

# RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
<b>Product Name:</b>	Mini Smart IR Remote Control
<b>Test Model:</b>	S18
<b>Sample ID:</b>	202312-0065-7-2#
Environmental Conditions	
<b>Temperature:</b>	24°C
<b>Relative Humidity:</b>	50%
<b>Test Voltage:</b>	DC 5V
<b>Test Engineer:</b>	Yanzheming
Note: For a more detailed features description, please refer to the report TBR-C-202312-0065-20 The report only show the worst case data.	



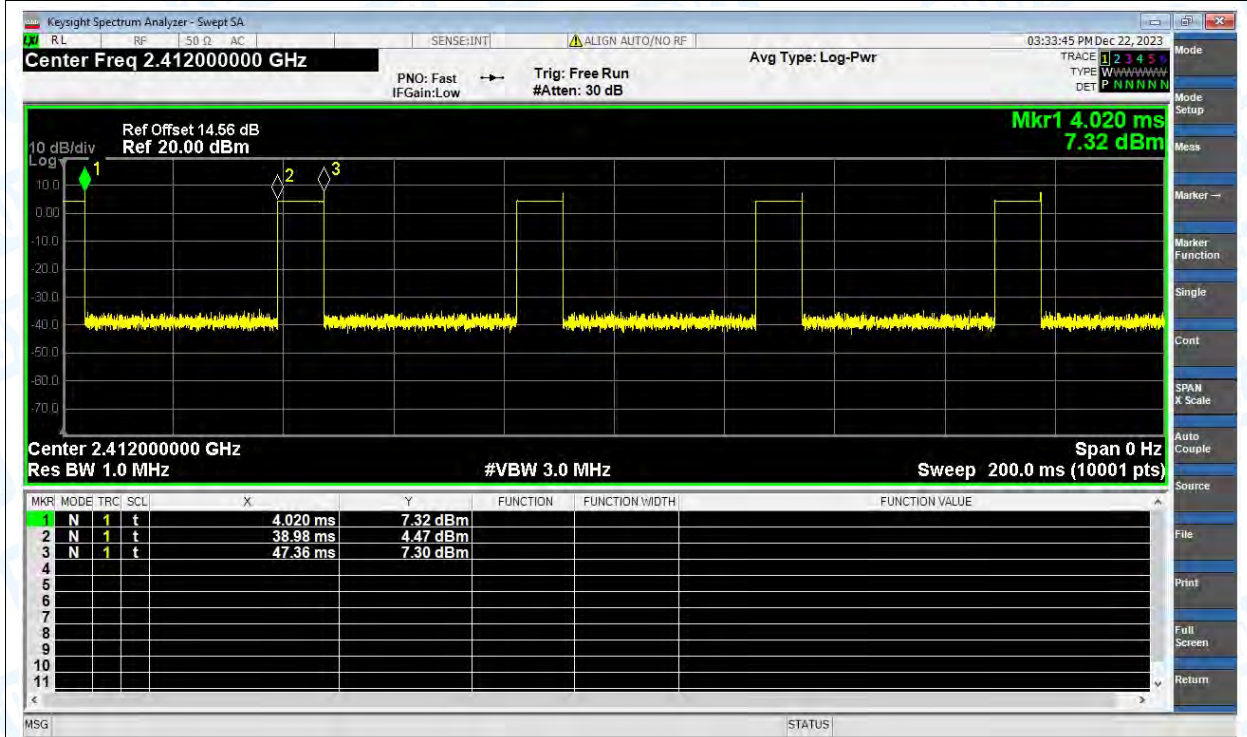
## Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	19.34	7.14	0.12
NVNT	b	2437	Ant1	19.34	7.14	0.12
NVNT	b	2462	Ant1	19.34	7.14	0.12
NVNT	g	2412	Ant1	9.95	10.02	0.72
NVNT	g	2437	Ant1	10.01	10	0.71
NVNT	g	2462	Ant1	9.95	10.02	0.72
NVNT	n(HT20)	2412	Ant1	9.95	10.02	0.77
NVNT	n(HT20)	2437	Ant1	9.96	10.02	0.77
NVNT	n(HT20)	2462	Ant1	9.96	10.02	0.77
NVNT	n(HT40)	2422	Ant1	9.96	10.02	1.54
NVNT	n(HT40)	2437	Ant1	9.94	10.03	1.54
NVNT	n(HT40)	2452	Ant1	9.94	10.03	1.54

