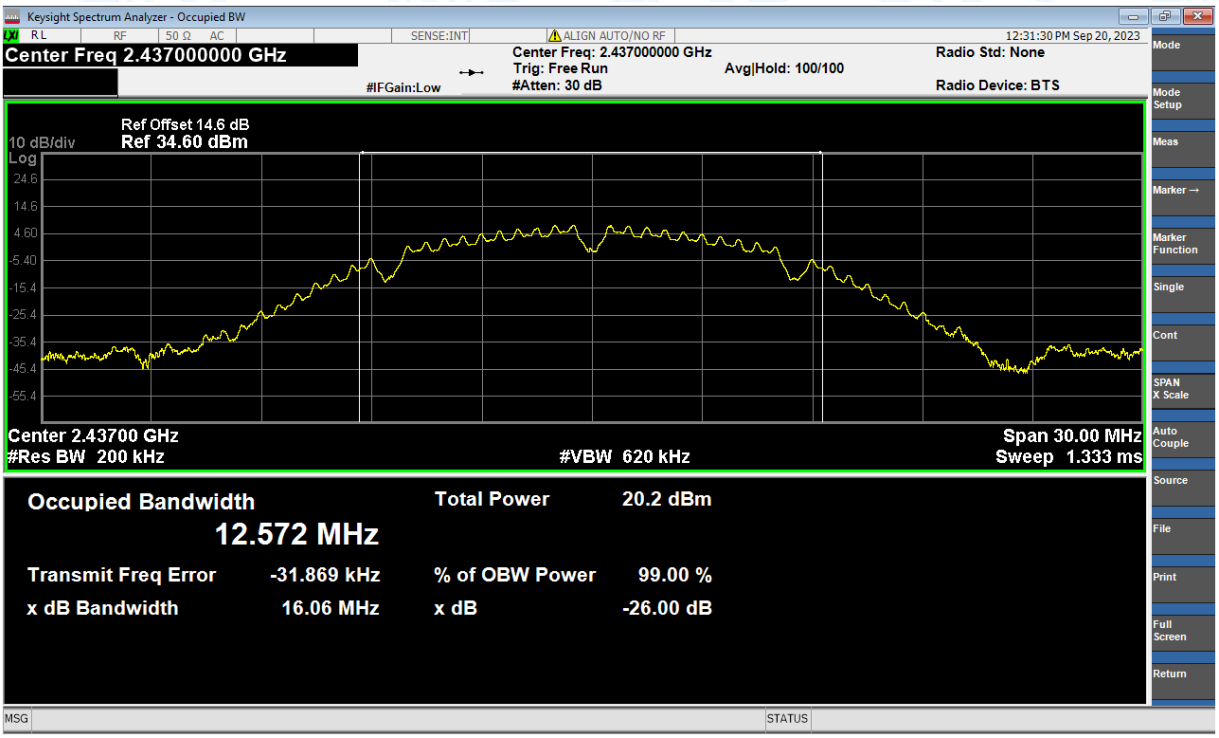
OBW NVNT ax(VHT40) 2452MHz Ant1



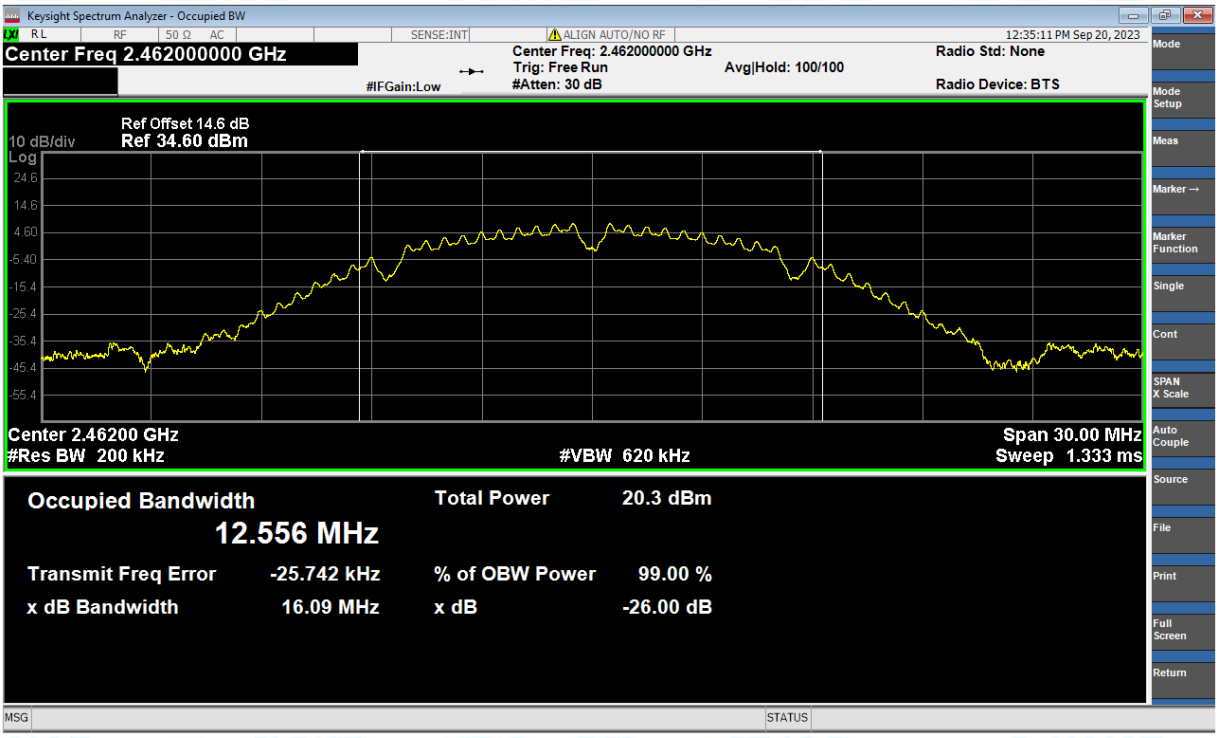
OBW NVNT b 2412MHz Ant1



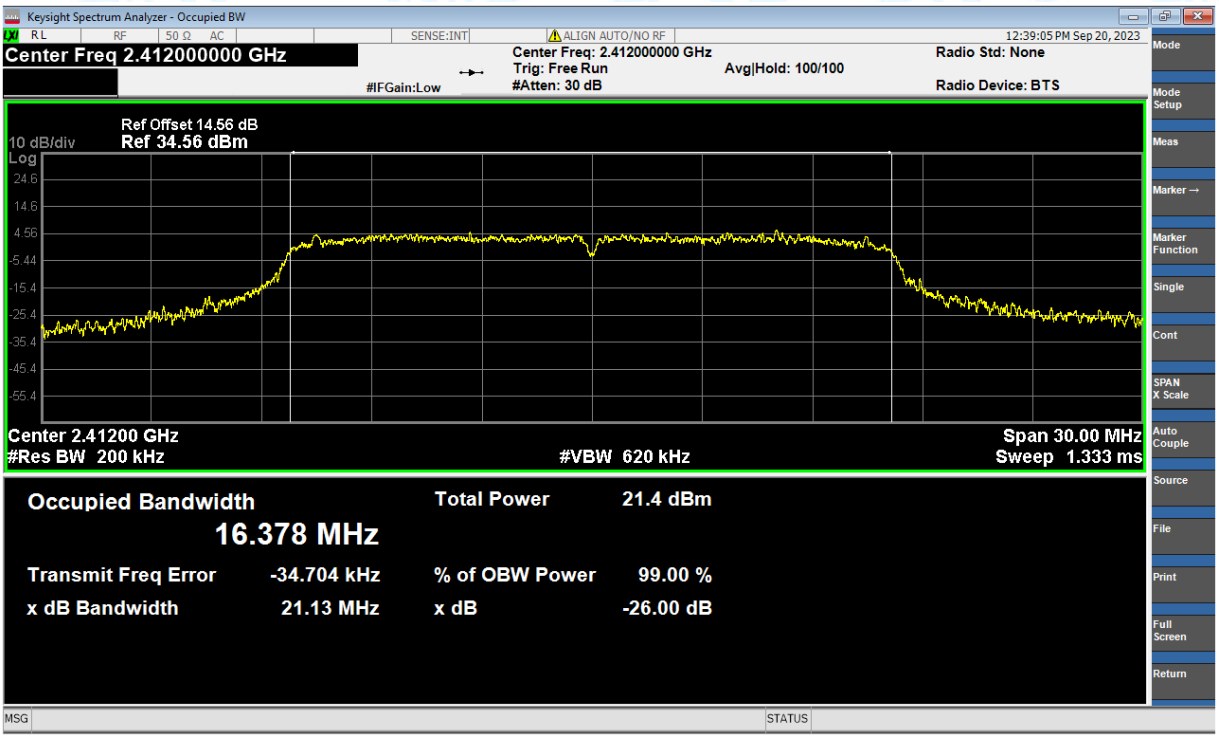
OBW NVNT b 2437MHz Ant1



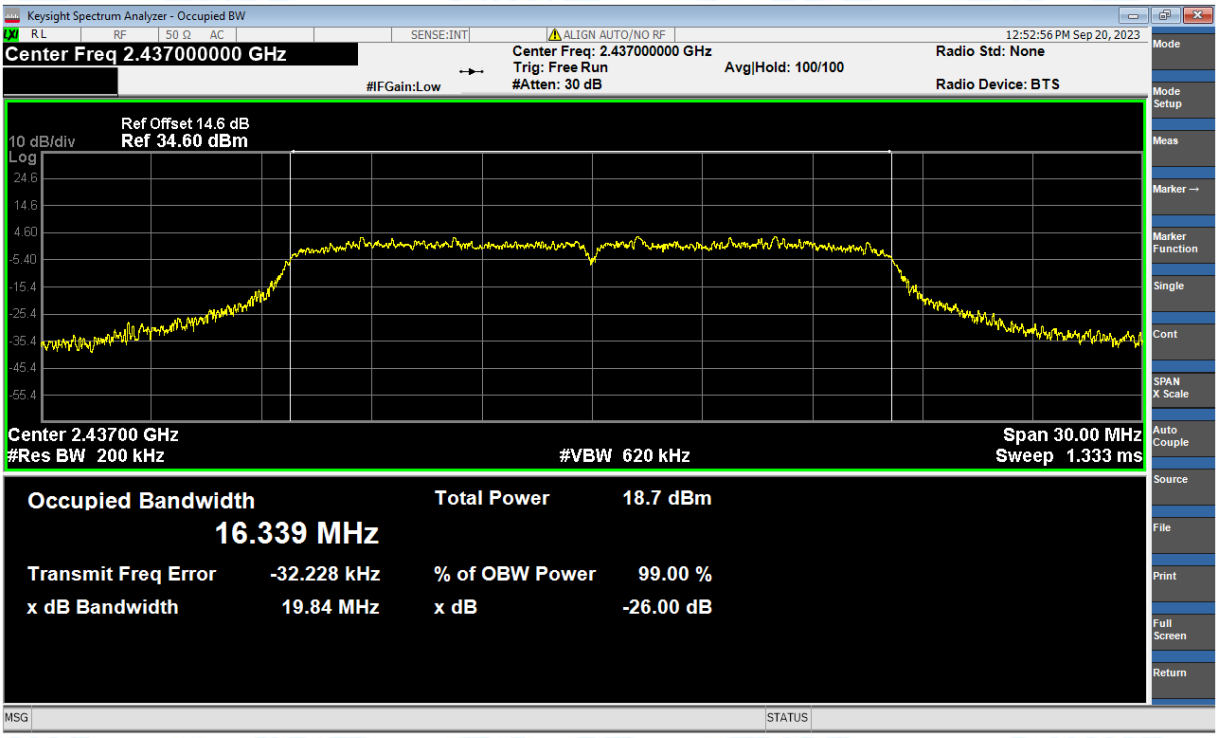
OBW NVNT b 2462MHz Ant1



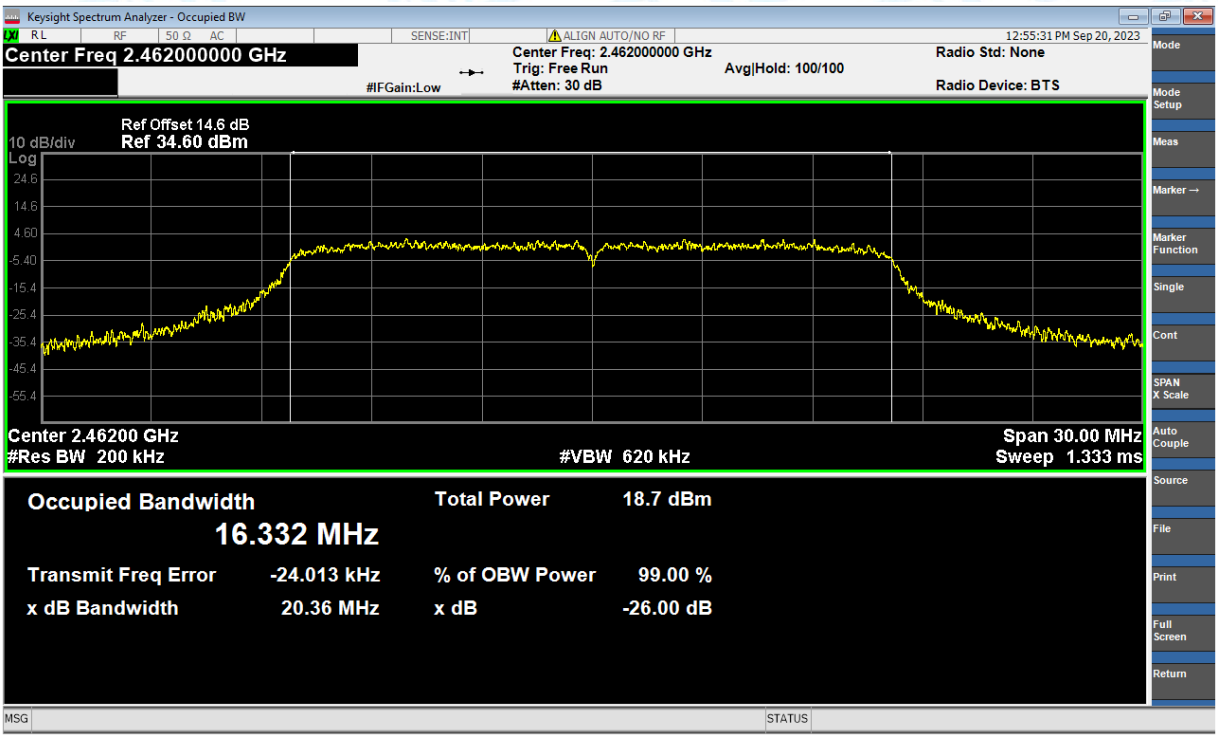
OBW NVNT g 2412MHz Ant1



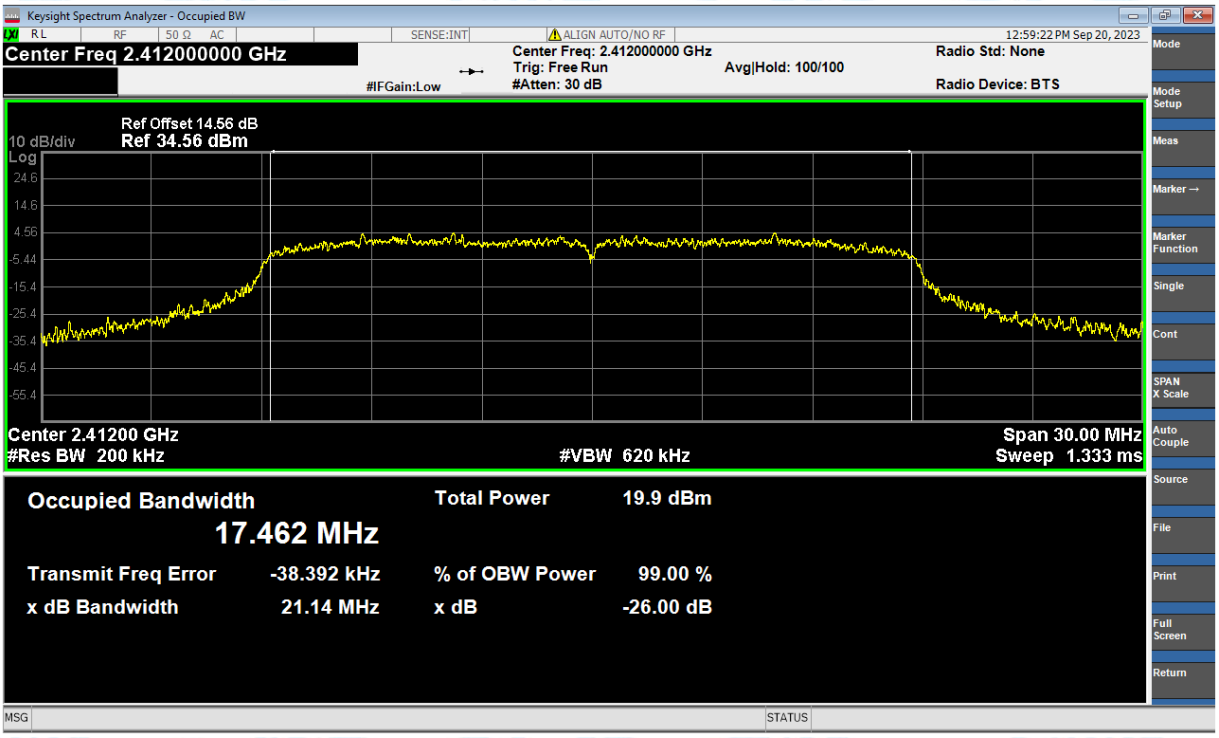