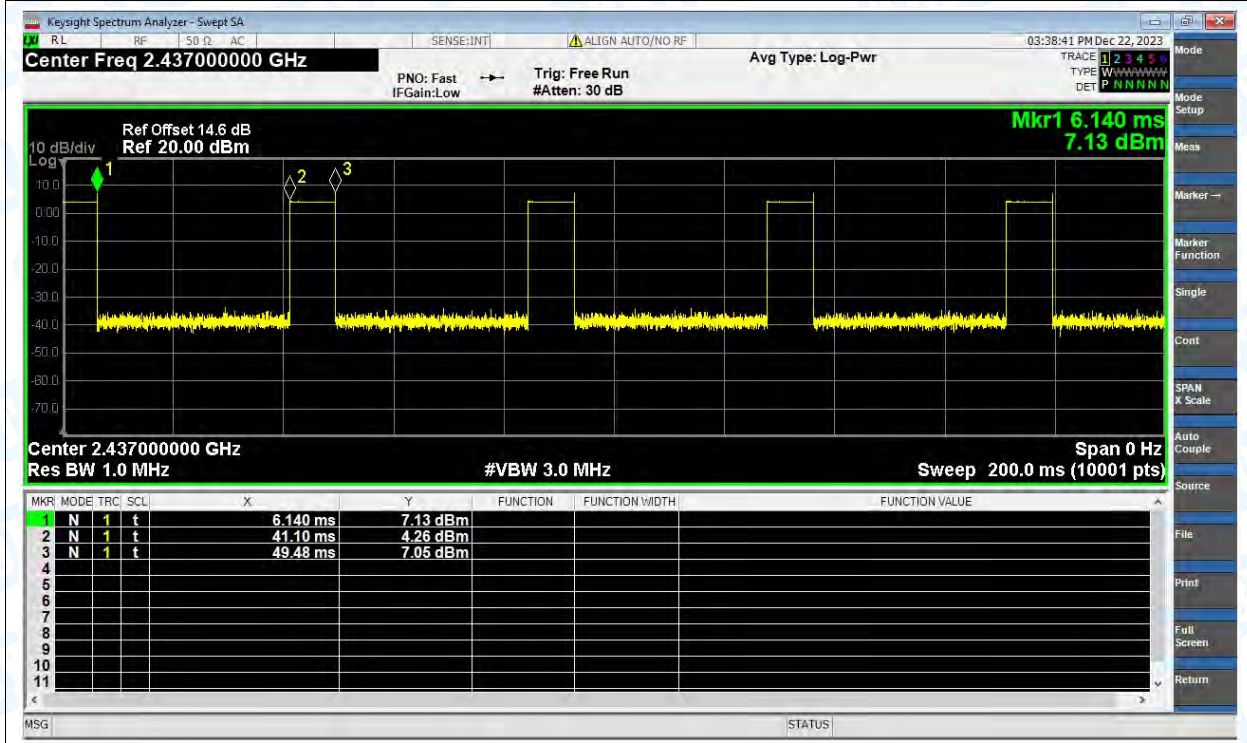


Test Graphs

Duty Cycle NVNT b 2412MHz Ant1

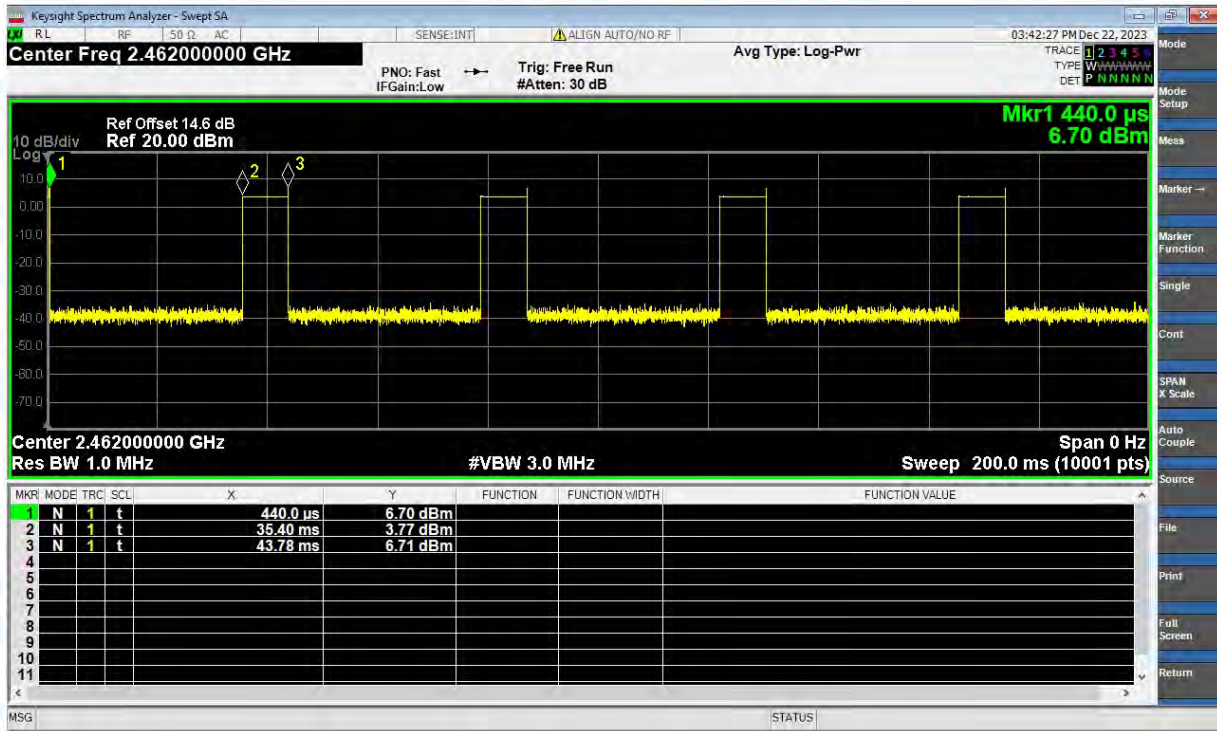


Duty Cycle NVNT b 2437MHz Ant1

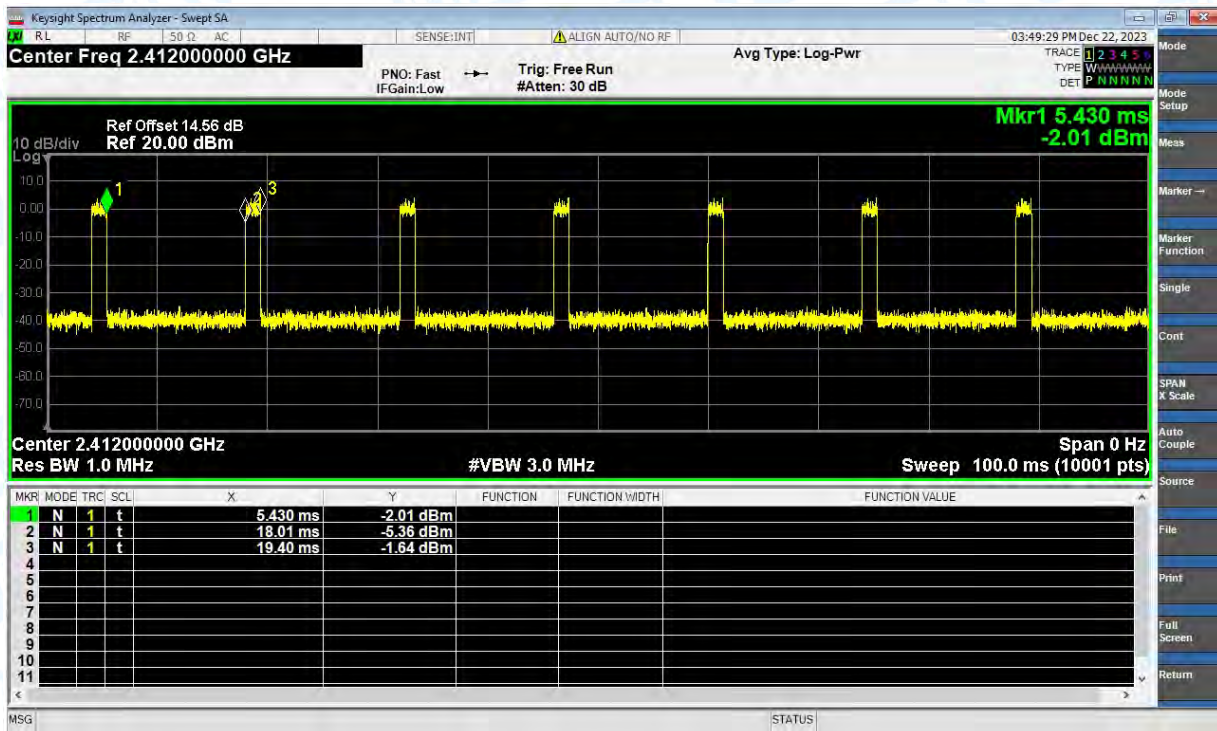




Duty Cycle NVNT b 2462MHz Ant1

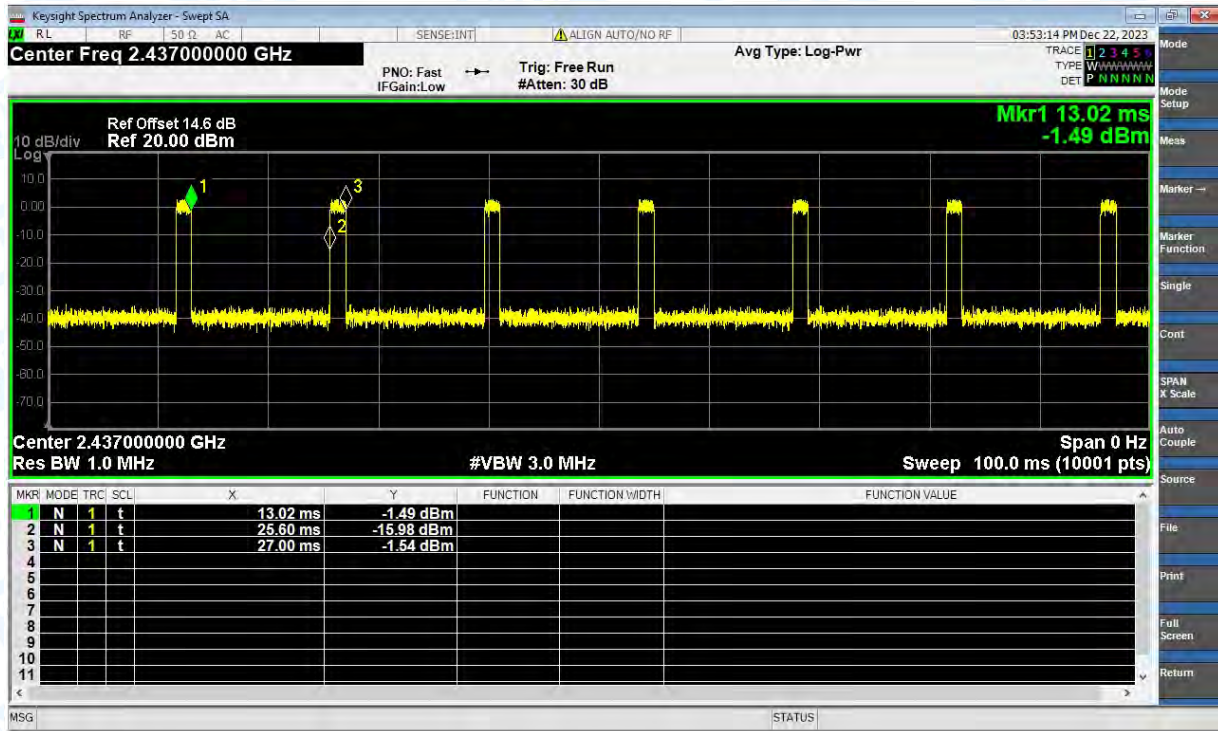


Duty Cycle NVNT g 2412MHz Ant1

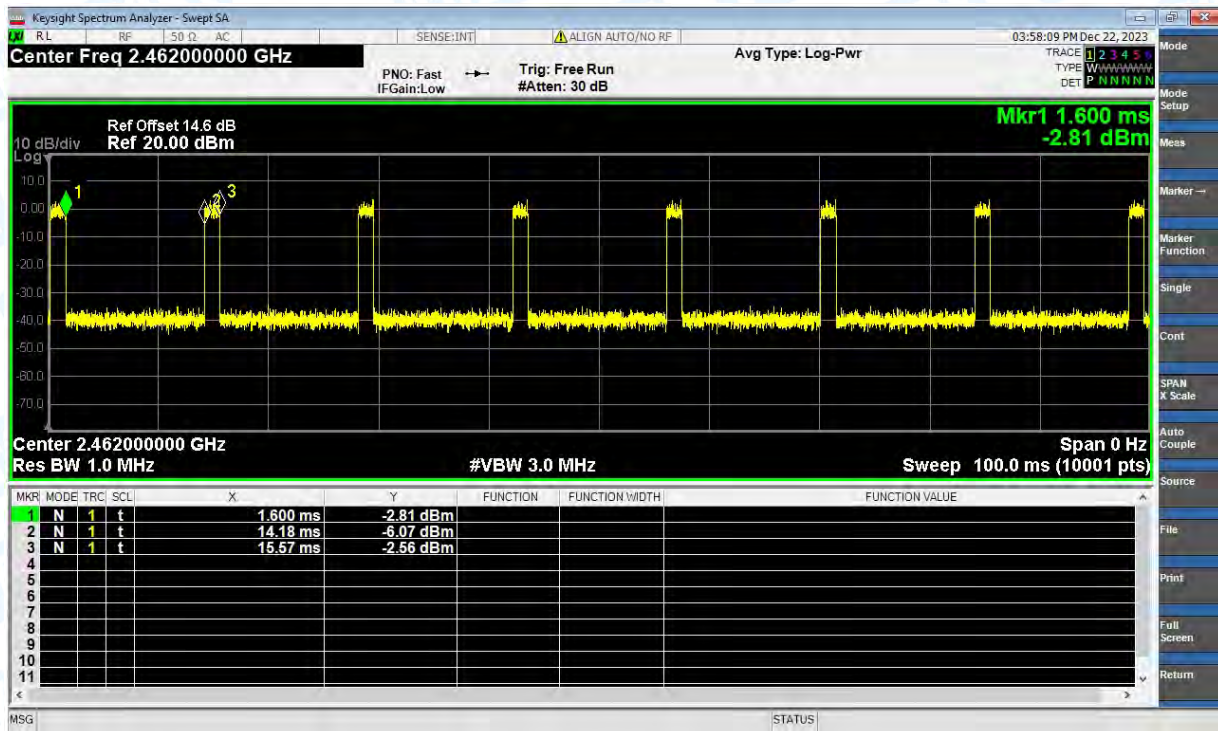




Duty Cycle NVNT g 2437MHz Ant1

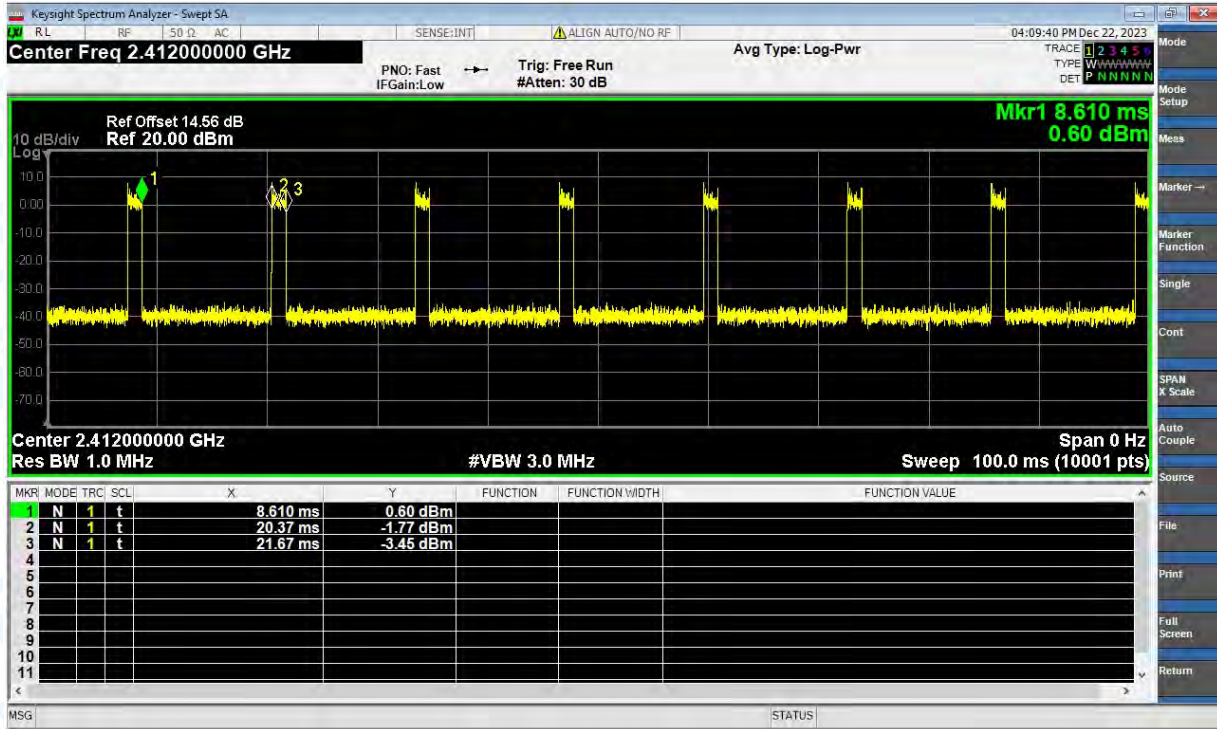


Duty Cycle NVNT g 2462MHz Ant1

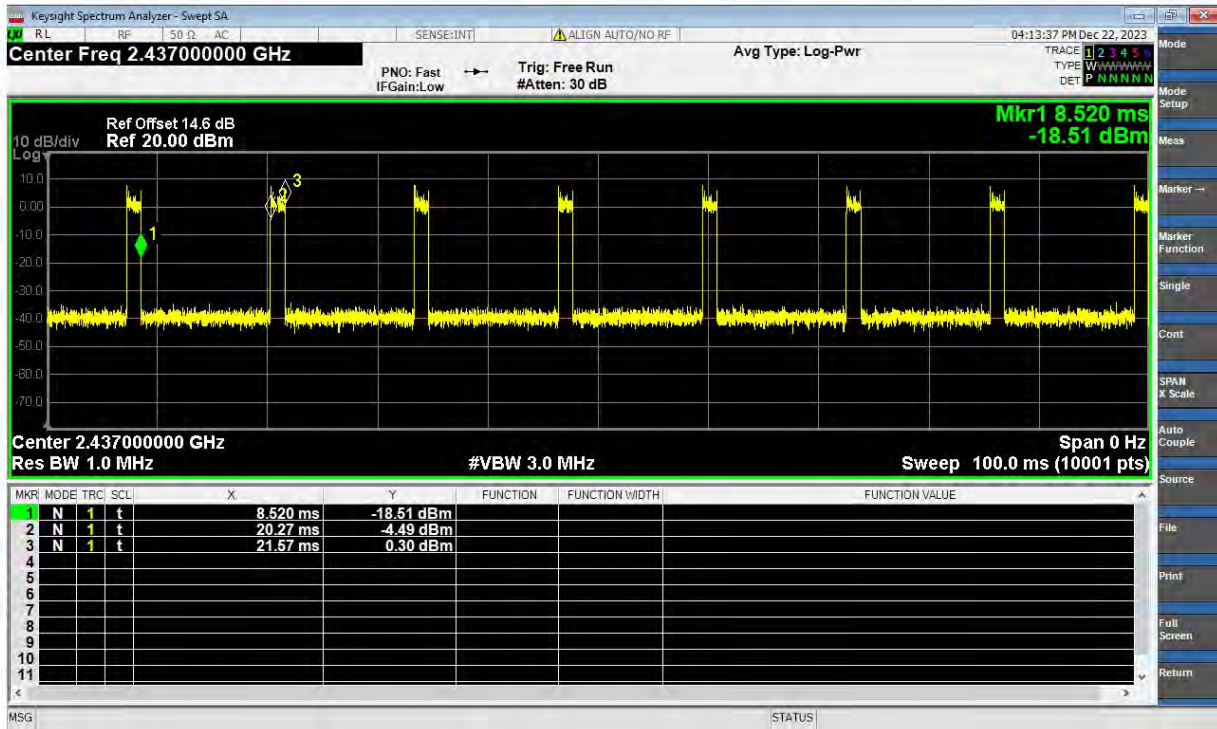




Duty Cycle NVNT n(HT20) 2412MHz Ant1

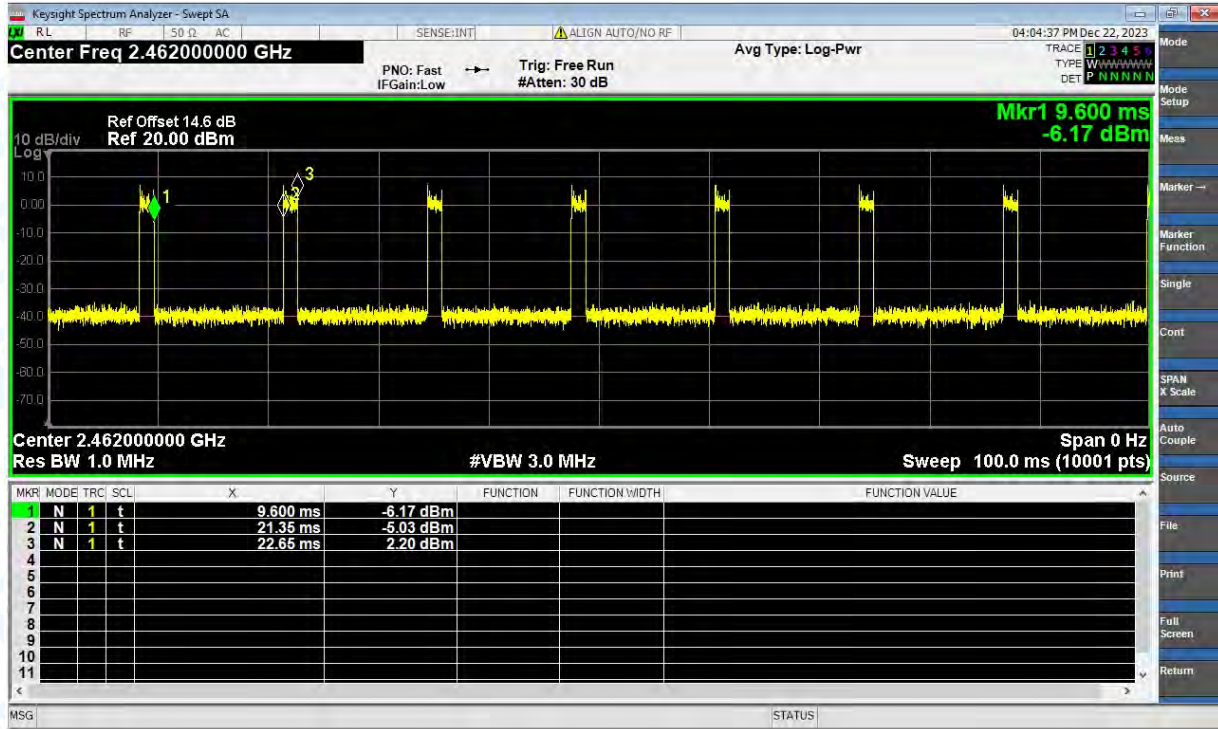


Duty Cycle NVNT n(HT20) 2437MHz Ant1

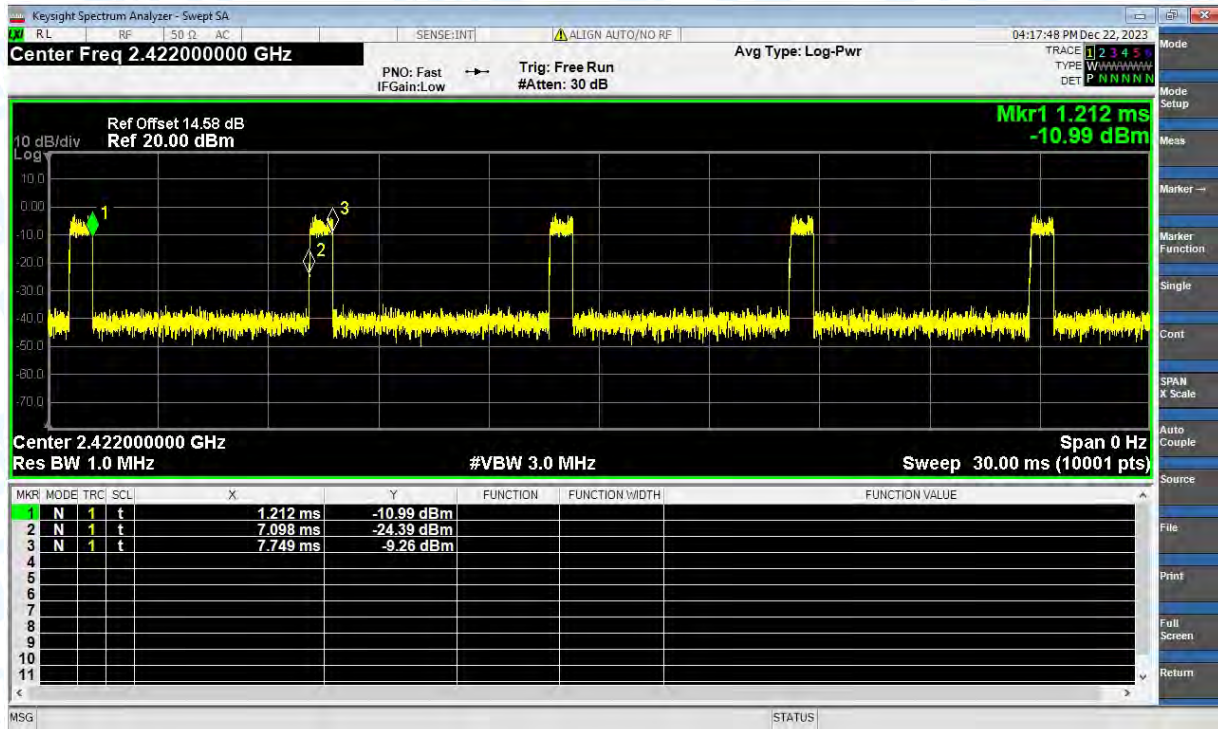




Duty Cycle NVNT n(HT20) 2462MHz Ant1

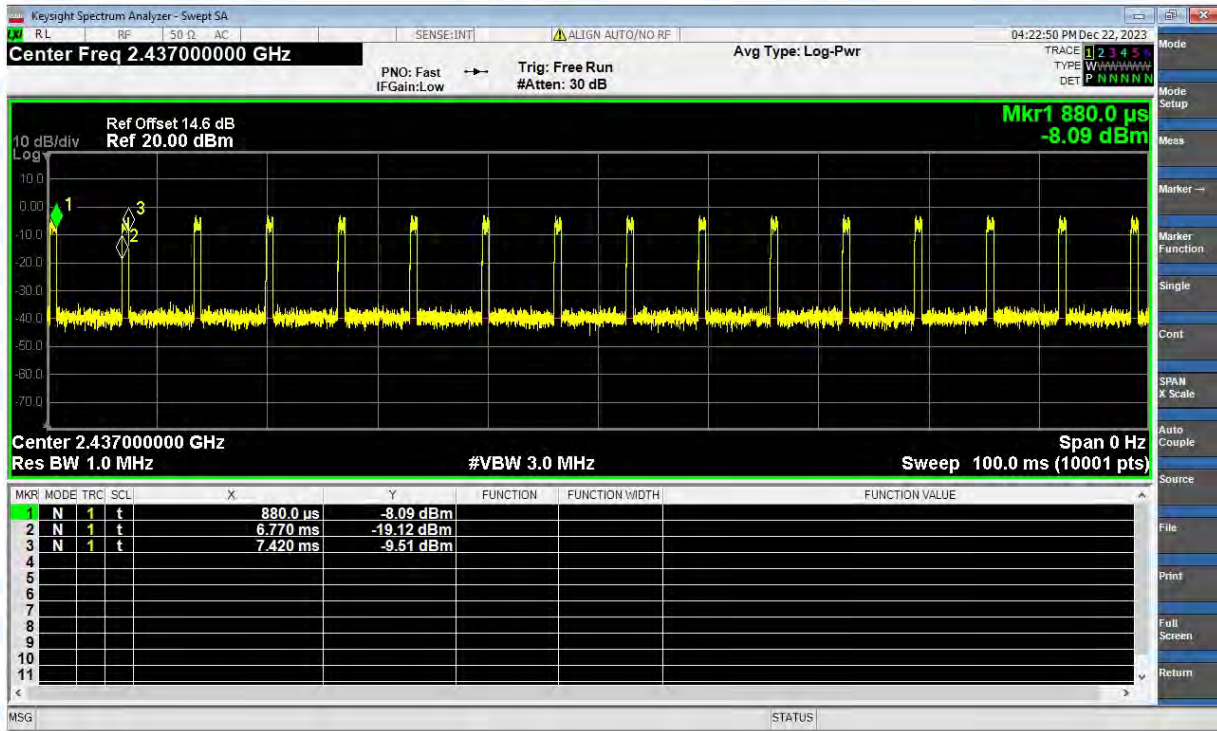