OBW NVNT g 2437MHz Ant1



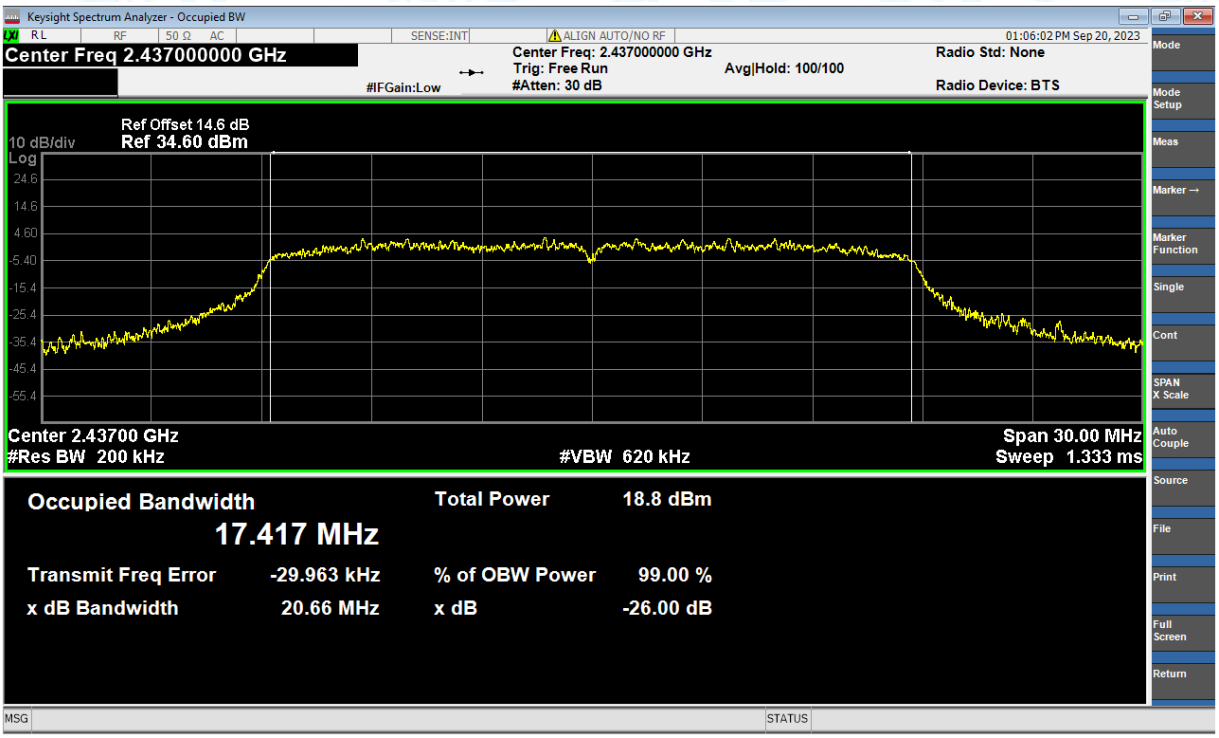
OBW NVNT g 2462MHz Ant1



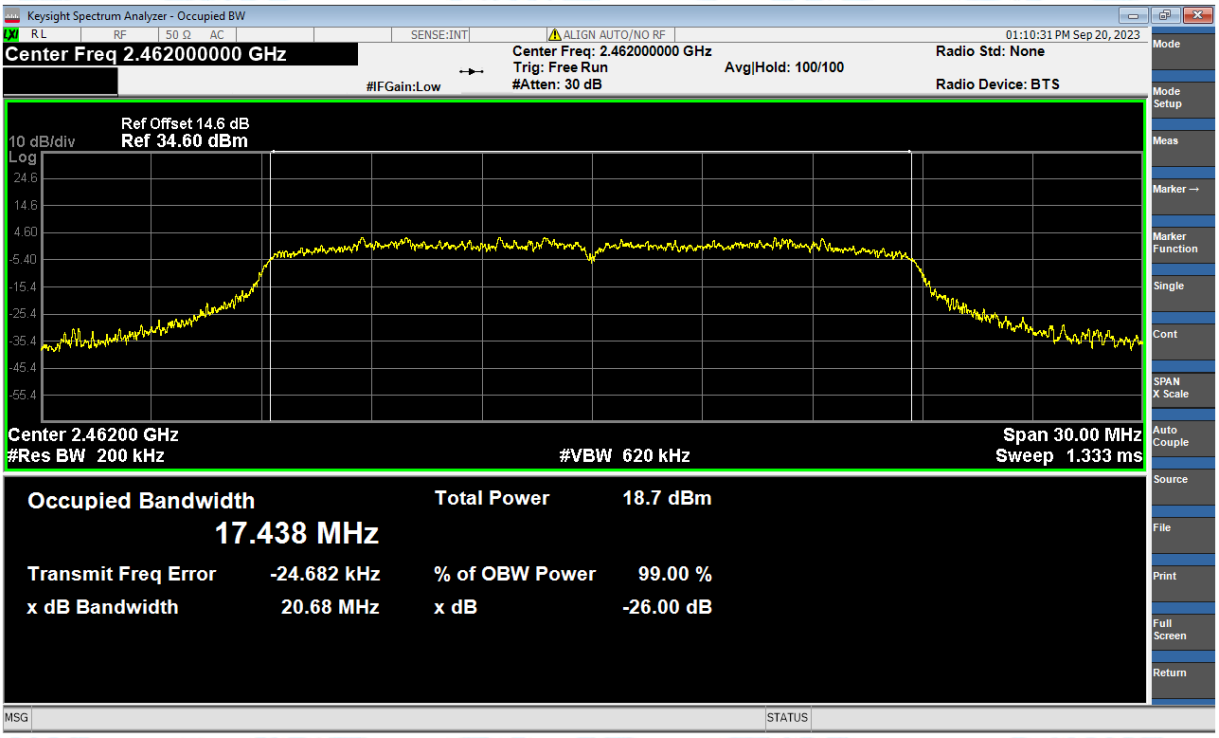
OBW NVNT n(HT20) 2412MHz Ant1



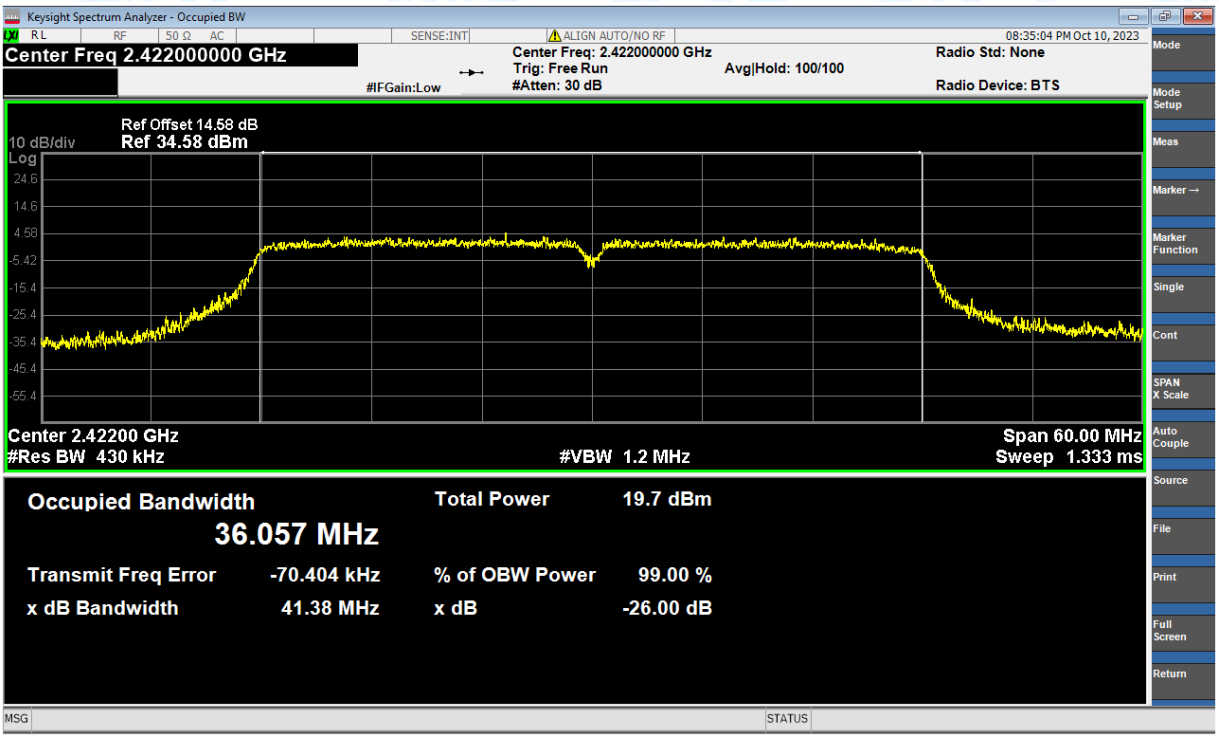
OBW NVNT n(HT20) 2437MHz Ant1



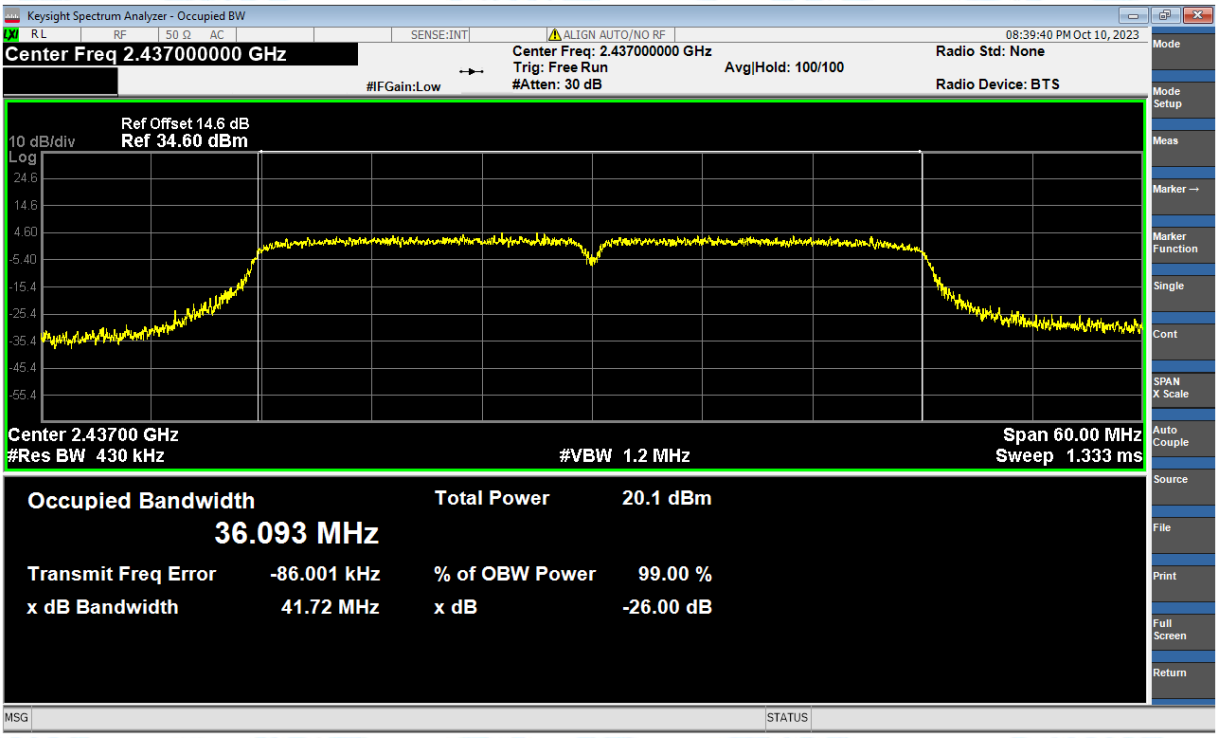
OBW NVNT n(HT20) 2462MHz Ant1



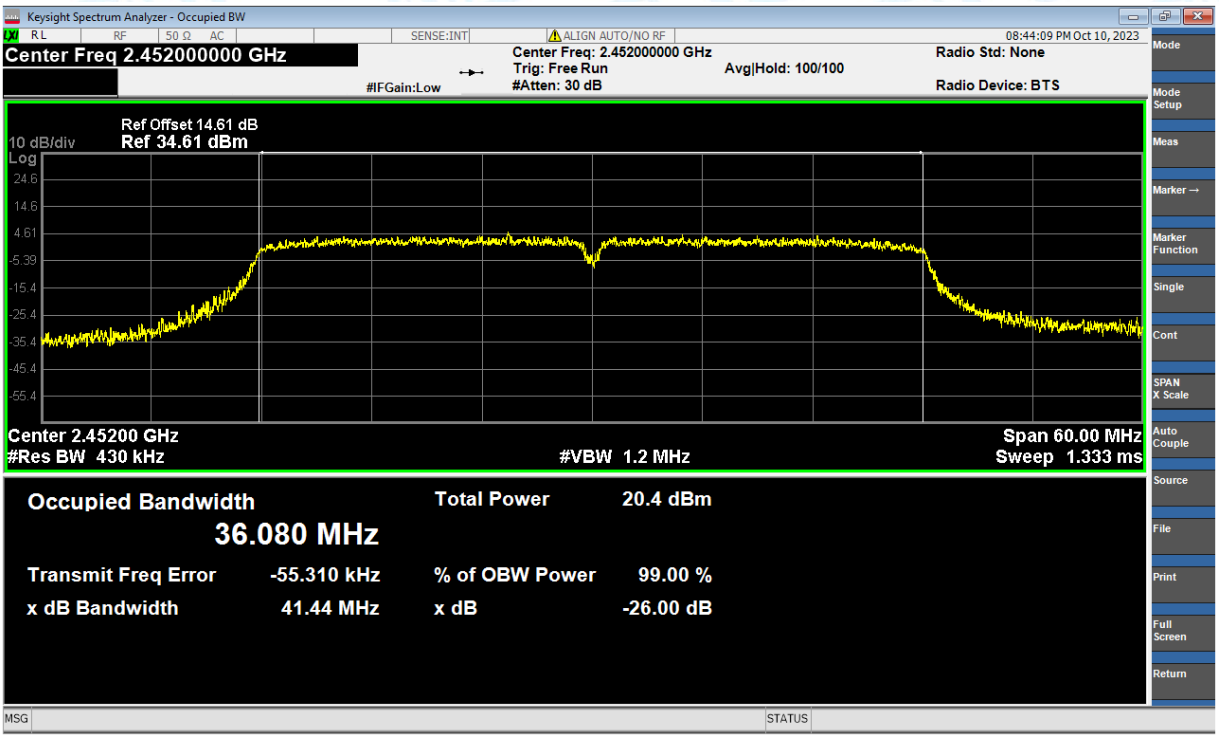
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1

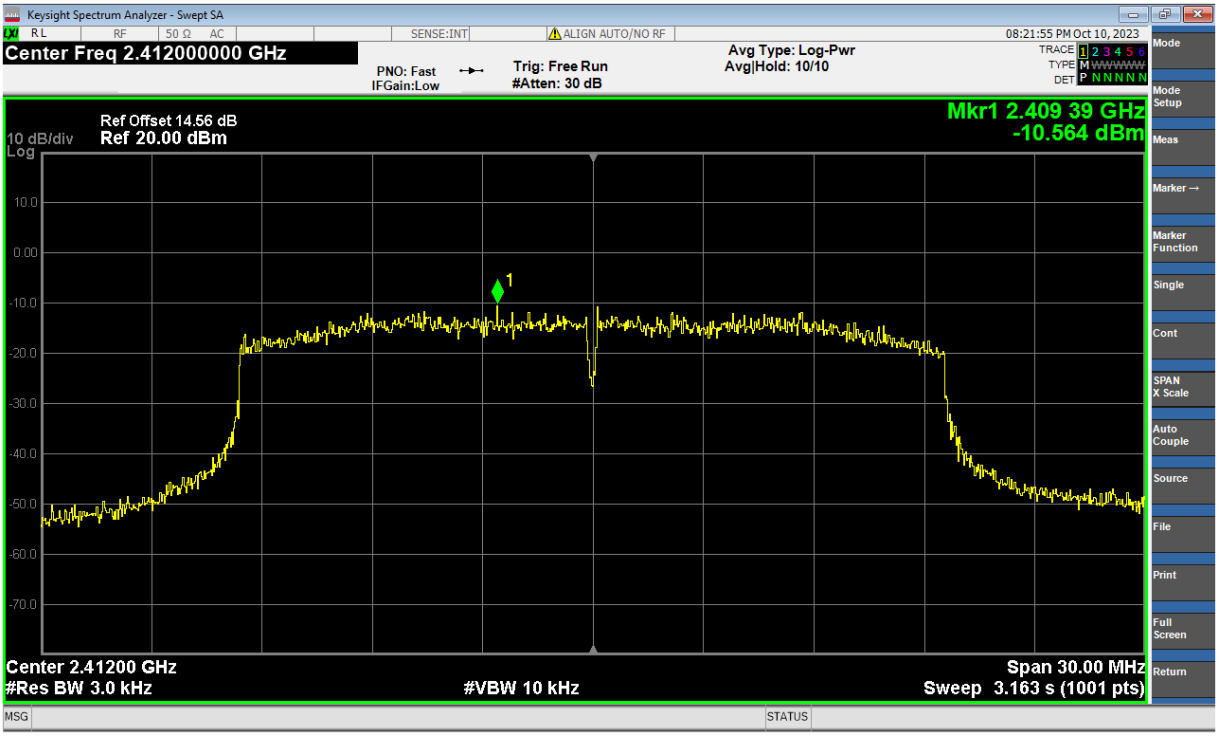


5. Maximum Power Spectral Density Level

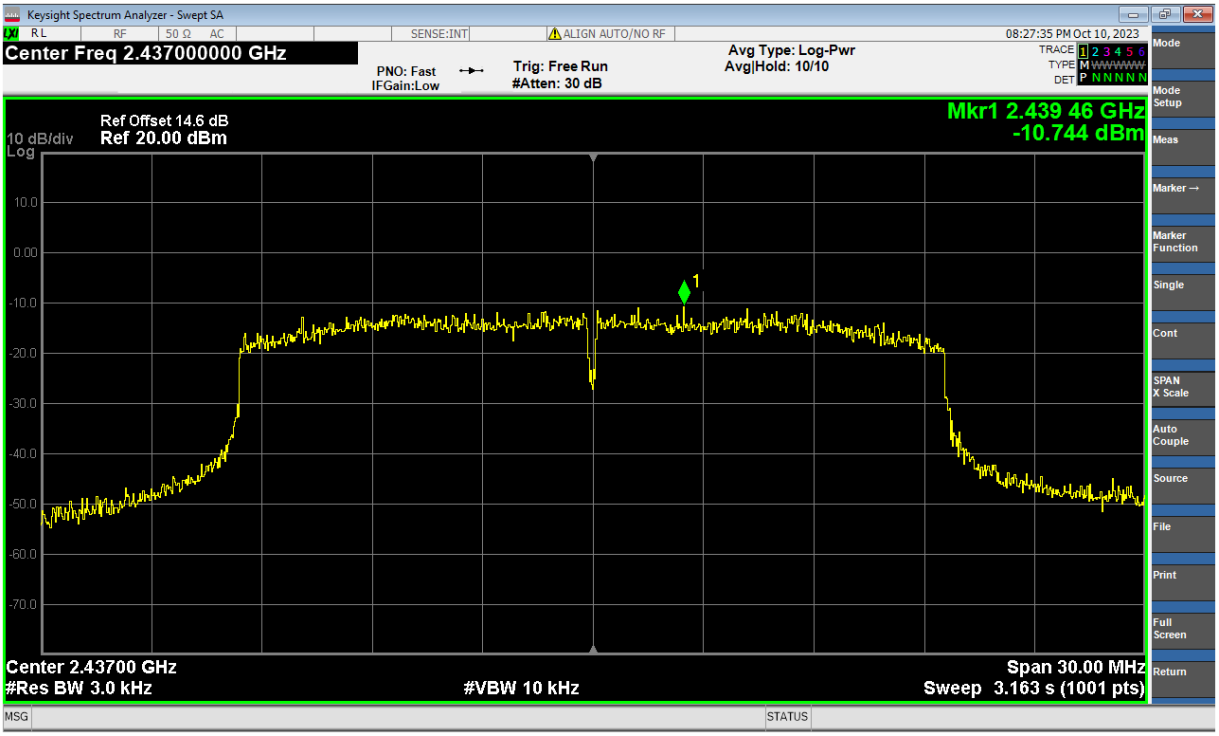
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-10.564	8	Pass
NVNT	ax(VHT20)	2437	Ant1	-10.744	8	Pass
NVNT	ax(VHT20)	2462	Ant1	-10.249	8	Pass
NVNT	ax(VHT40)	2422	Ant1	-15.379	8	Pass
NVNT	ax(VHT40)	2437	Ant1	-13.884	8	Pass
NVNT	ax(VHT40)	2452	Ant1	-13.687	8	Pass
NVNT	b	2412	Ant1	-5.808	8	Pass
NVNT	b	2437	Ant1	-5.794	8	Pass
NVNT	b	2462	Ant1	-6.676	8	Pass
NVNT	g	2412	Ant1	-8.771	8	Pass
NVNT	g	2437	Ant1	-12.104	8	Pass
NVNT	g	2462	Ant1	-11.552	8	Pass
NVNT	n(HT20)	2412	Ant1	-11.299	8	Pass
NVNT	n(HT20)	2437	Ant1	-10.109	8	Pass
NVNT	n(HT20)	2462	Ant1	-12.024	8	Pass
NVNT	n(HT40)	2422	Ant1	-14.317	8	Pass
NVNT	n(HT40)	2437	Ant1	-12.764	8	Pass
NVNT	n(HT40)	2452	Ant1	-13.955	8	Pass