Duty Cycle NVNT n(HT40) 2422MHz Ant1

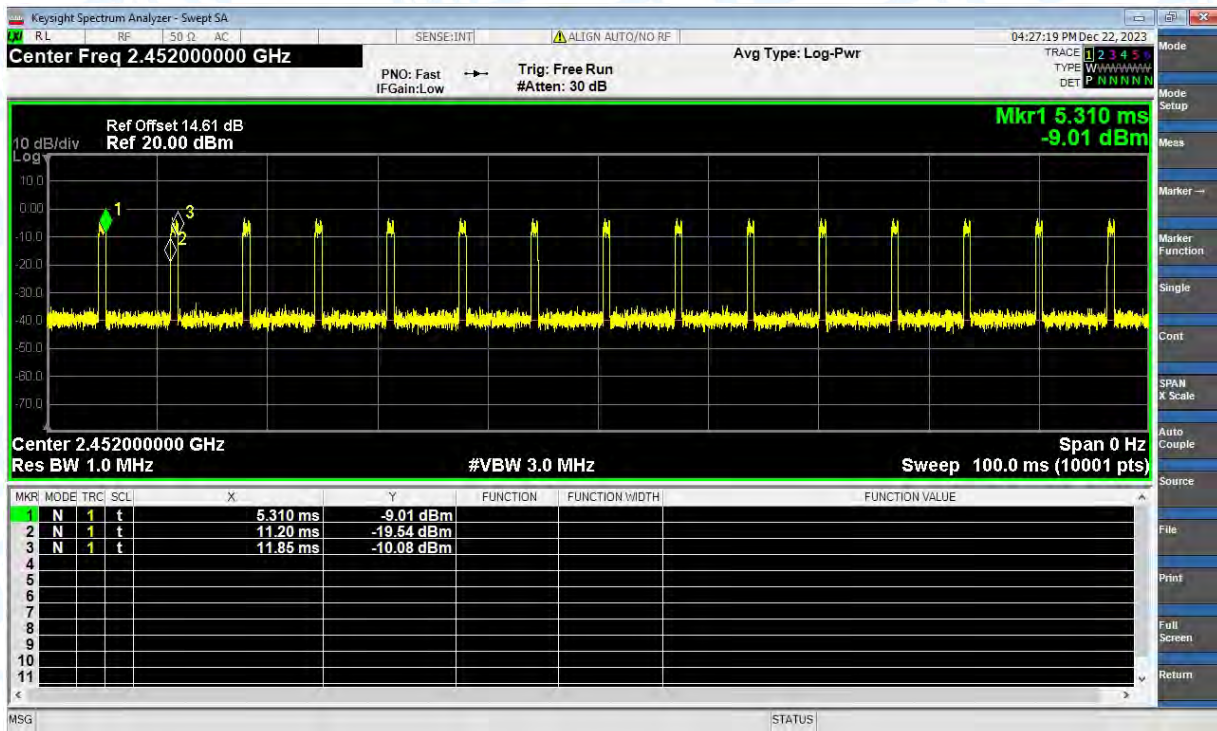




Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1





## Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	10.38	7.14	17.52	30	Pass
NVNT	b	2437	Ant1	10.03	7.14	17.17	30	Pass
NVNT	b	2462	Ant1	9.56	7.14	16.7	30	Pass
NVNT	g	2412	Ant1	6.39	10.02	16.41	30	Pass
NVNT	g	2437	Ant1	5.97	10	15.97	30	Pass
NVNT	g	2462	Ant1	5.44	10.02	15.46	30	Pass
NVNT	n(HT20)	2412	Ant1	7.62	10.02	17.64	30	Pass
NVNT	n(HT20)	2437	Ant1	7.16	10.02	17.18	30	Pass
NVNT	n(HT20)	2462	Ant1	6.64	10.02	16.66	30	Pass
NVNT	n(HT40)	2422	Ant1	6.33	10.02	16.35	30	Pass
NVNT	n(HT40)	2437	Ant1	5.88	10.03	15.91	30	Pass
NVNT	n(HT40)	2452	Ant1	5.32	10.03	15.35	30	Pass