Test Graphs

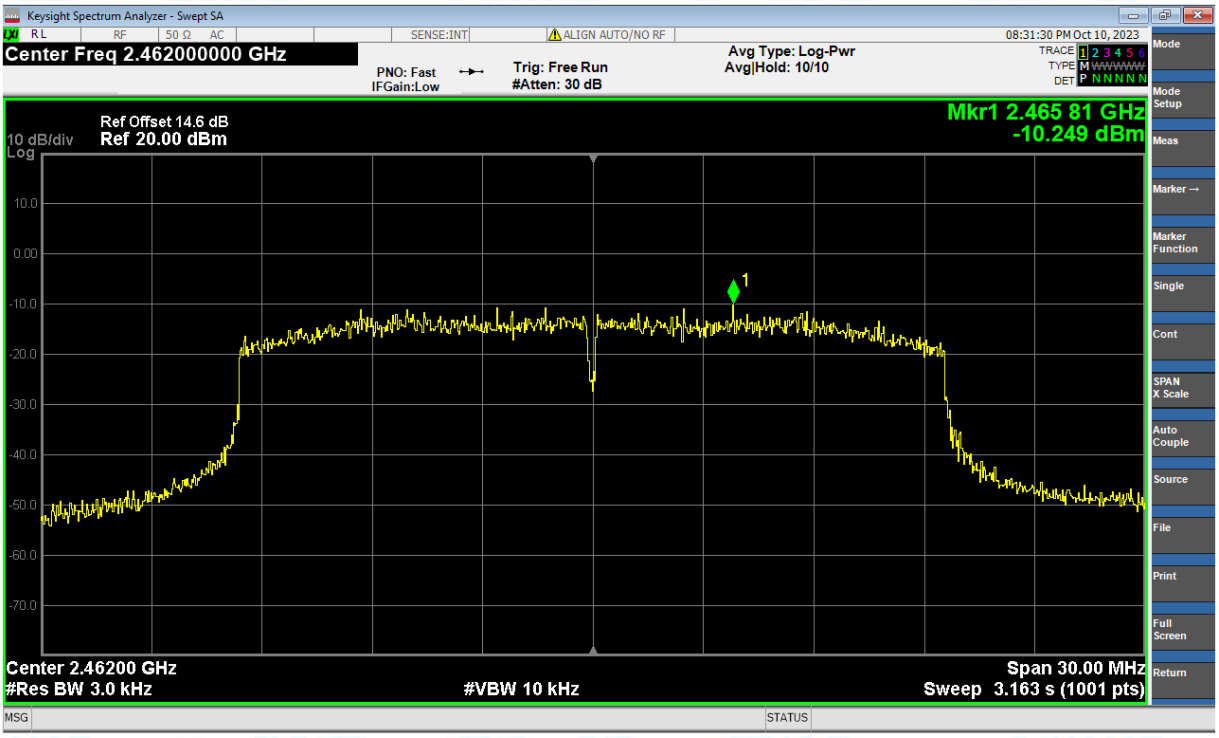
PSD NVNT ax(VHT20) 2412MHz Ant1



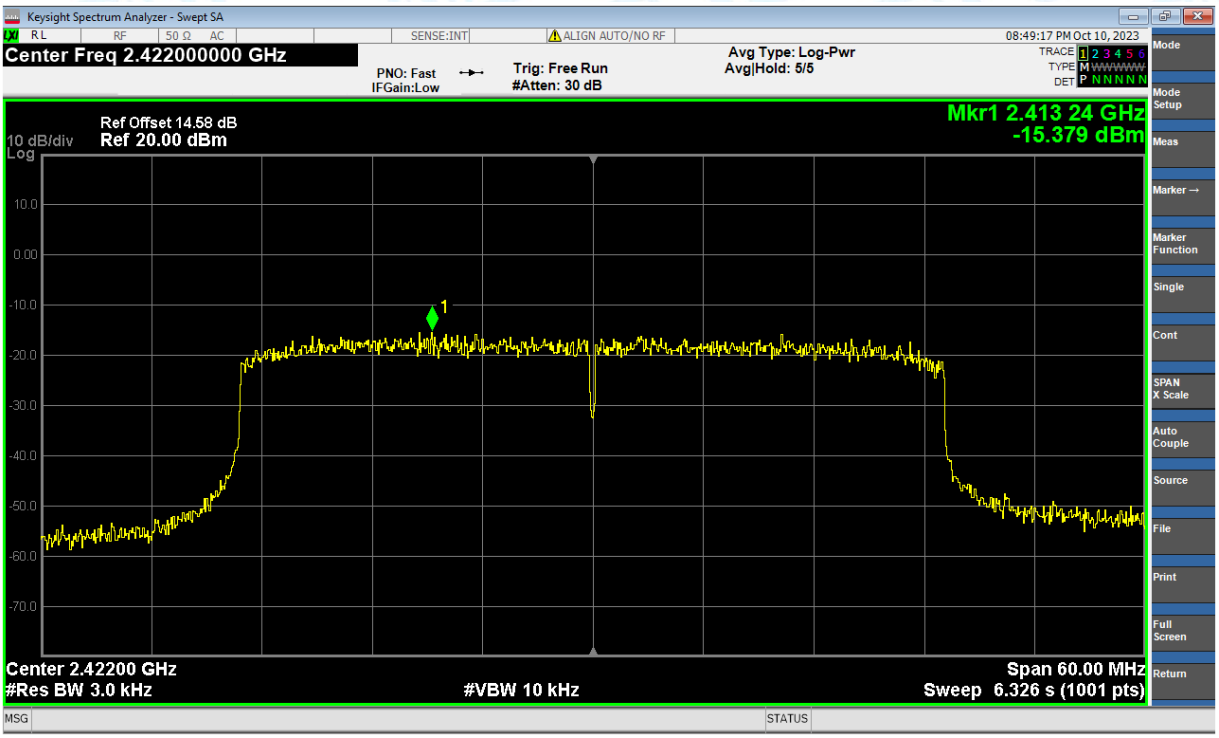
PSD NVNT ax(VHT20) 2437MHz Ant1



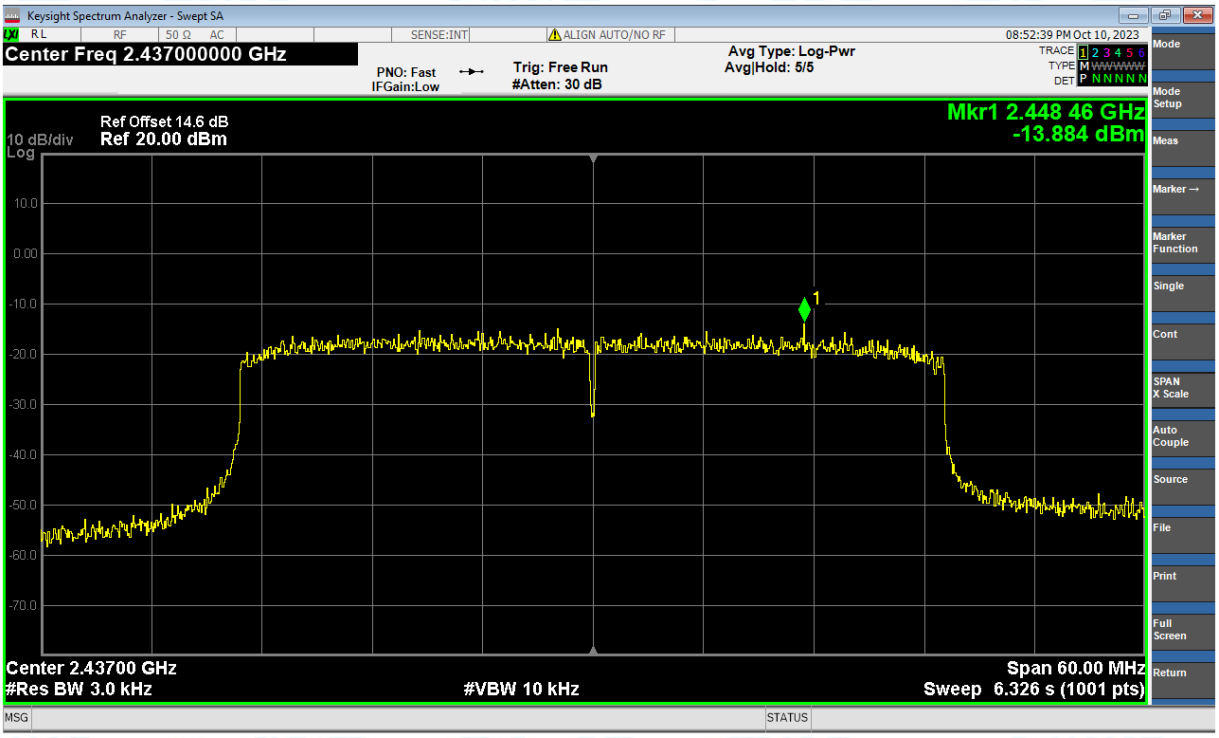
PSD NVNT ax(VHT20) 2462MHz Ant1



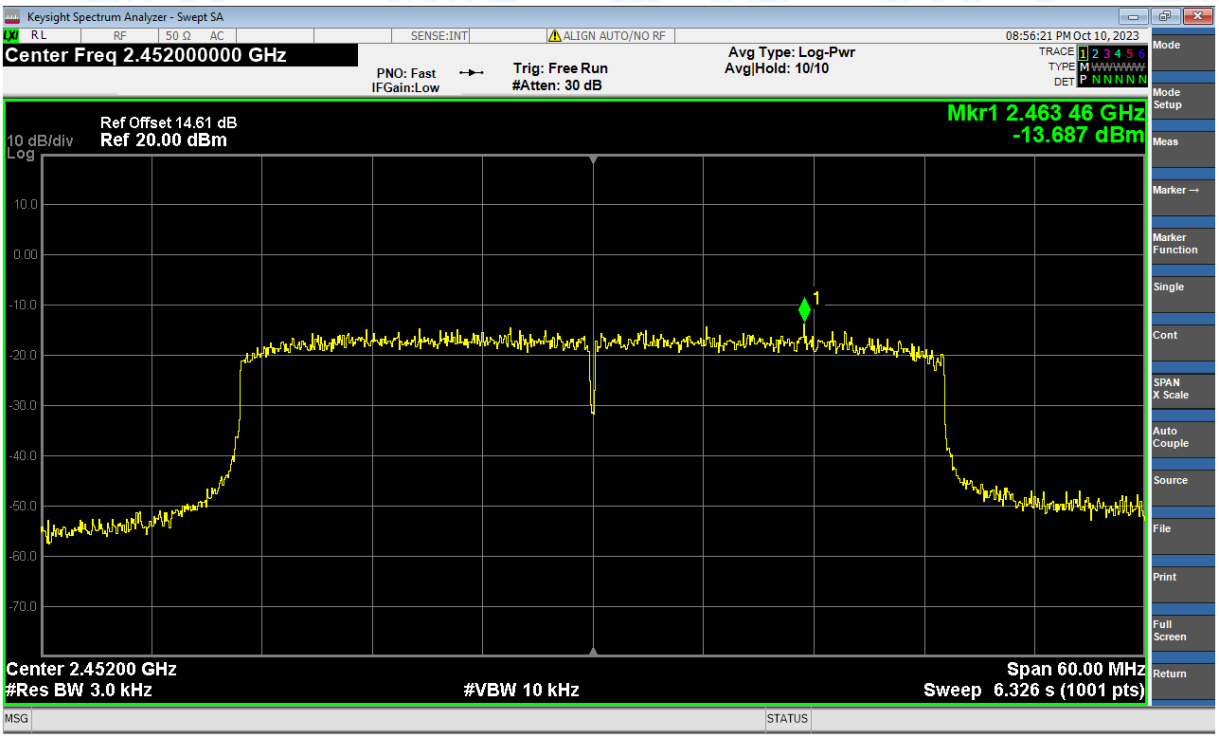
PSD NVNT ax(VHT40) 2422MHz Ant1



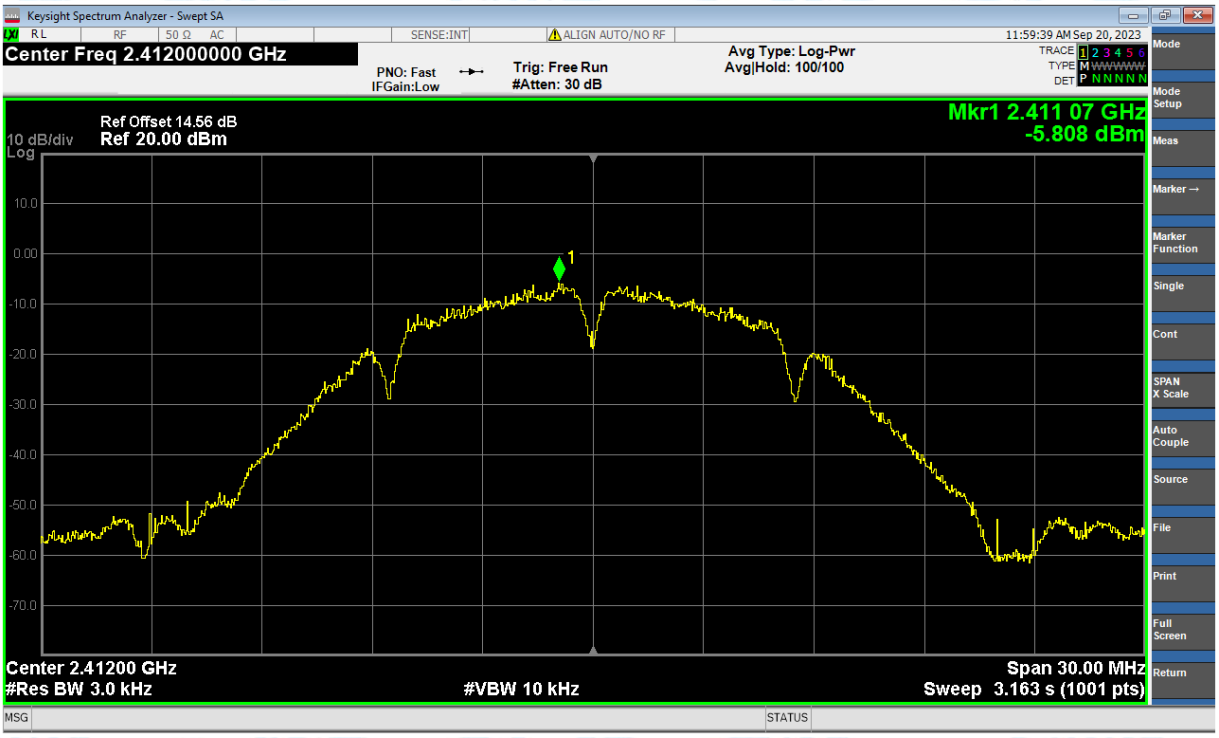
PSD NVNT ax(VHT40) 2437MHz Ant1



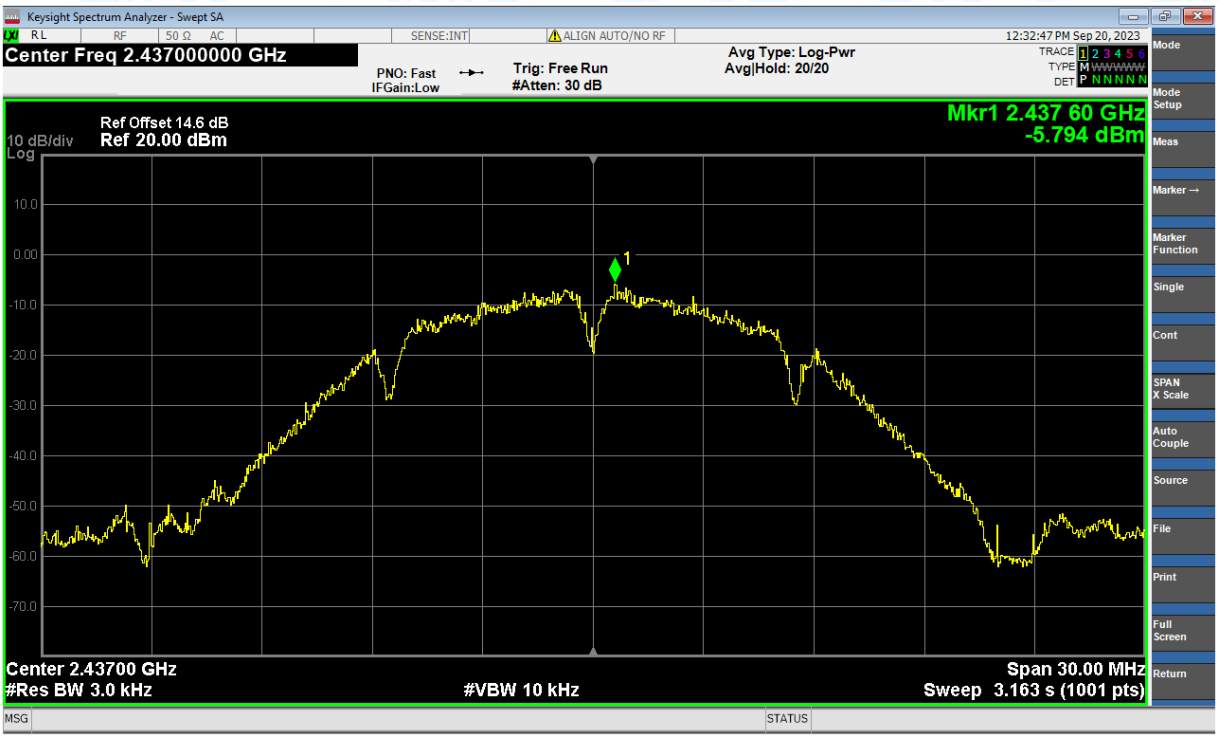
PSD NVNT ax(VHT40) 2452MHz Ant1



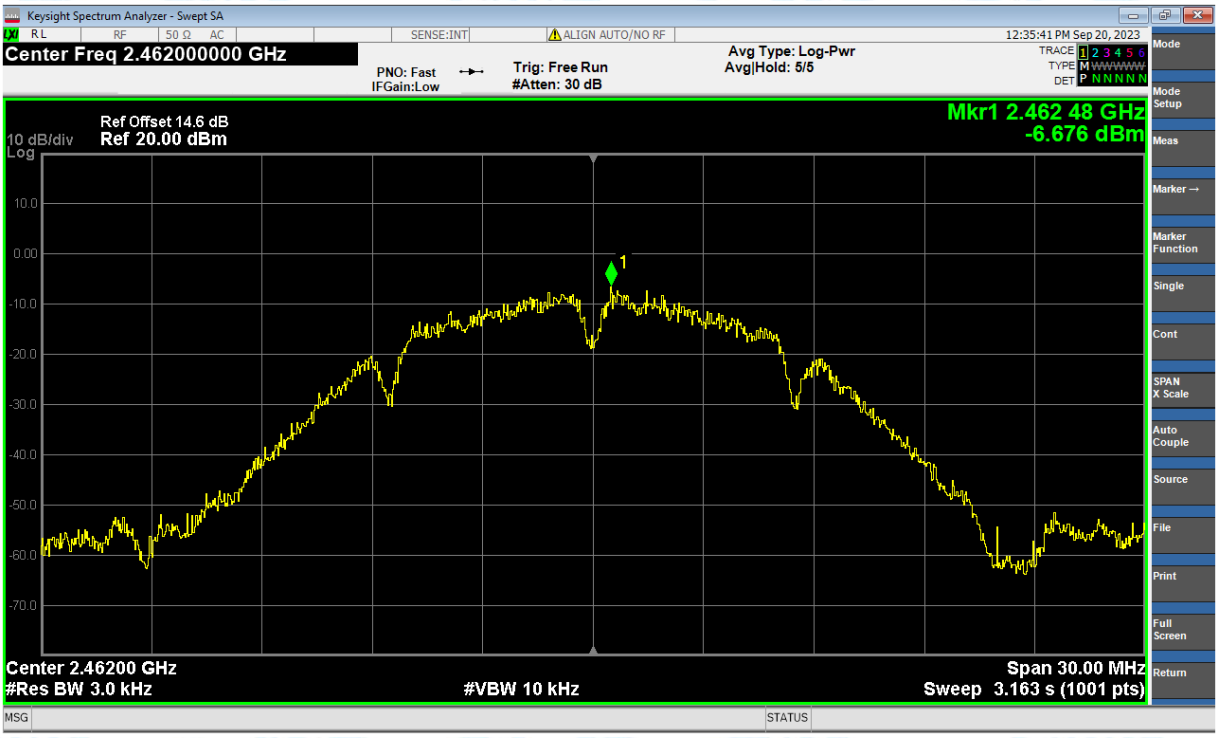
PSD NVNT b 2412MHz Ant1



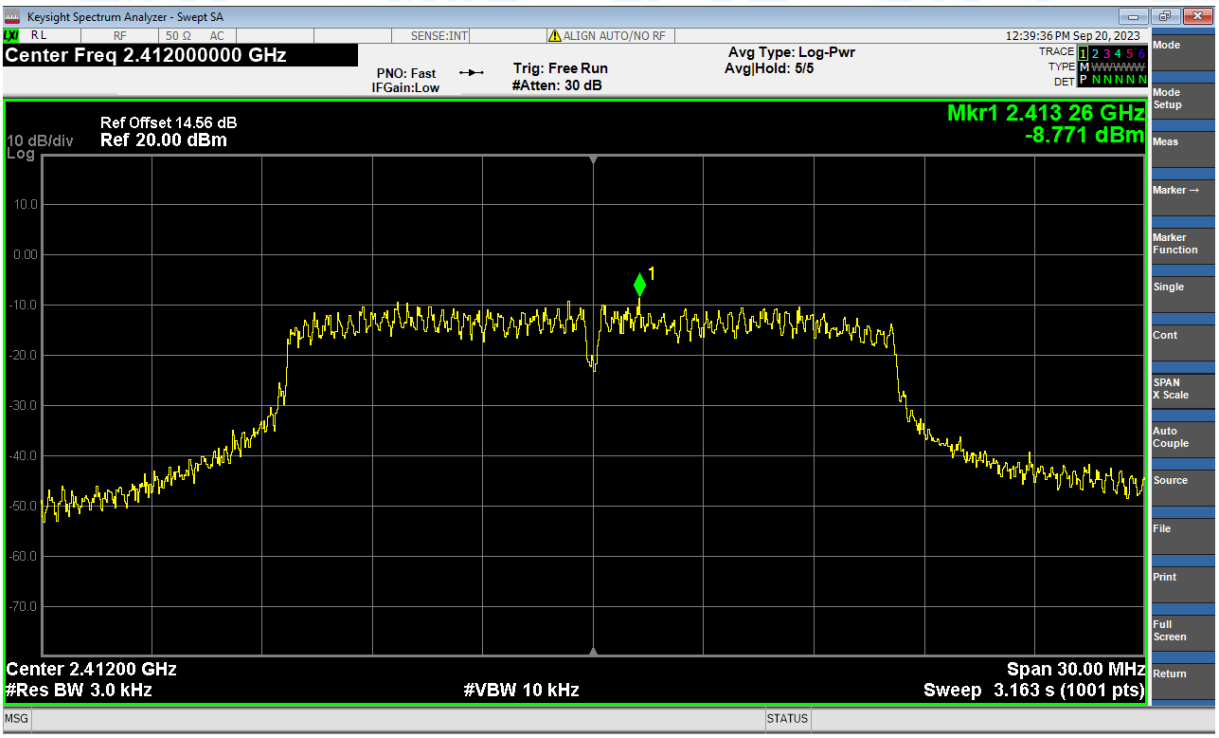
PSD NVNT b 2437MHz Ant1



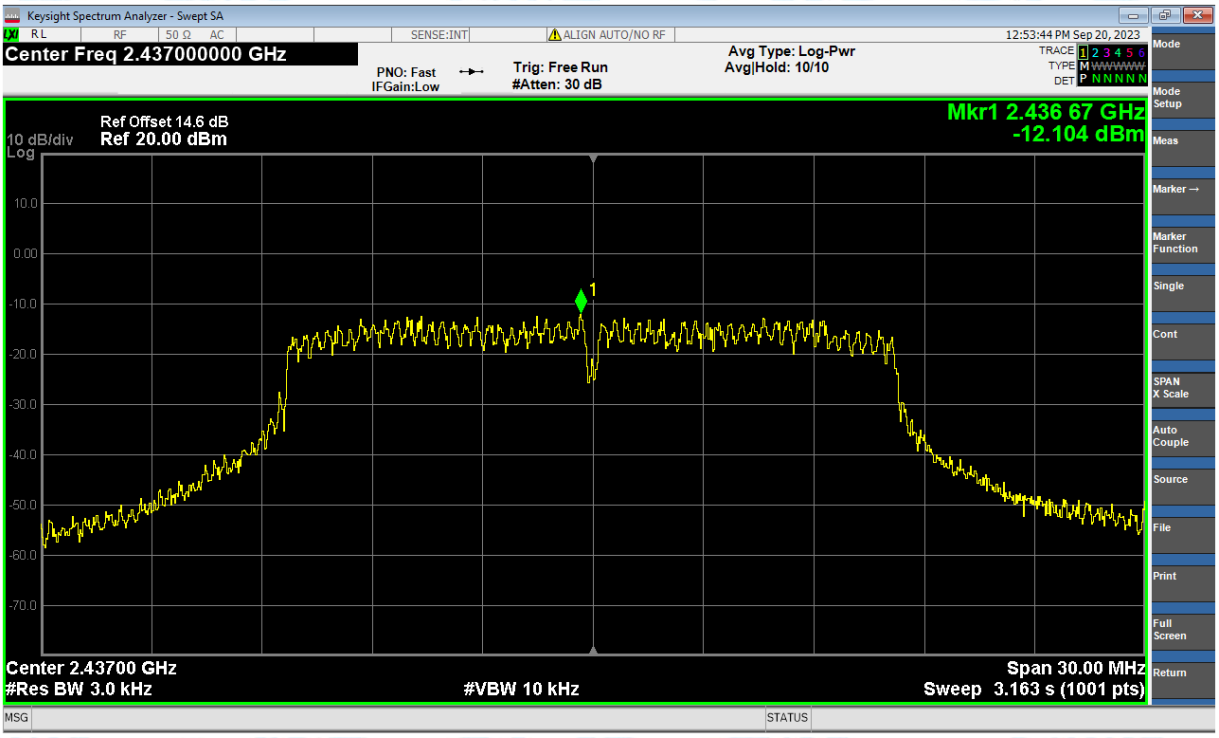