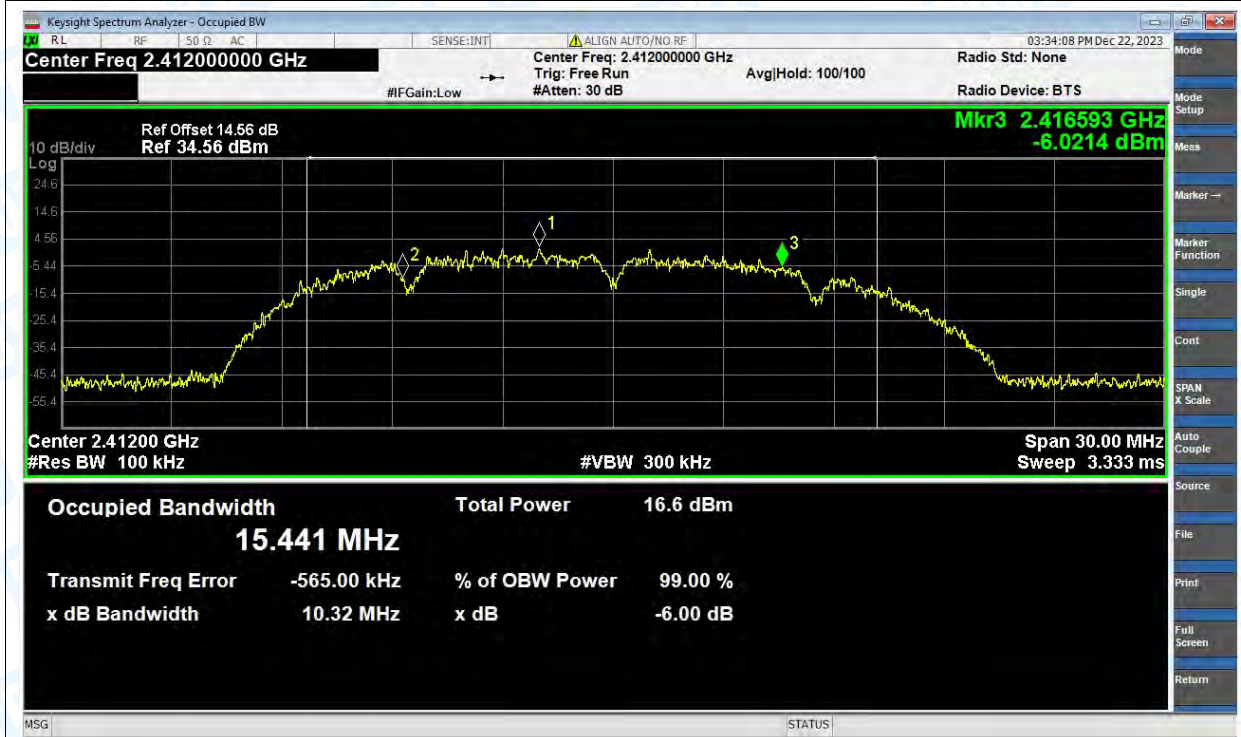
## -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.32	0.5	Pass
NVNT	b	2437	Ant1	11.54	0.5	Pass
NVNT	b	2462	Ant1	11.49	0.5	Pass
NVNT	g	2412	Ant1	16.85	0.5	Pass
NVNT	g	2437	Ant1	16.97	0.5	Pass
NVNT	g	2462	Ant1	17.3	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.92	0.5	Pass
NVNT	n(HT20)	2462	Ant1	11.53	0.5	Pass
NVNT	n(HT40)	2422	Ant1	34.91	0.5	Pass
NVNT	n(HT40)	2437	Ant1	32.84	0.5	Pass
NVNT	n(HT40)	2452	Ant1	34.66	0.5	Pass



Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

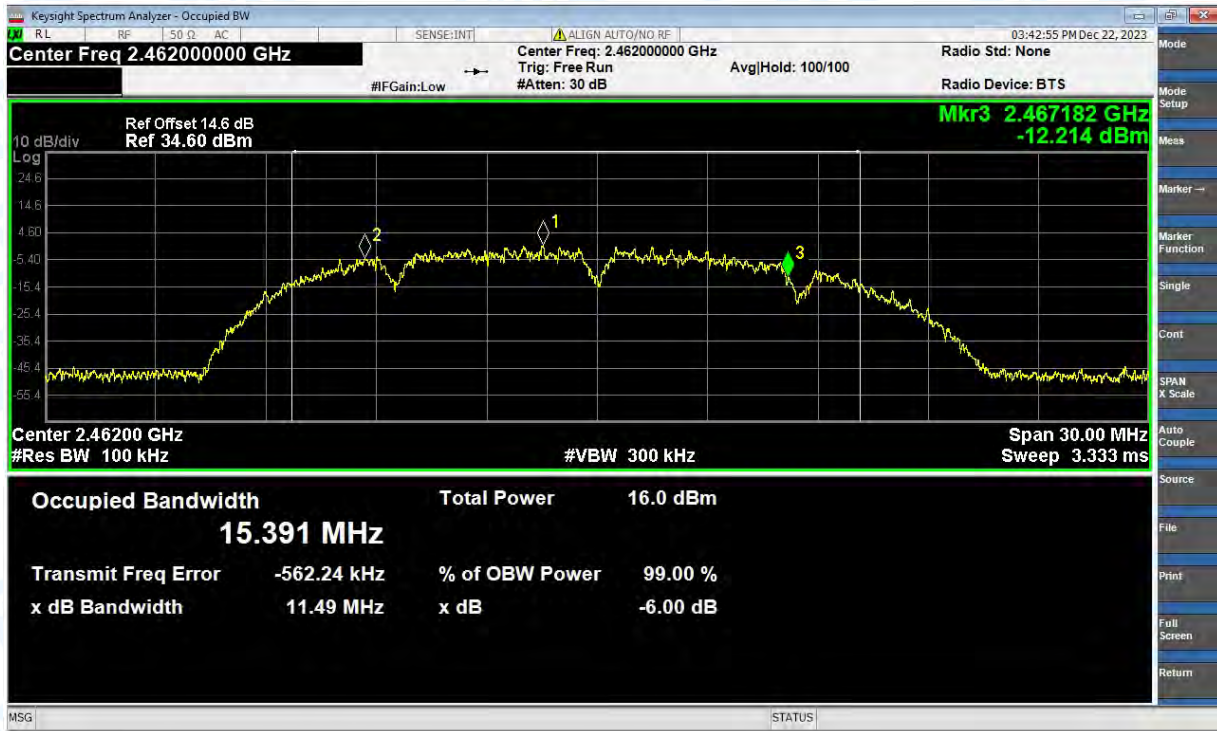


-6dB Bandwidth NVNT b 2437MHz Ant1

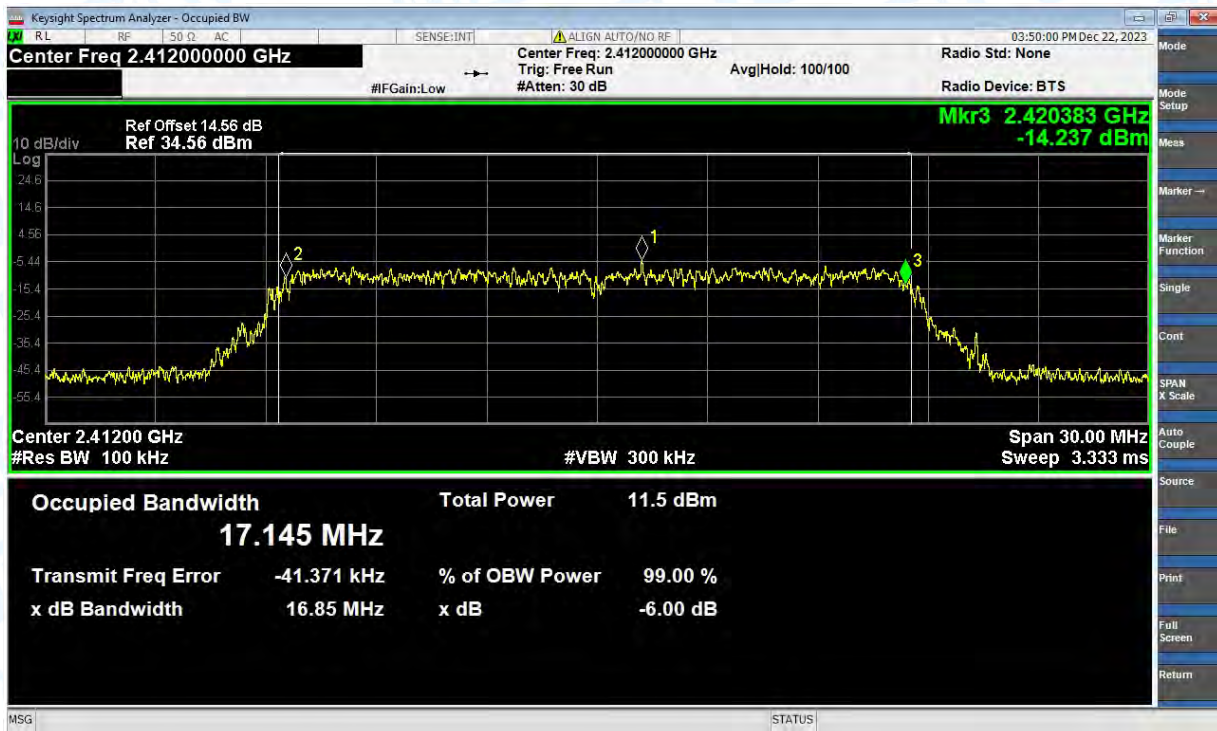




-6dB Bandwidth NVNT b 2462MHz Ant1

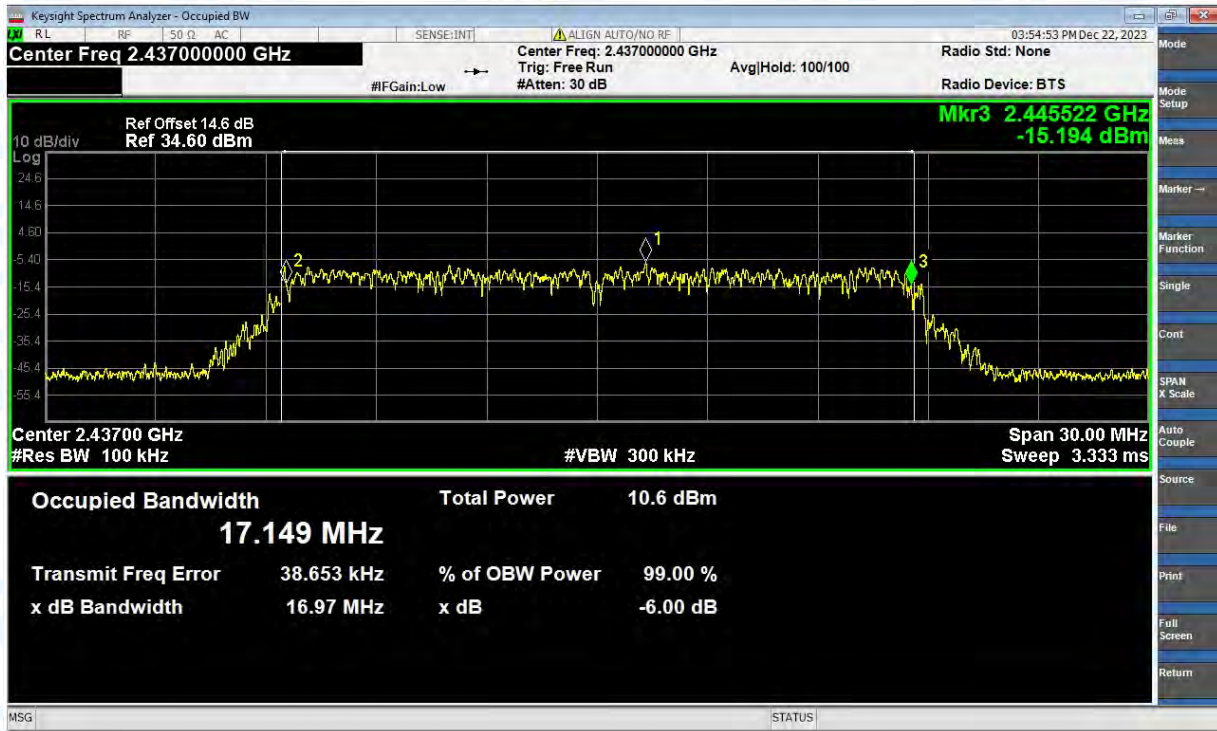


-6dB Bandwidth NVNT g 2412MHz Ant1

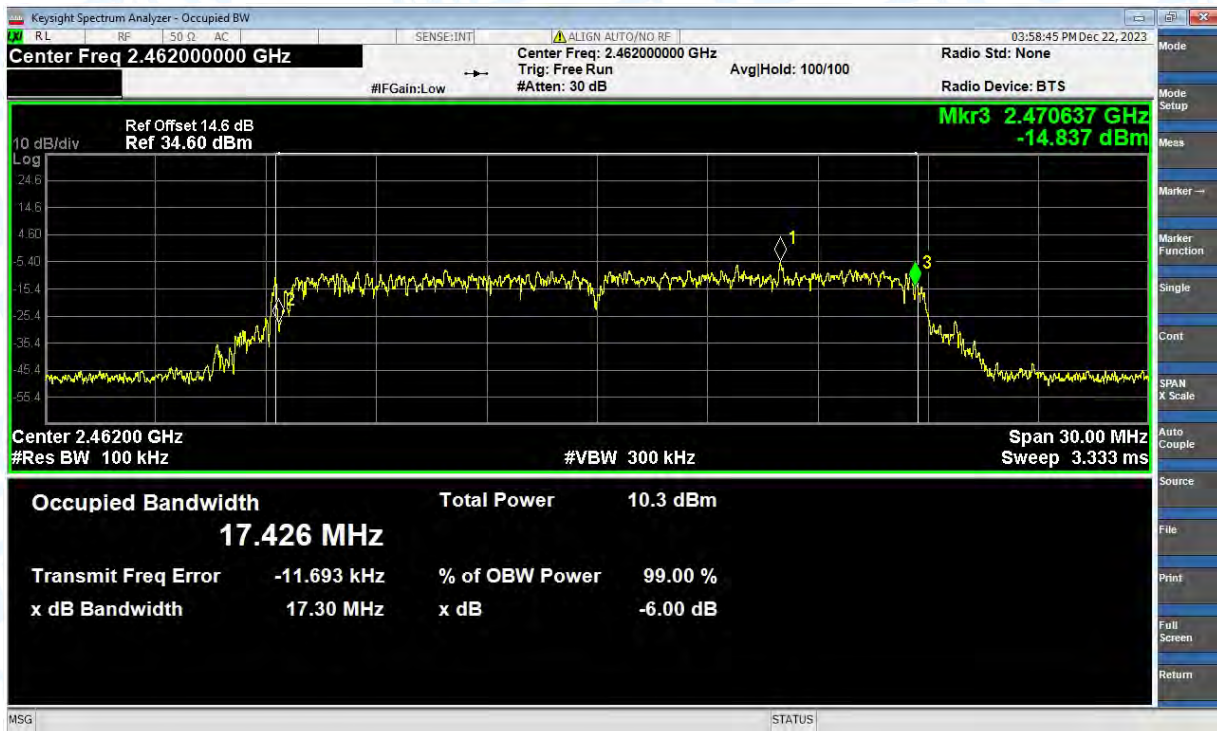




-6dB Bandwidth NVNT g 2437MHz Ant1

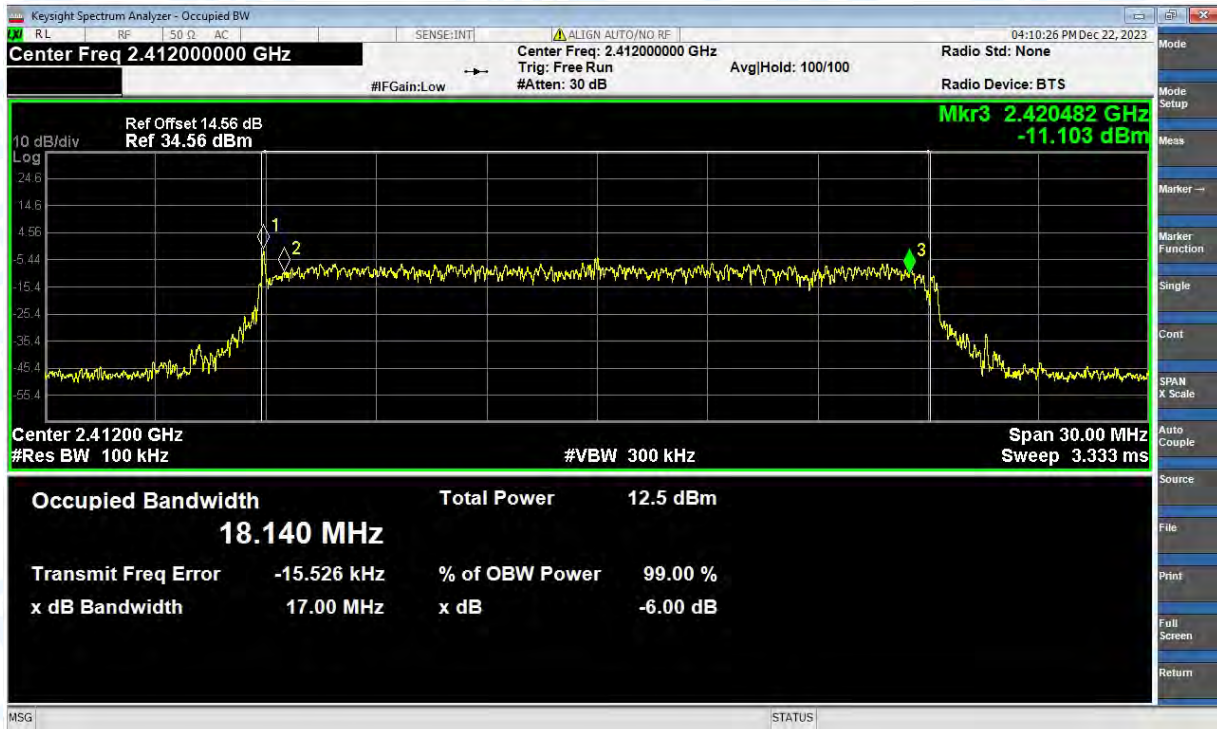


-6dB Bandwidth NVNT g 2462MHz Ant1

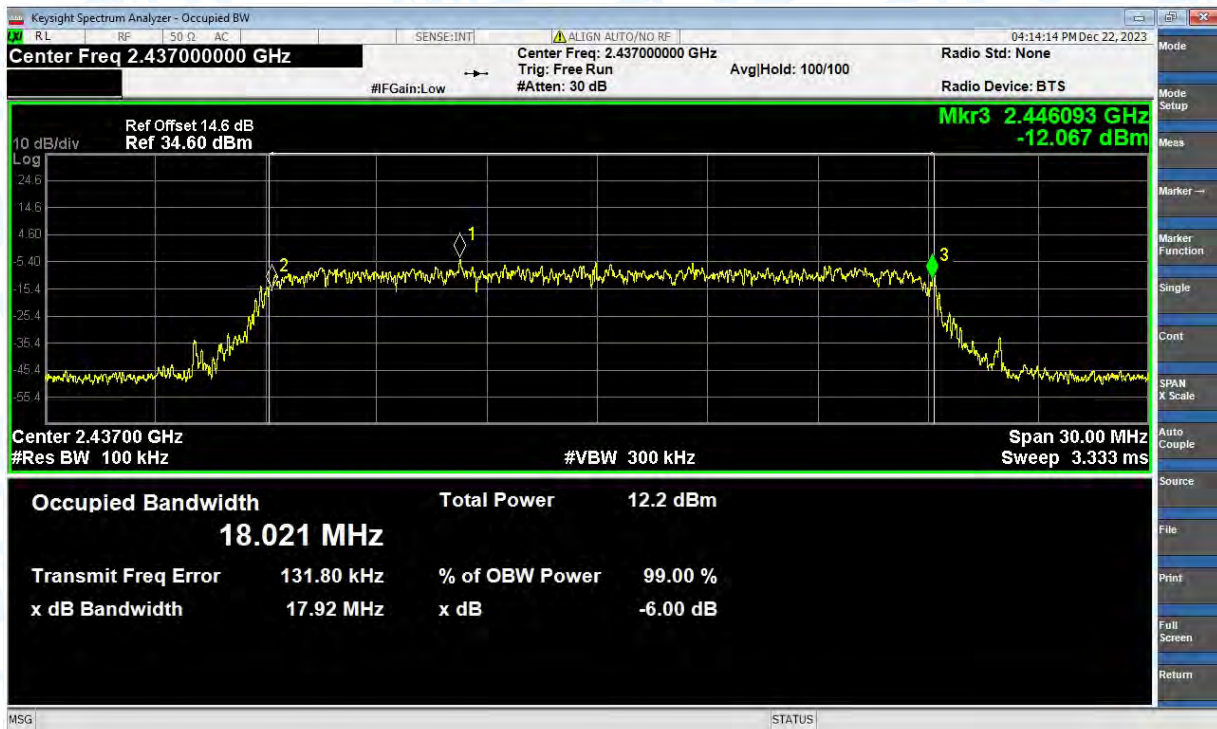




-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1

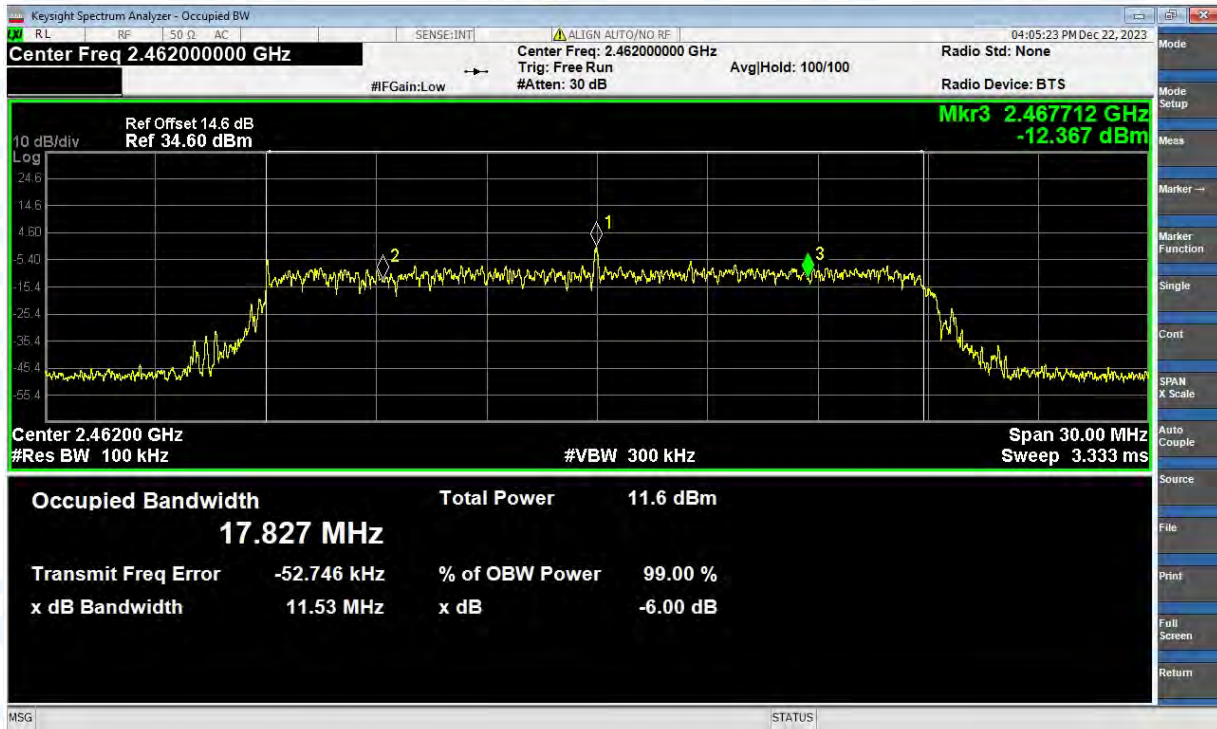


-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1

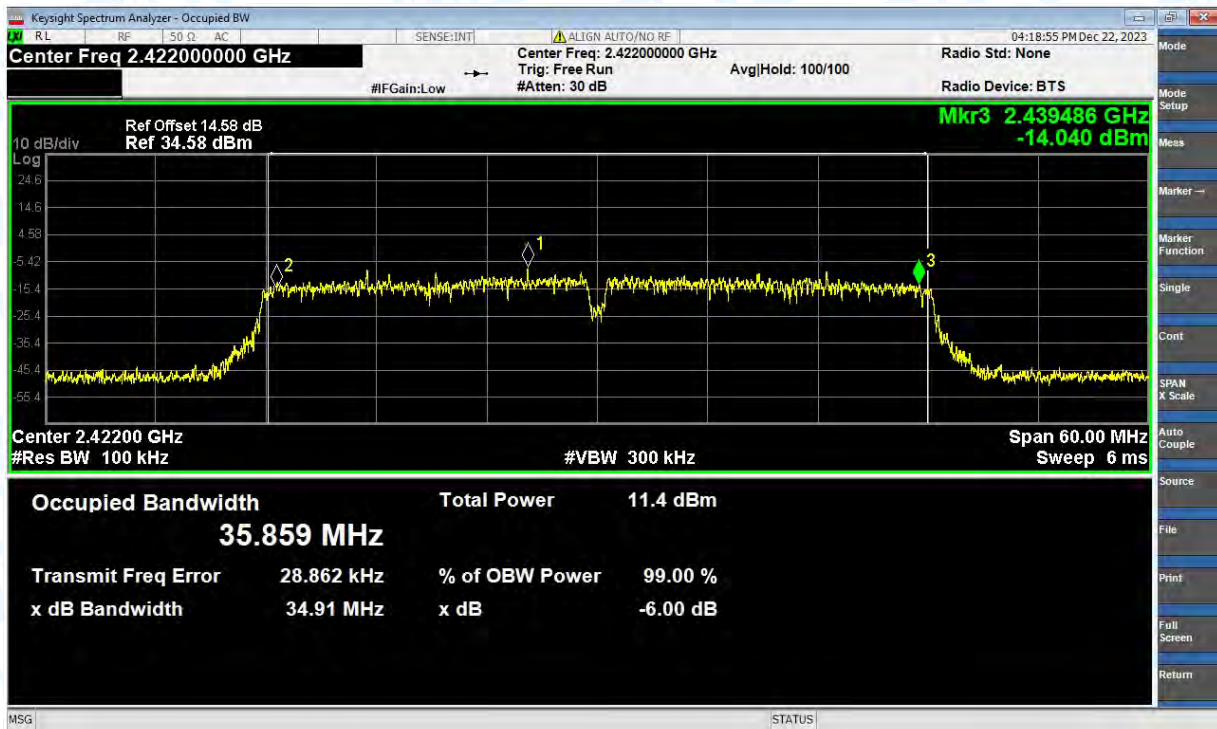