PSD NVNT b 2462MHz Ant1



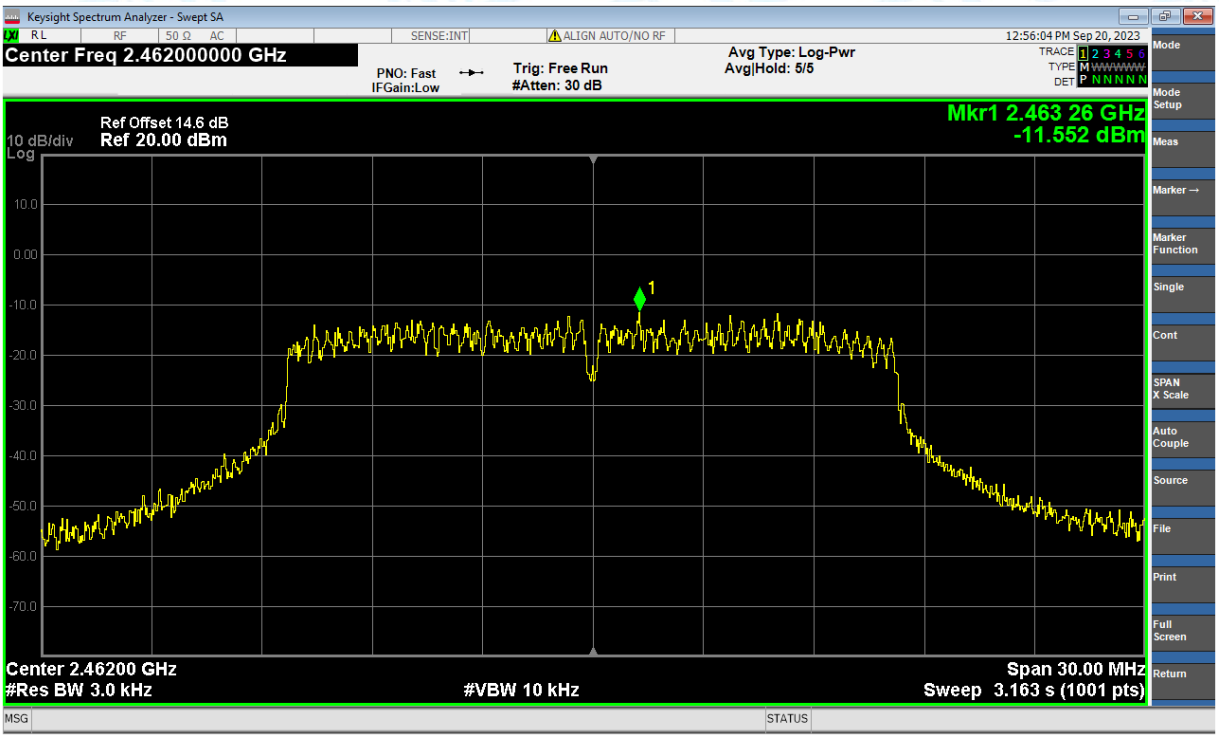
PSD NVNT g 2412MHz Ant1



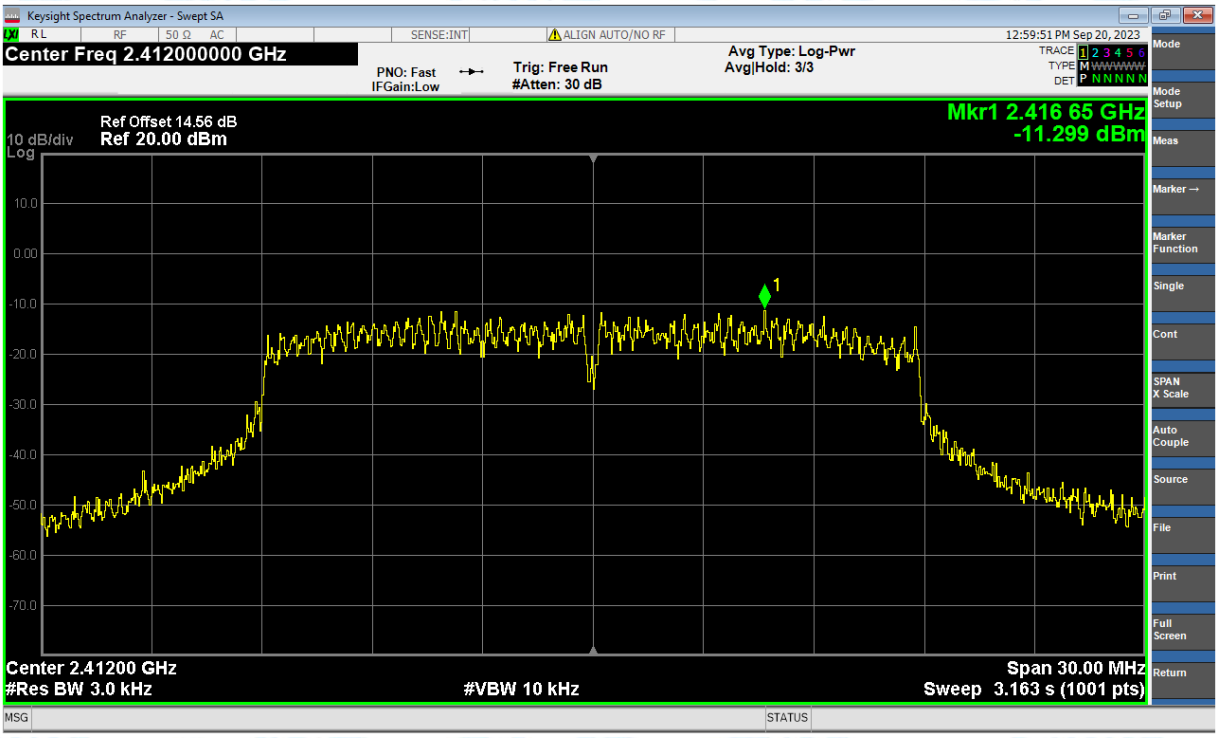
PSD NVNT g 2437MHz Ant1



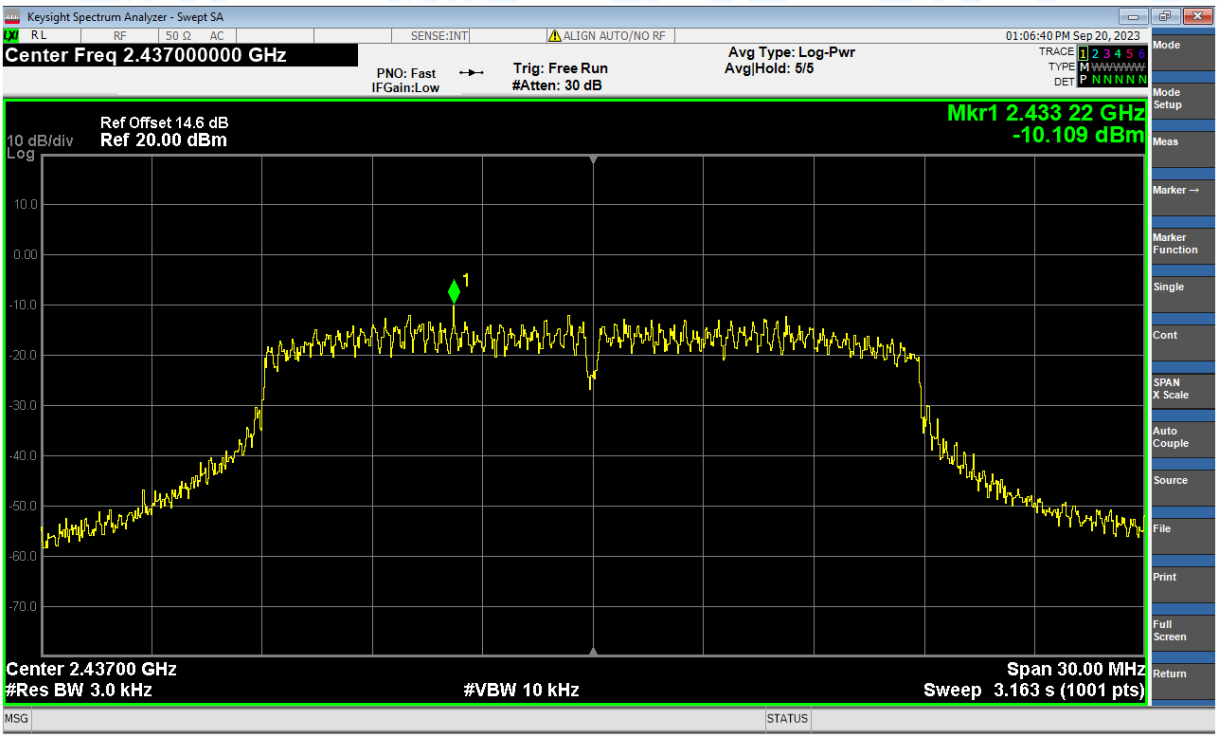
PSD NVNT g 2462MHz Ant1



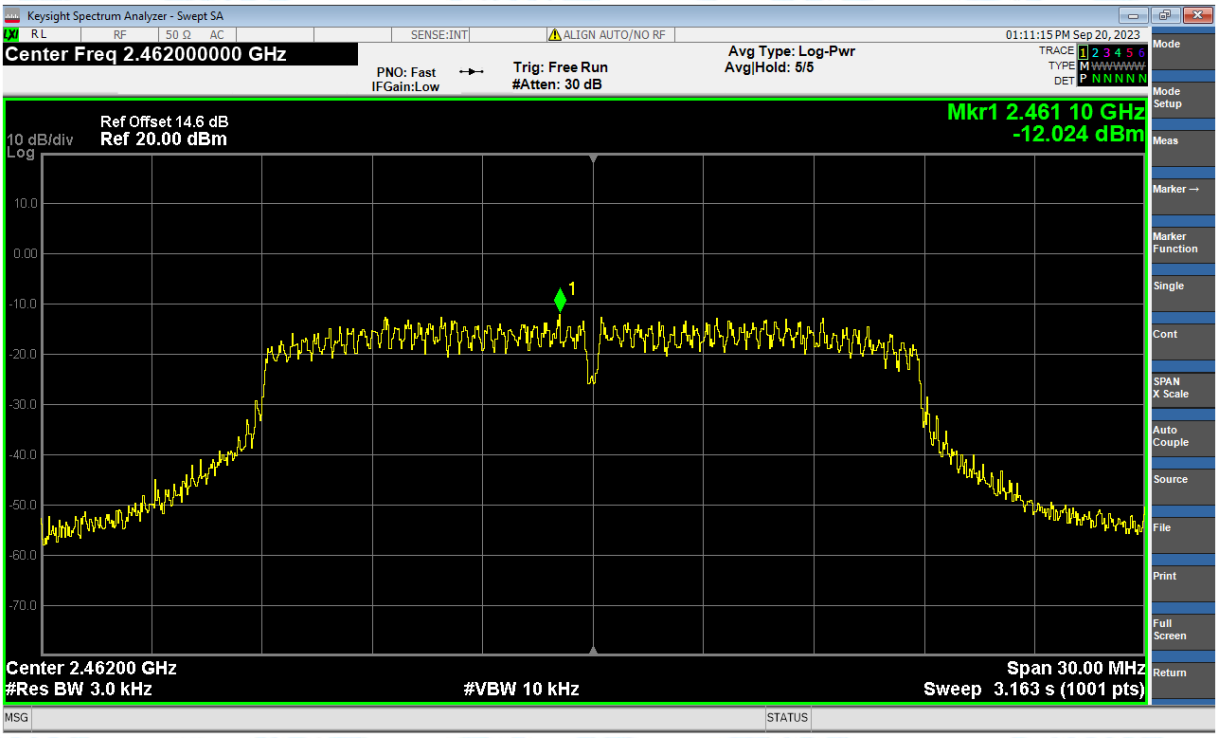
PSD NVNT n(HT20) 2412MHz Ant1



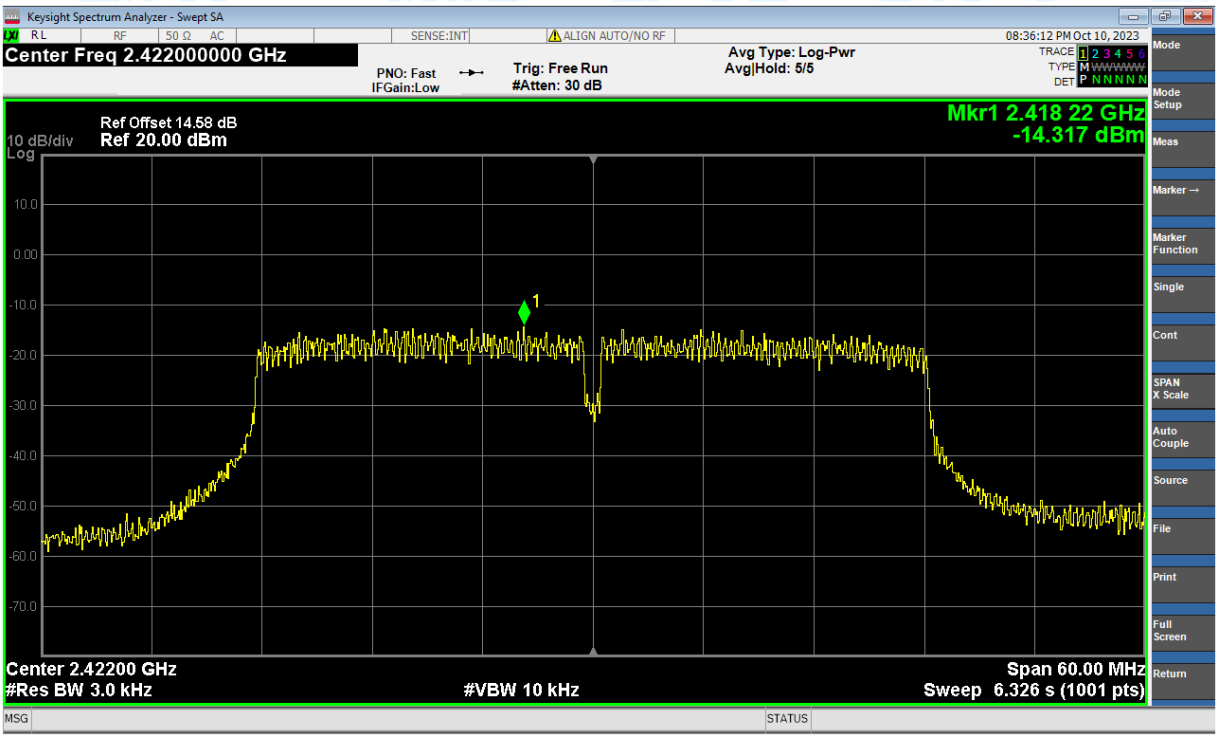
PSD NVNT n(HT20) 2437MHz Ant1



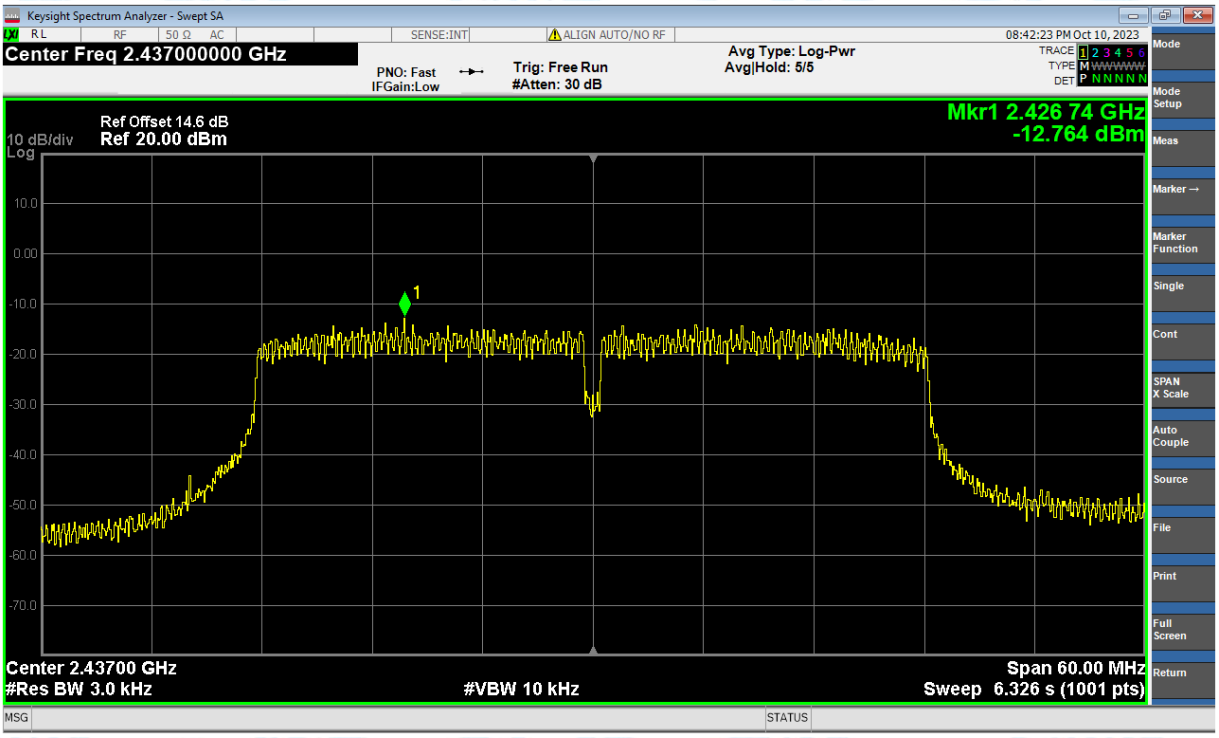
PSD NVNT n(HT20) 2462MHz Ant1



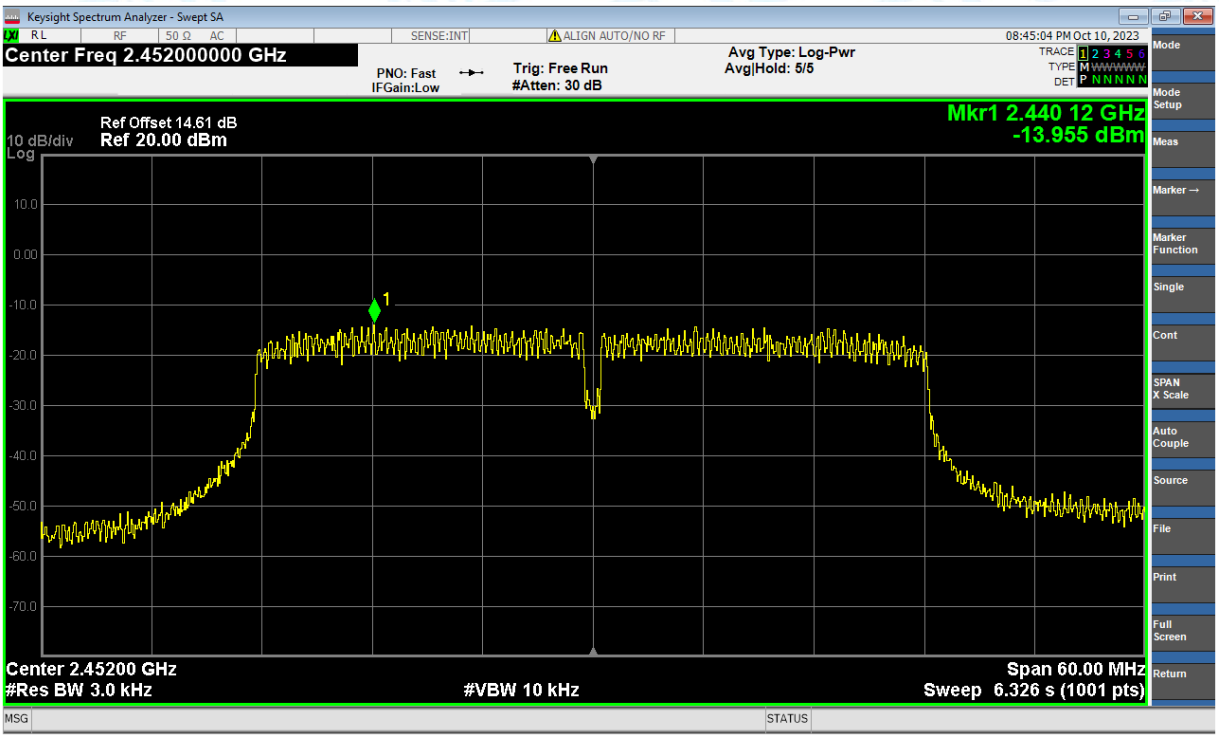
PSD NVNT n(HT40) 2422MHz Ant1



PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1

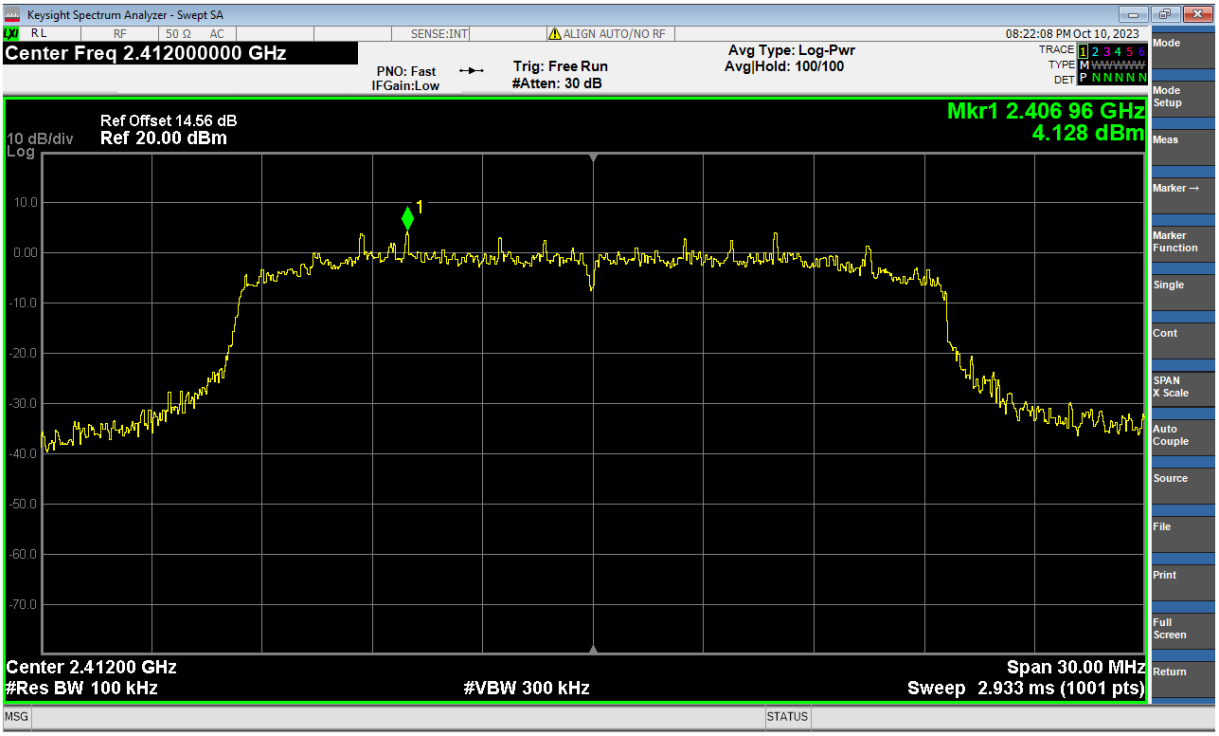


6. Band Edge

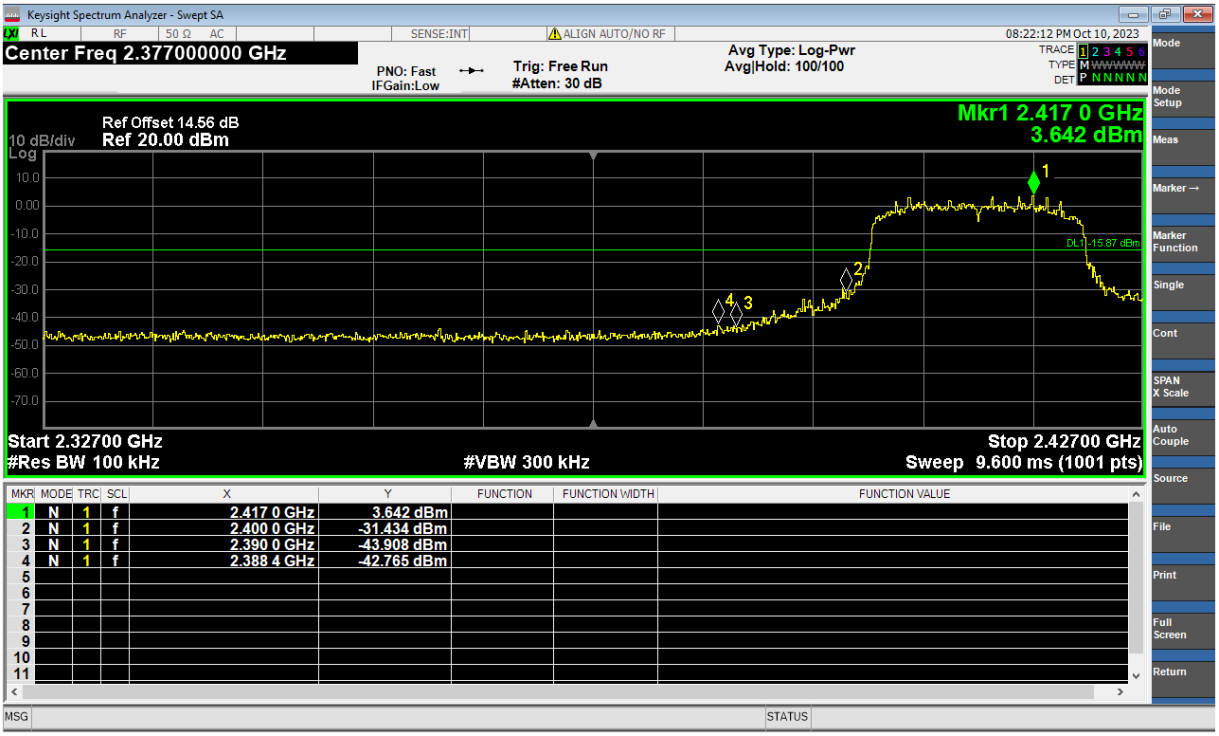
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	ax(VHT20)	2412	Ant1	-46.89	-20	Pass
NVNT	ax(VHT20)	2462	Ant1	-41.76	-20	Pass
NVNT	ax(VHT40)	2422	Ant1	-37.52	-20	Pass
NVNT	ax(VHT40)	2452	Ant1	-33.78	-20	Pass
NVNT	b	2412	Ant1	-51.50	-20	Pass
NVNT	b	2462	Ant1	-51.22	-20	Pass
NVNT	g	2412	Ant1	-47.70	-20	Pass
NVNT	g	2462	Ant1	-46.23	-20	Pass
NVNT	n(HT20)	2412	Ant1	-47.87	-20	Pass
NVNT	n(HT20)	2462	Ant1	-46.10	-20	Pass
NVNT	n(HT40)	2422	Ant1	-39.31	-20	Pass
NVNT	n(HT40)	2452	Ant1	-32.62	-20	Pass

Test Graphs

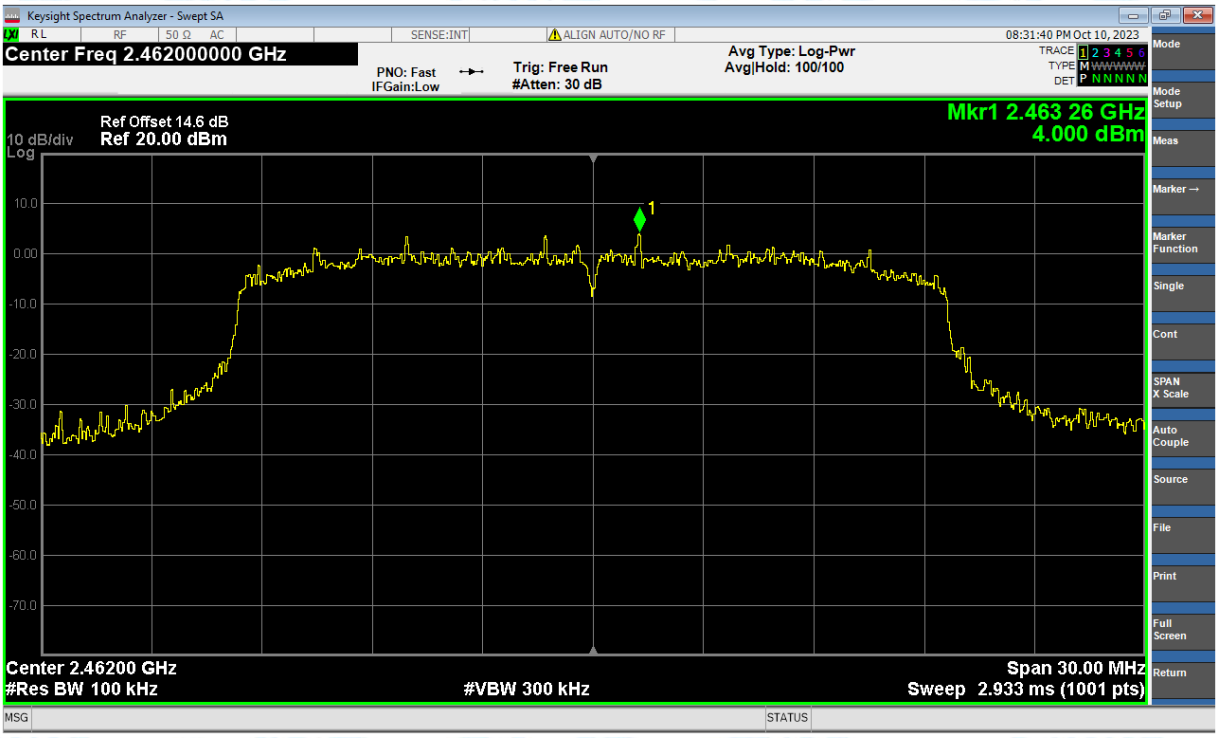
Band Edge NVNT ax(VHT20) 2412MHz Ant1 Ref