-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1

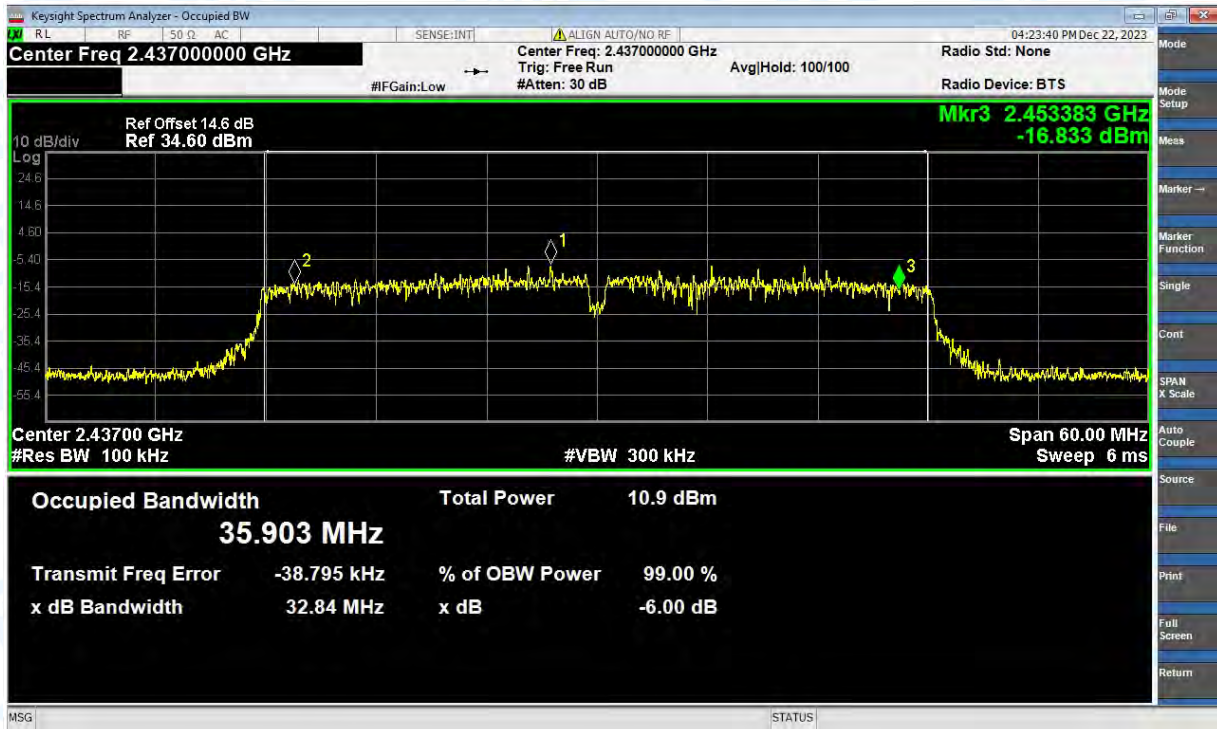


-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1

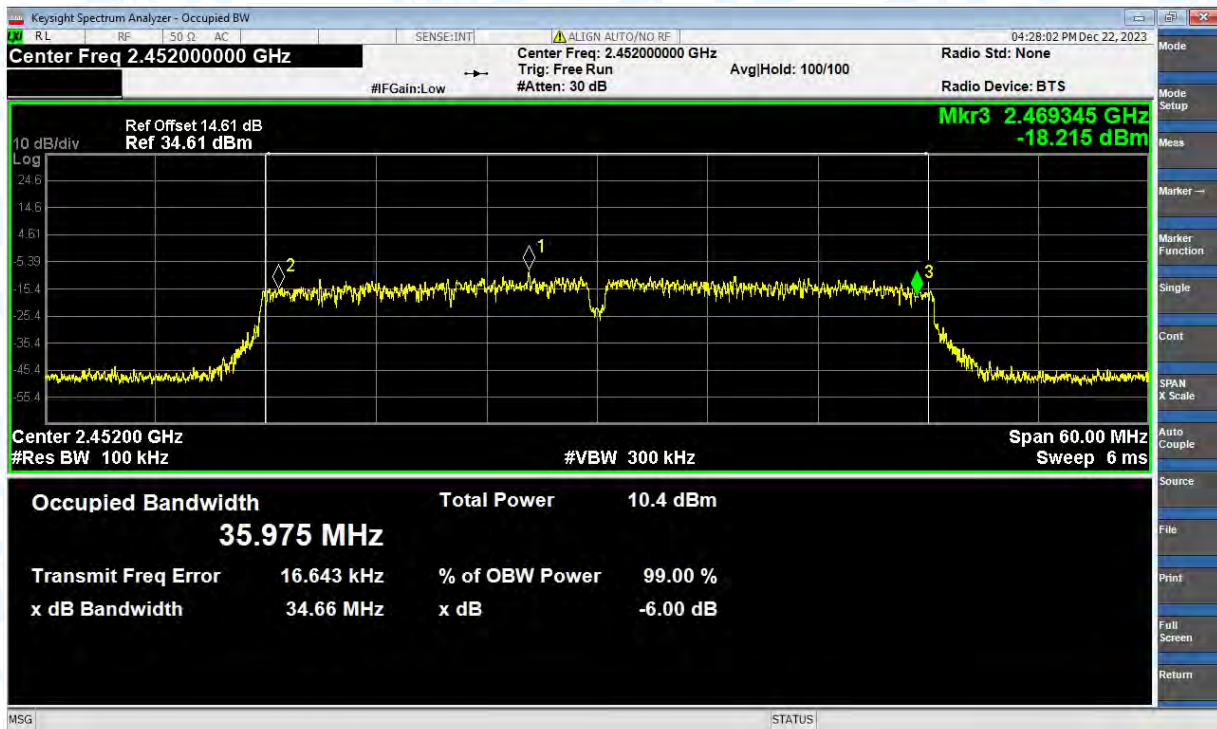




-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



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





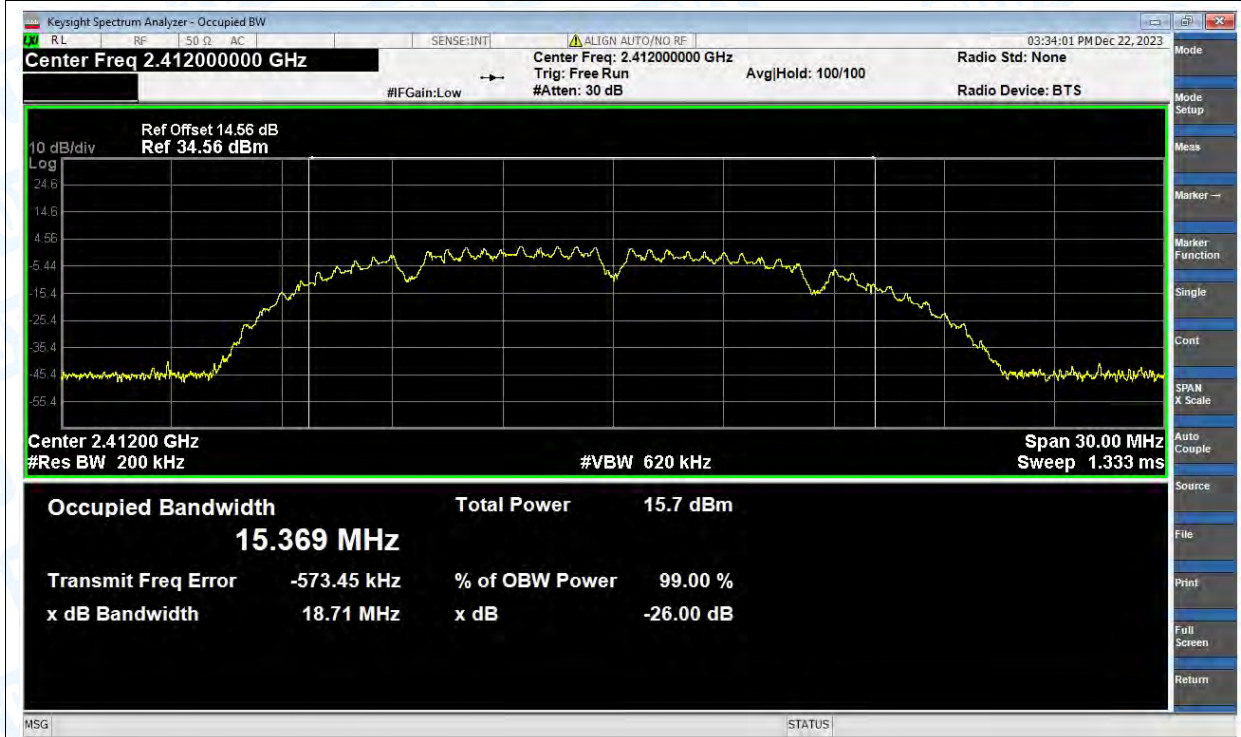
## Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	15.369
NVNT	b	2437	Ant1	15.399
NVNT	b	2462	Ant1	15.39
NVNT	g	2412	Ant1	17.391
NVNT	g	2437	Ant1	17.049
NVNT	g	2462	Ant1	17.412
NVNT	n(HT20)	2412	Ant1	18.027
NVNT	n(HT20)	2437	Ant1	17.837
NVNT	n(HT20)	2462	Ant1	18.08
NVNT	n(HT40)	2422	Ant1	36.048
NVNT	n(HT40)	2437	Ant1	35.93
NVNT	n(HT40)	2452	Ant1	35.909