Band Edge NVNT ax(VHT20) 2412MHz Ant1 Emission

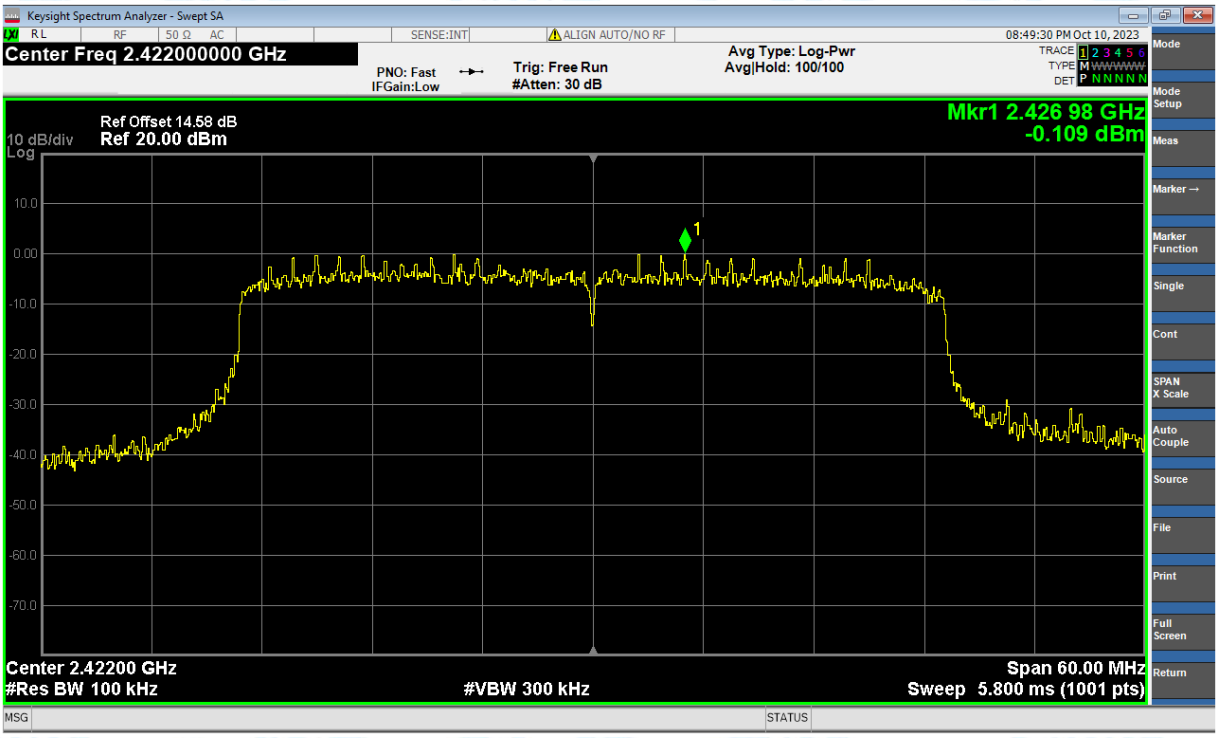


Band Edge NVNT ax(VHT20) 2462MHz Ant1 Ref

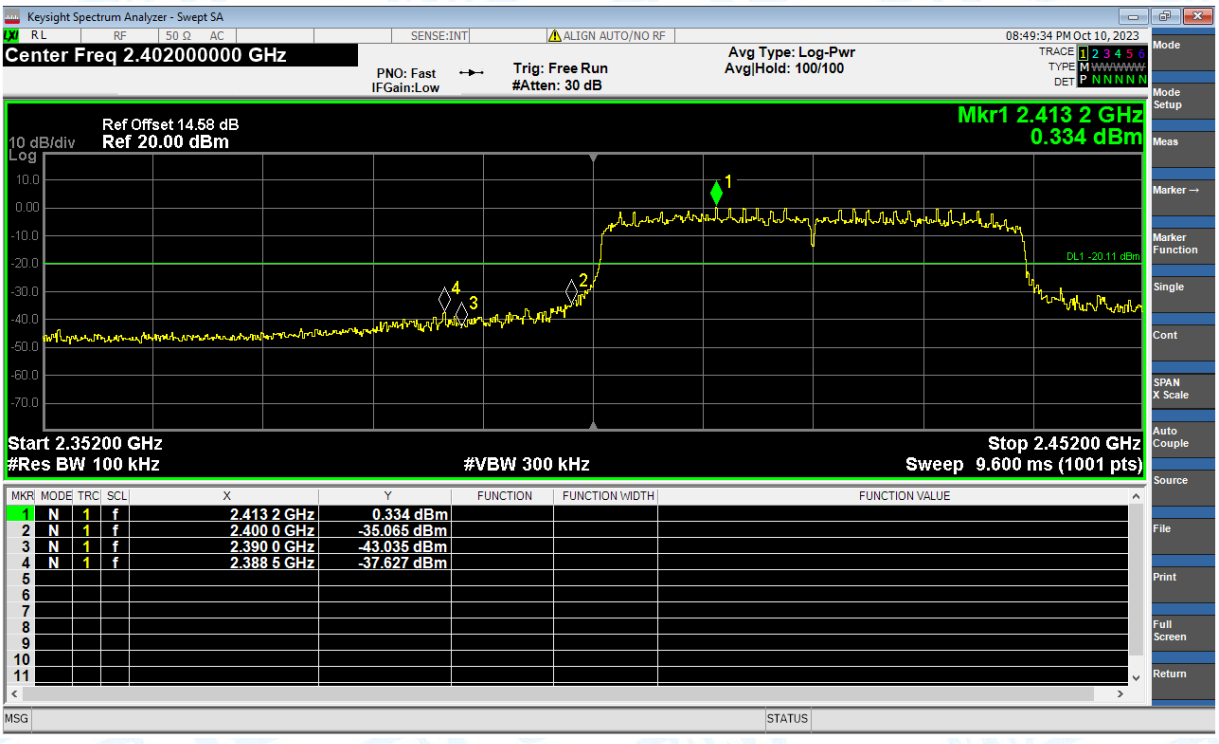


Band Edge NVNT ax(VHT20) 2462MHz Ant1 Emission

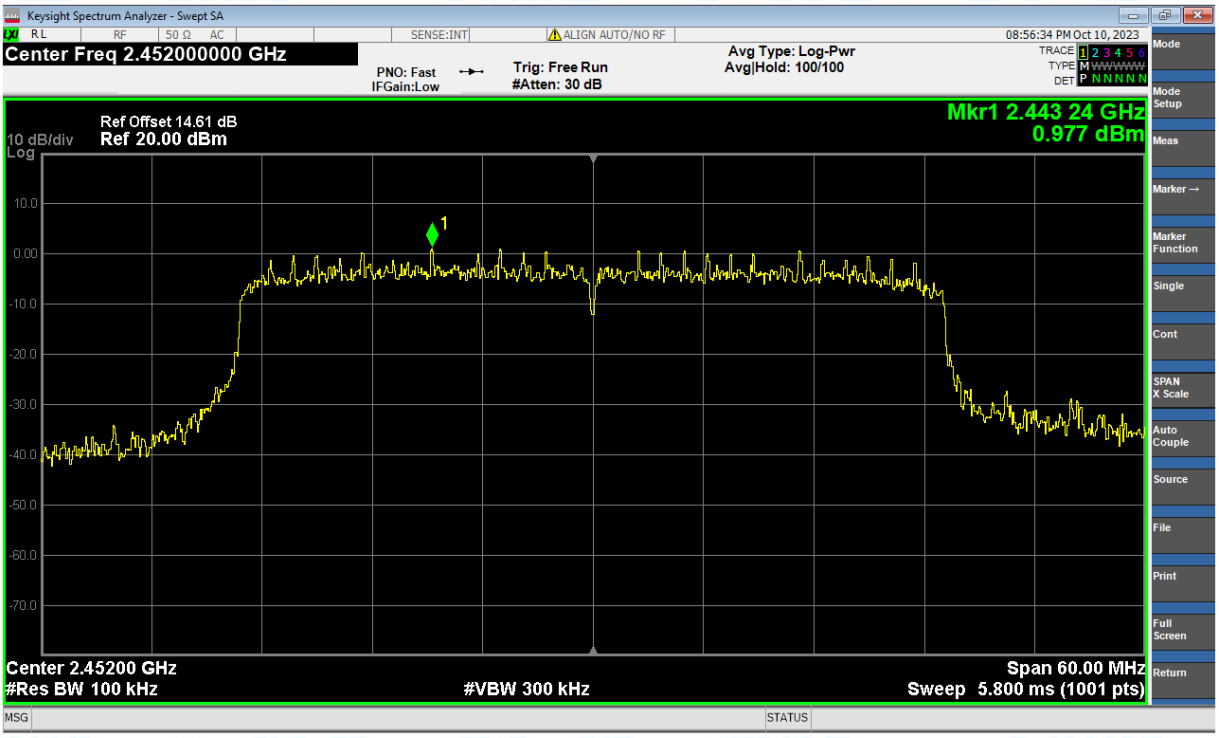
Band Edge NVNT ax(VHT40) 2422MHz Ant1 Ref



Band Edge NVNT ax(VHT40) 2422MHz Ant1 Emission

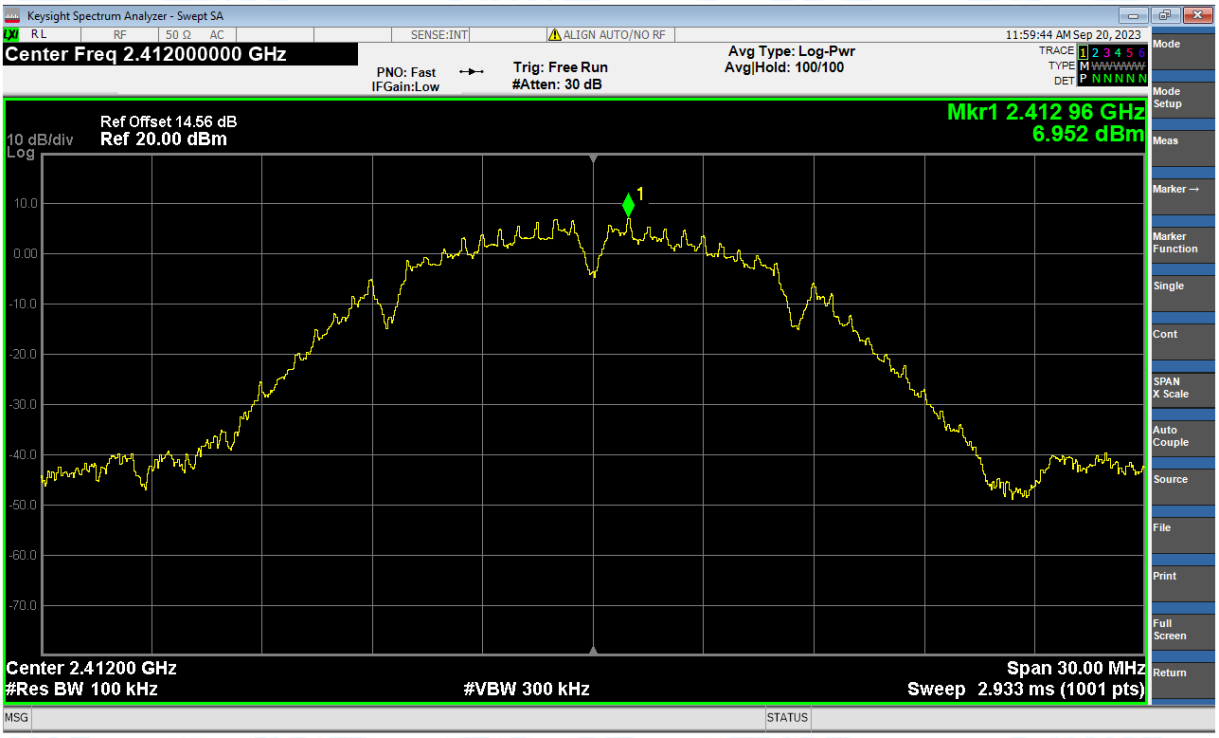


Band Edge NVNT ax(VHT40) 2452MHz Ant1 Ref

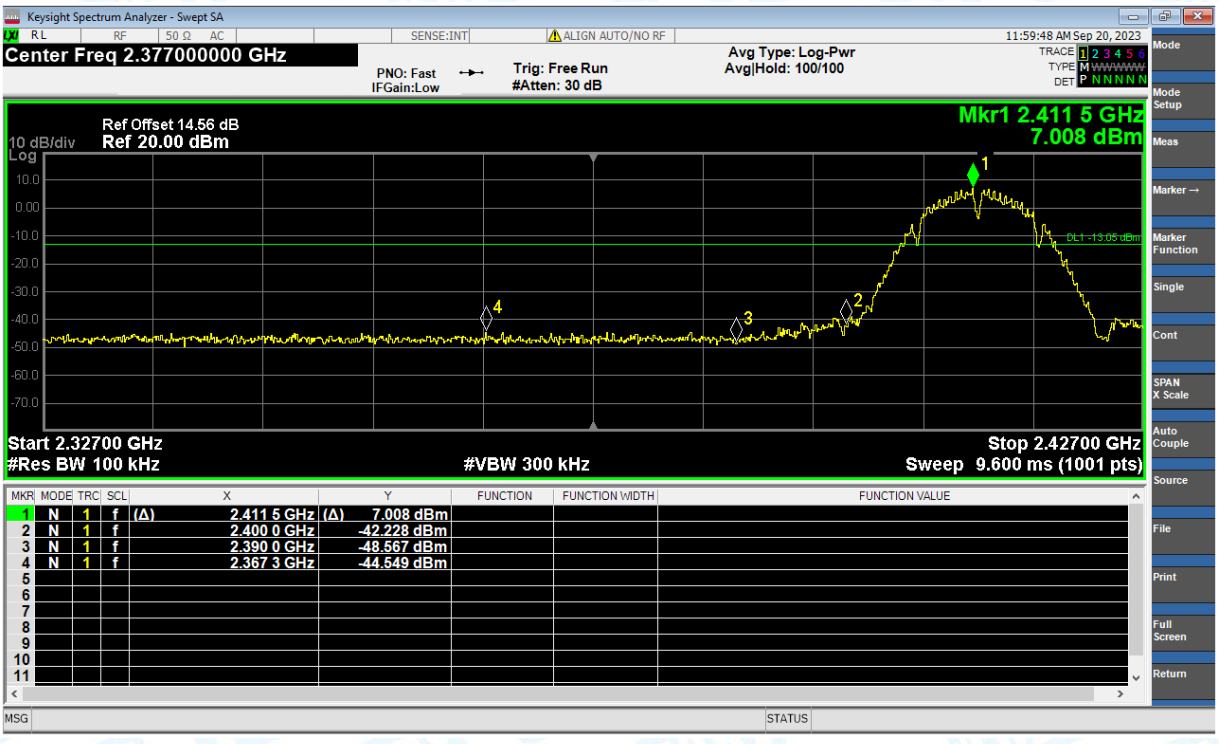


Band Edge NVNT ax(VHT40) 2452MHz Ant1 Emission

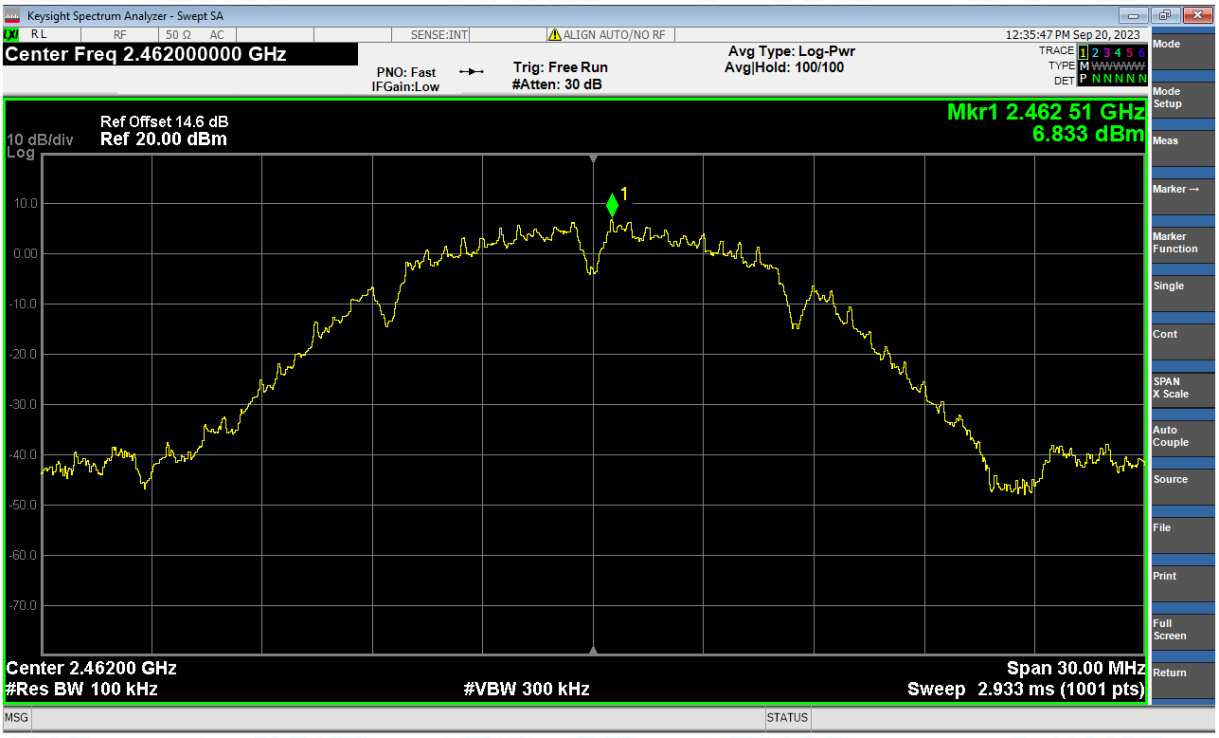
Band Edge NVNT b 2412MHz Ant1 Ref



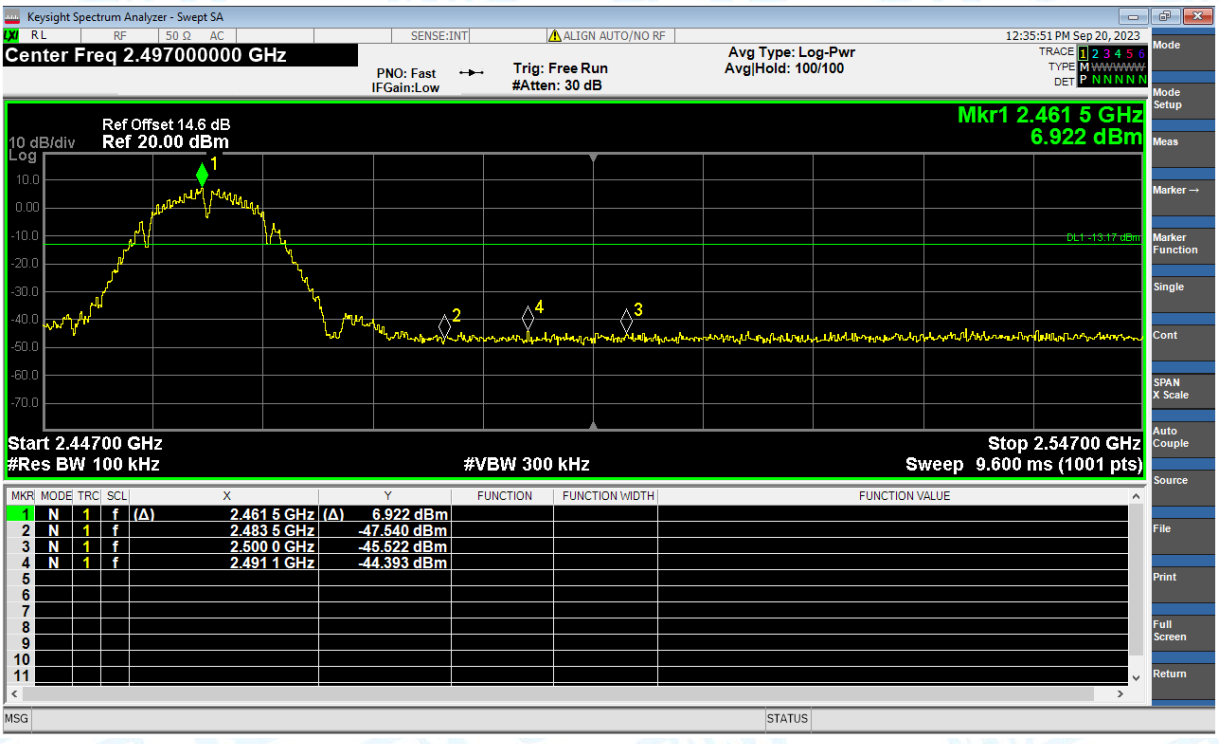
Band Edge NVNT b 2412MHz Ant1 Emission



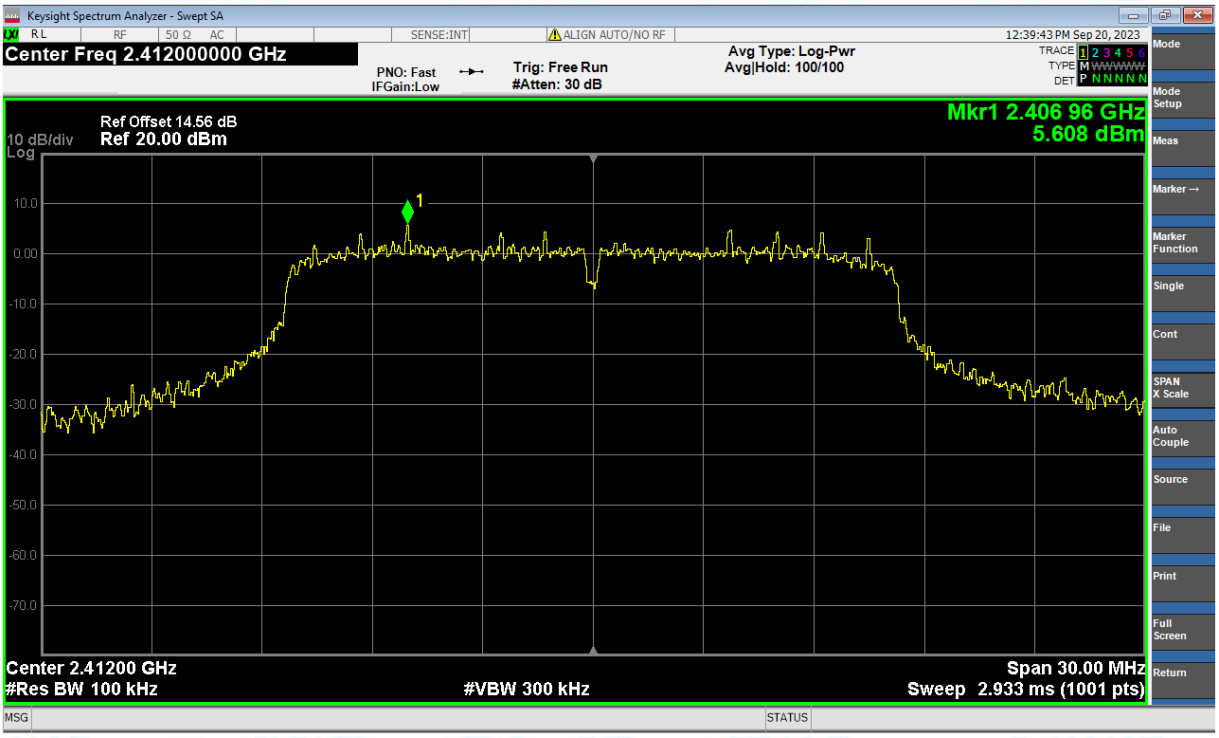
Band Edge NVNT b 2462MHz Ant1 Ref



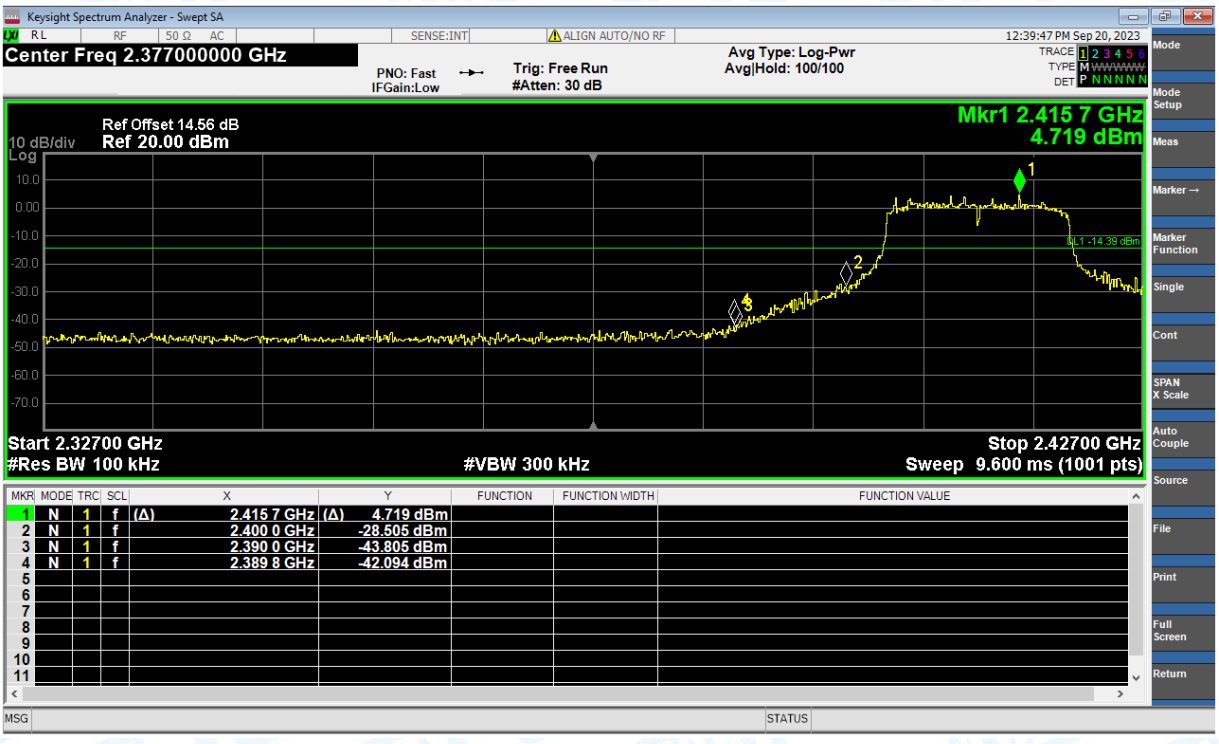
Band Edge NVNT b 2462MHz Ant1 Emission



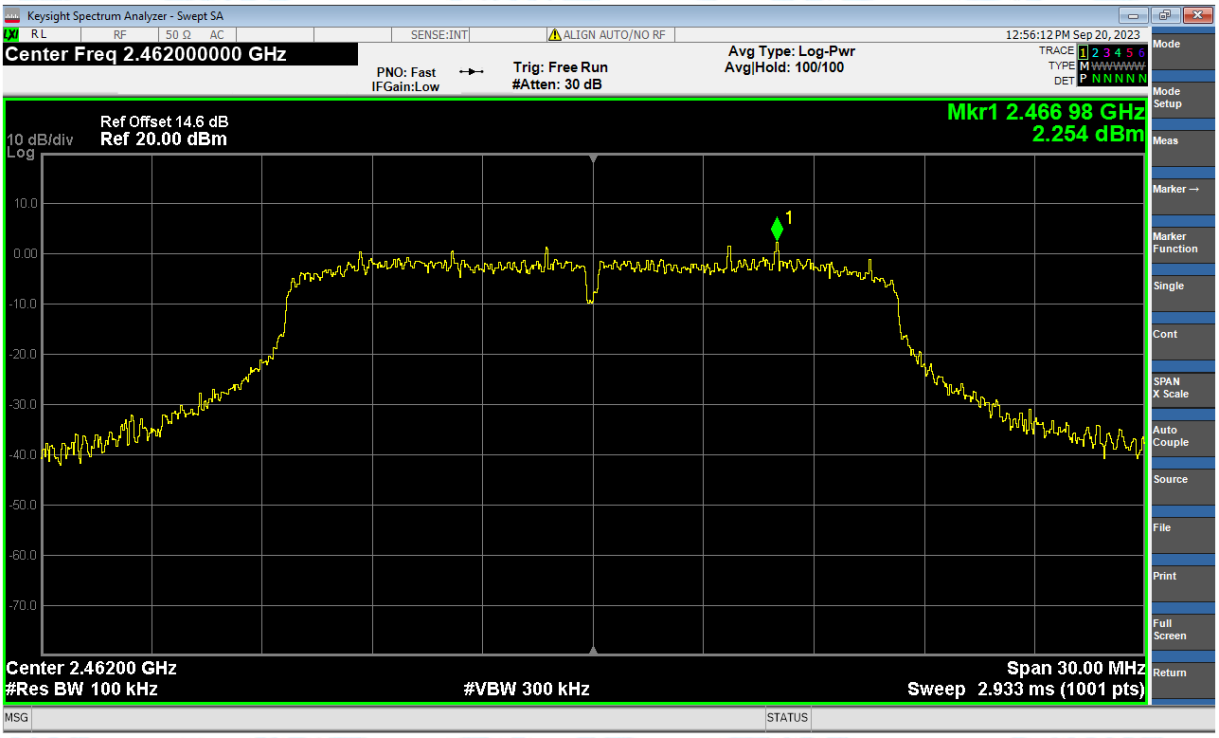
Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission

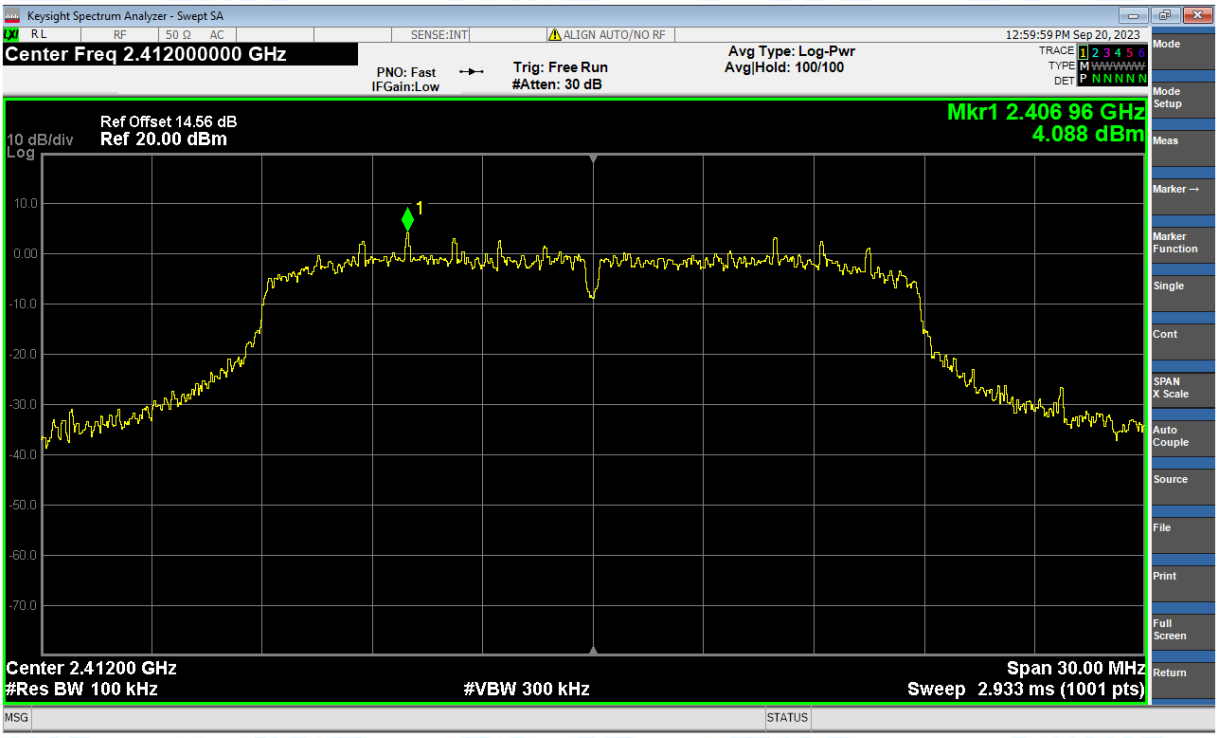


Band Edge NVNT g 2462MHz Ant1 Ref



Band Edge NVNT g 2462MHz Ant1 Emission

Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



Band Edge NVNT n(HT20) 2412MHz Ant1 Emission