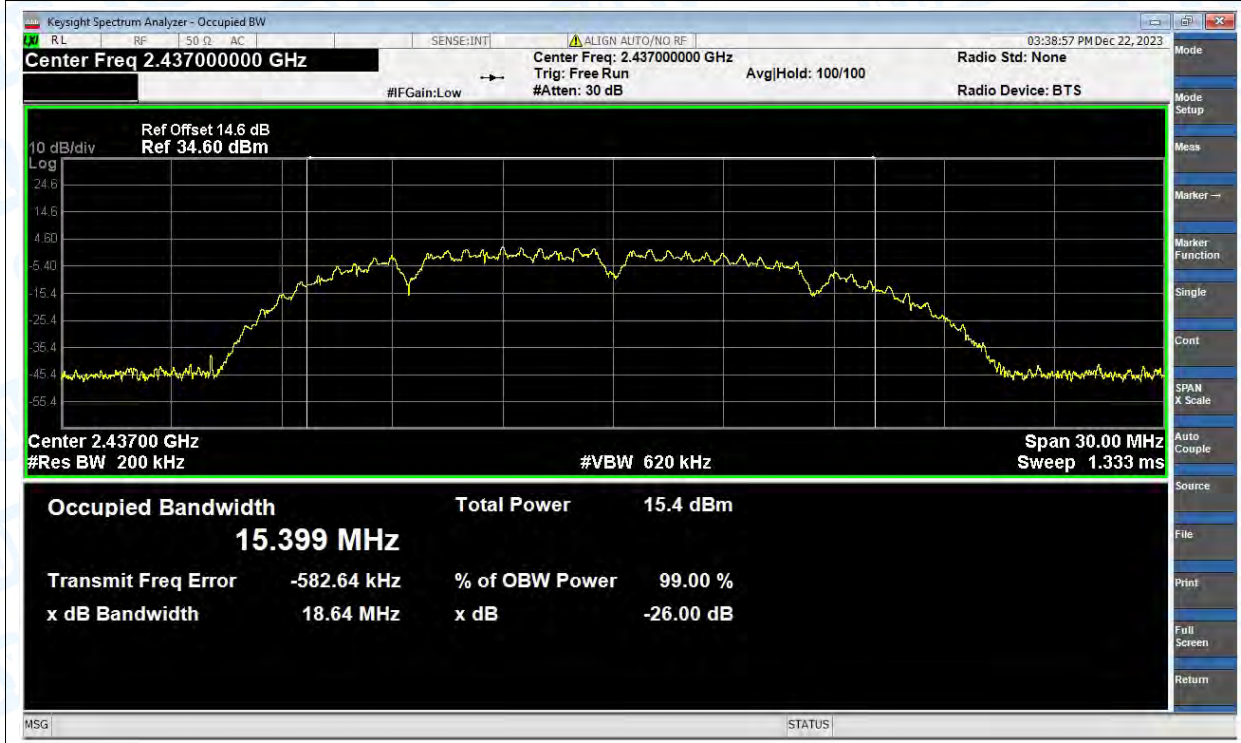


Test Graphs

OBW NVNT b 2412MHz Ant1

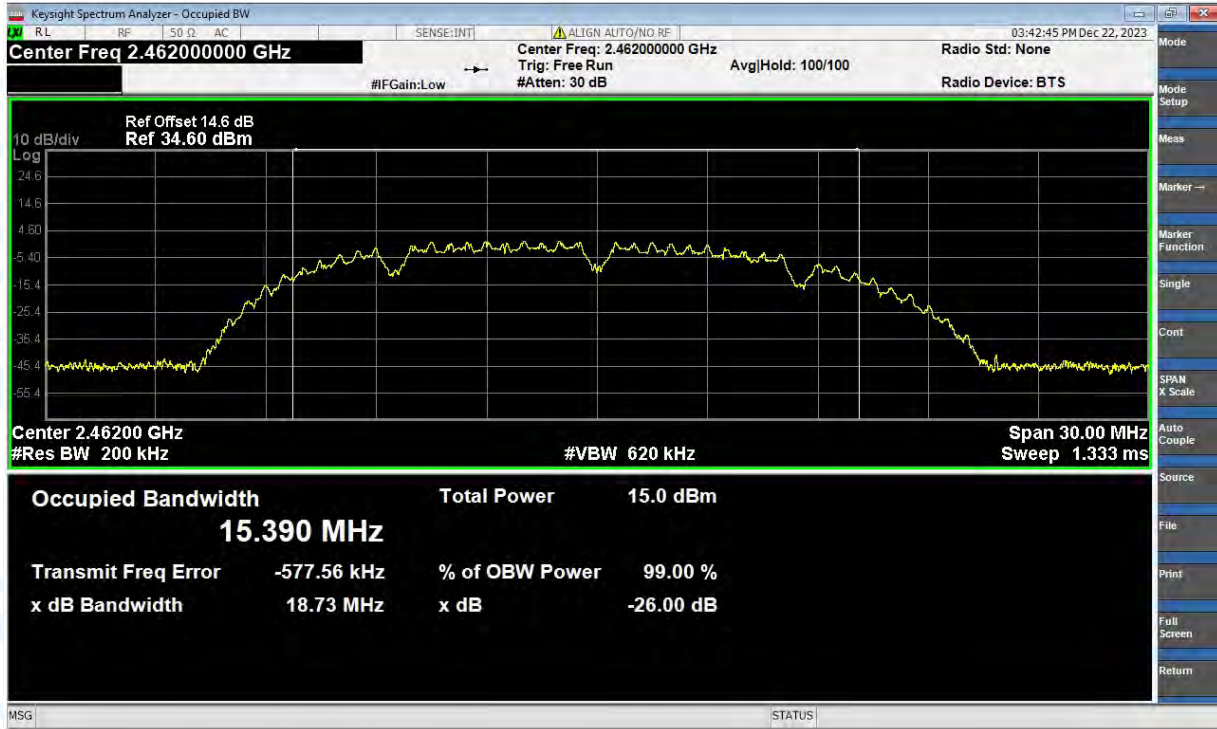


OBW NVNT b 2437MHz Ant1

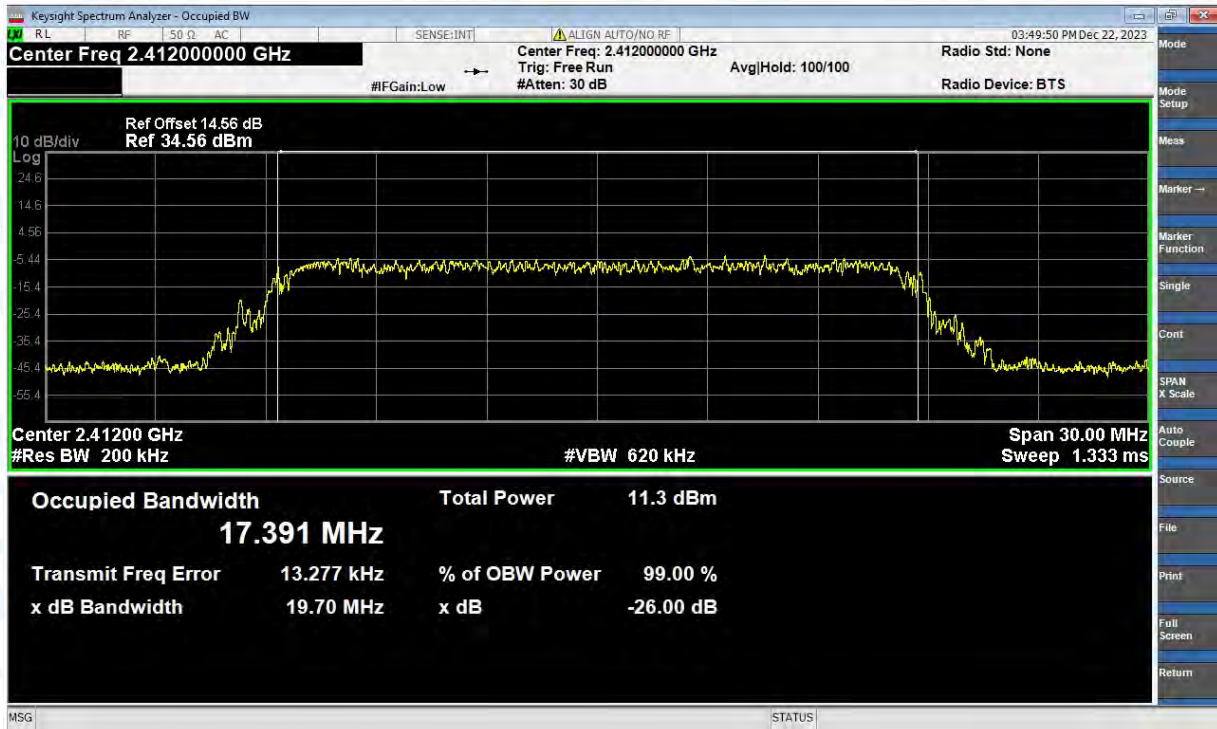




OBW NVNT b 2462MHz Ant1

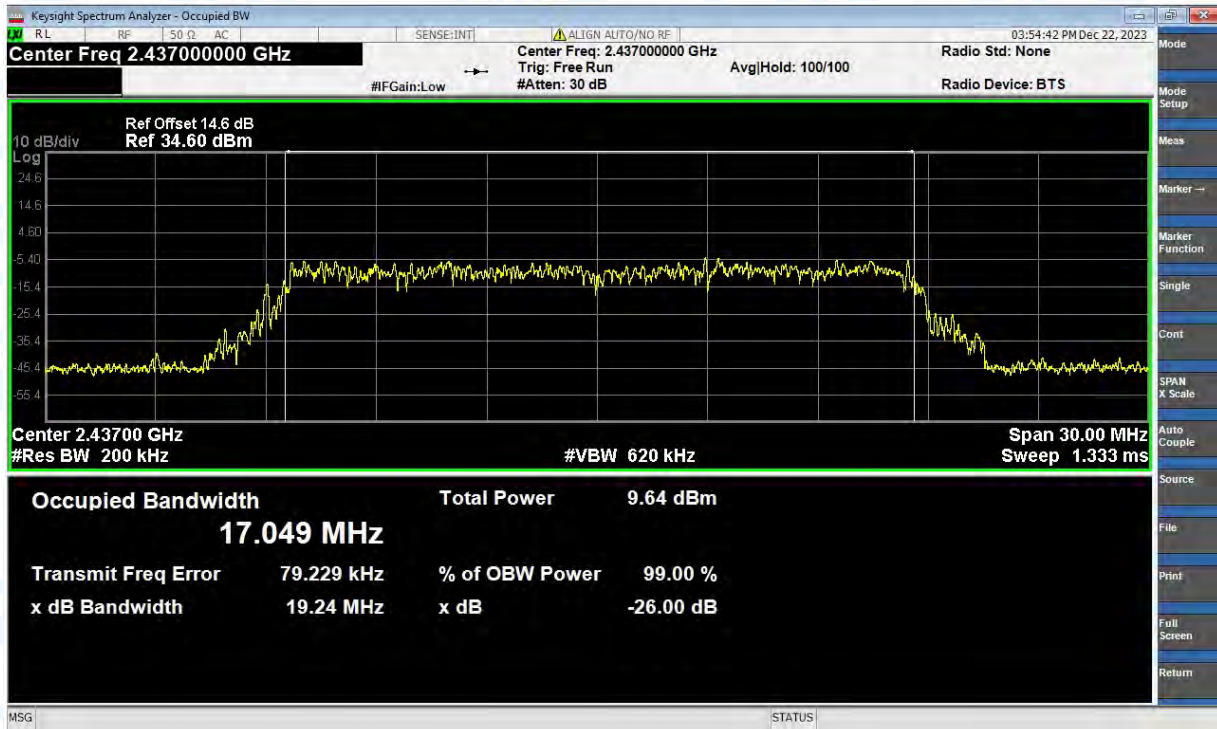


OBW NVNT g 2412MHz Ant1

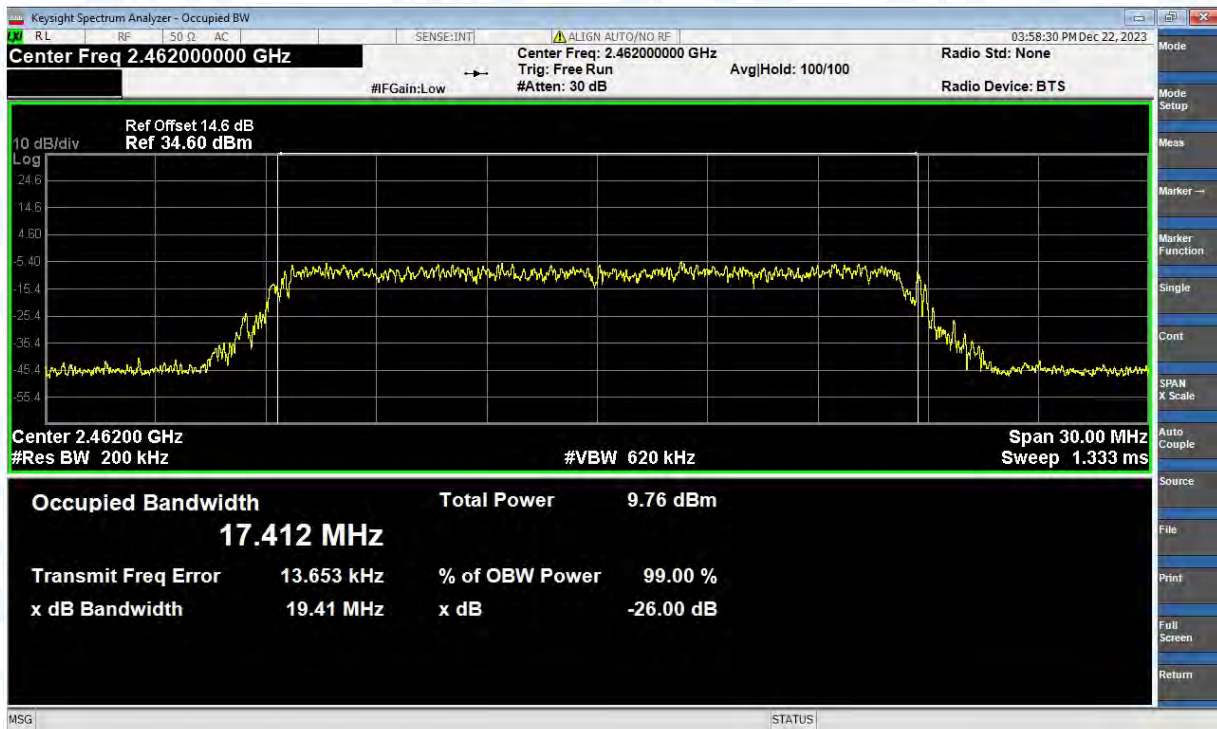




OBW NVNT g 2437MHz Ant1

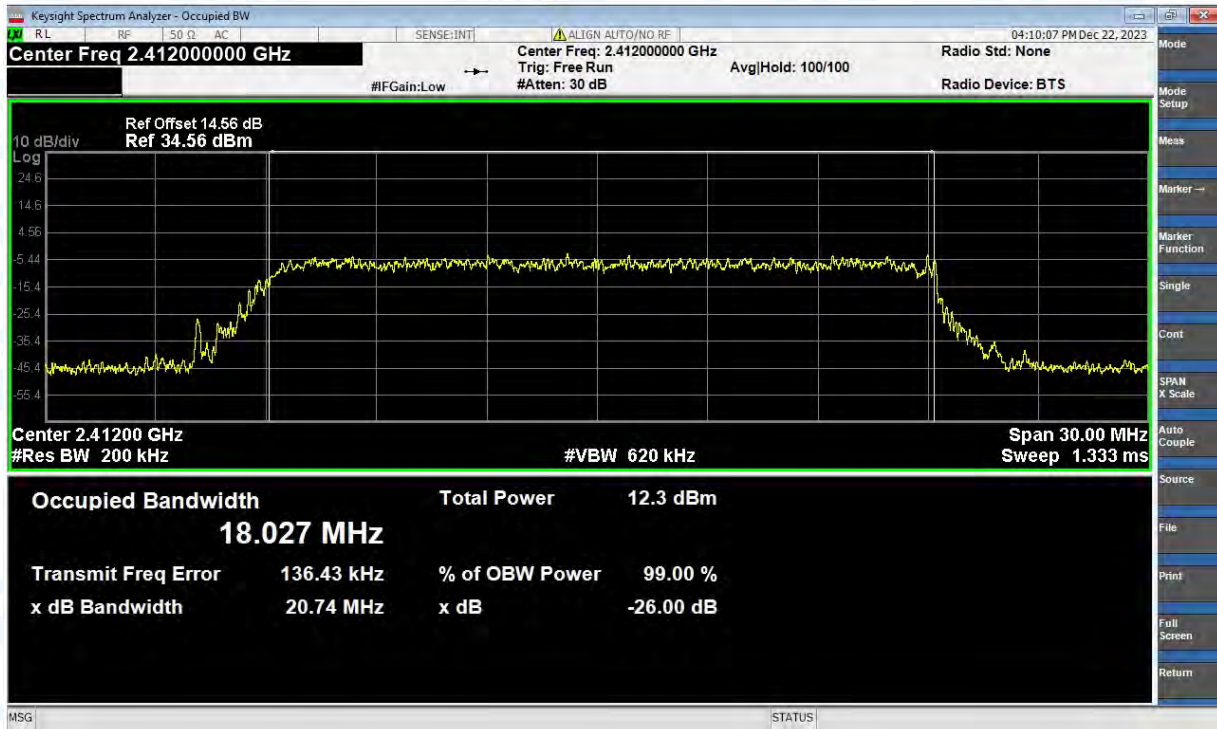


OBW NVNT g 2462MHz Ant1

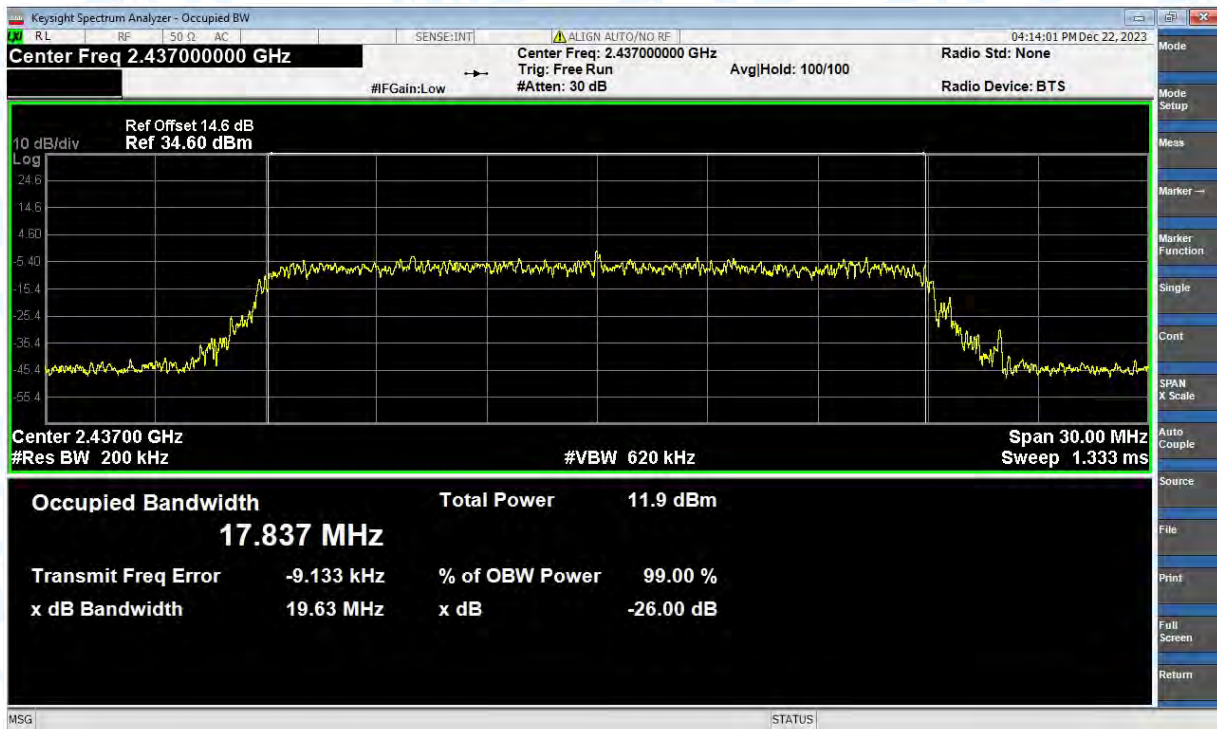




OBW NVNT n(HT20) 2412MHz Ant1

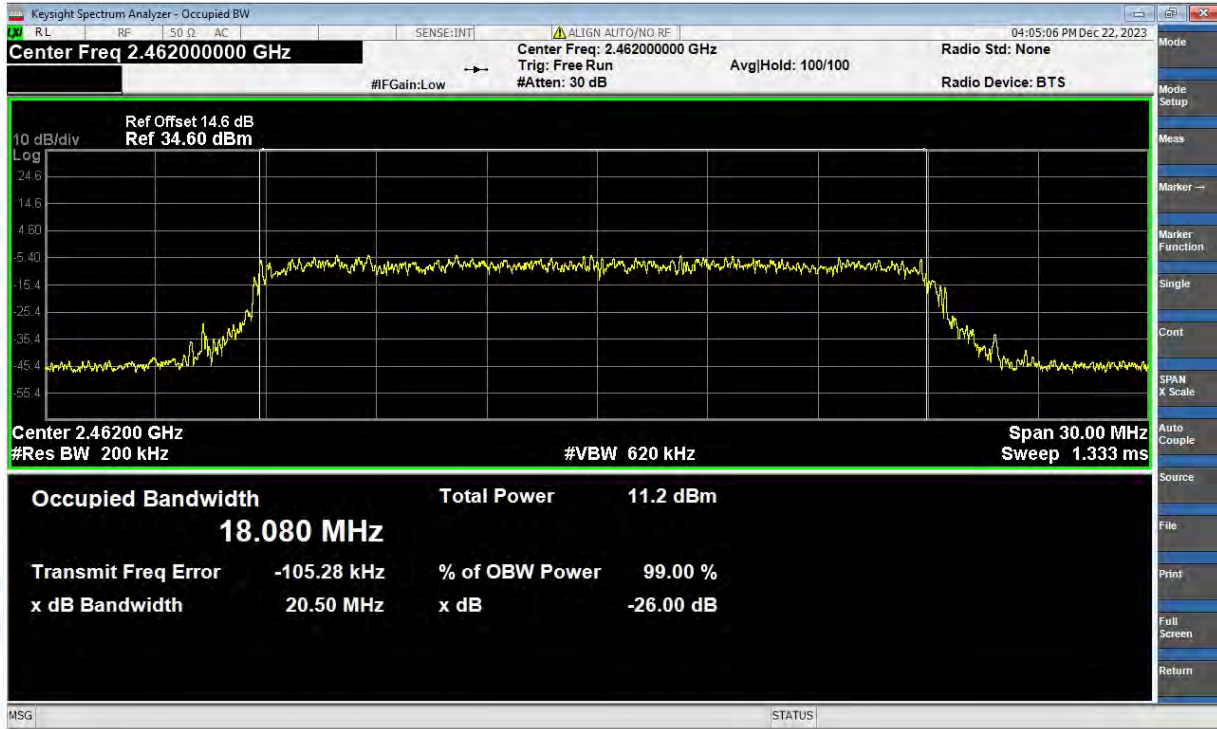


OBW NVNT n(HT20) 2437MHz Ant1

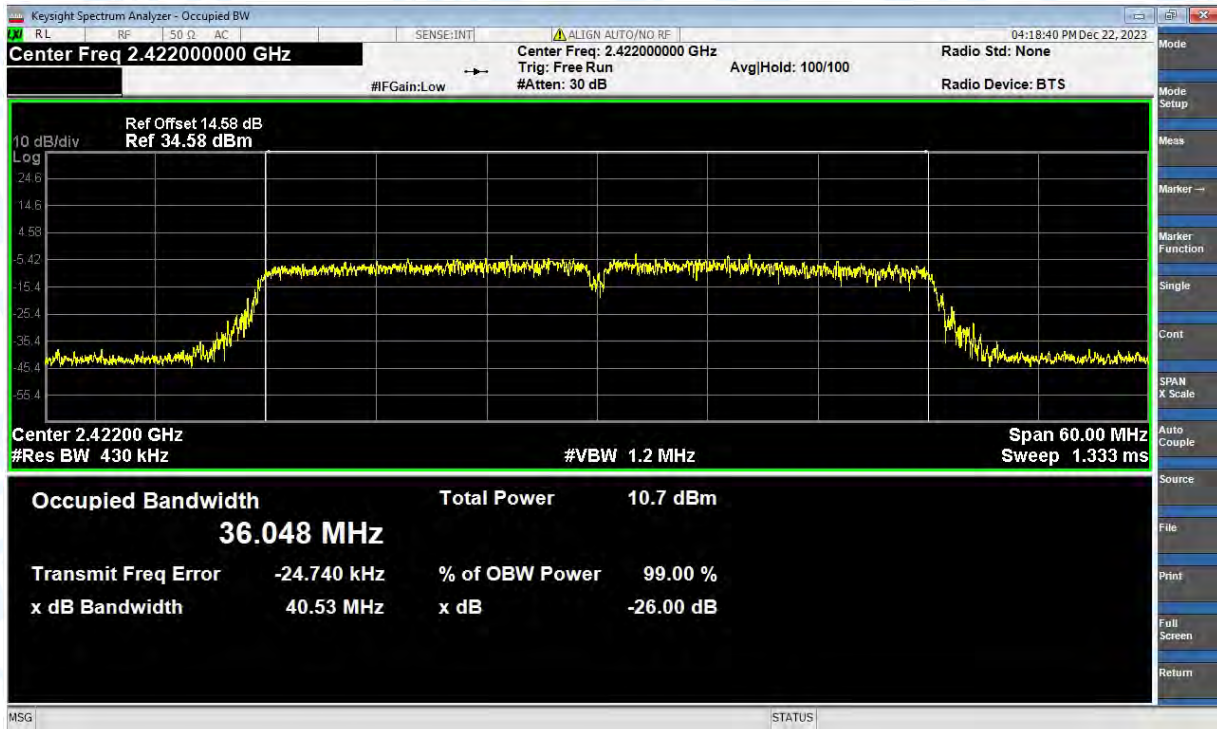




OBW NVNT n(HT20) 2462MHz Ant1

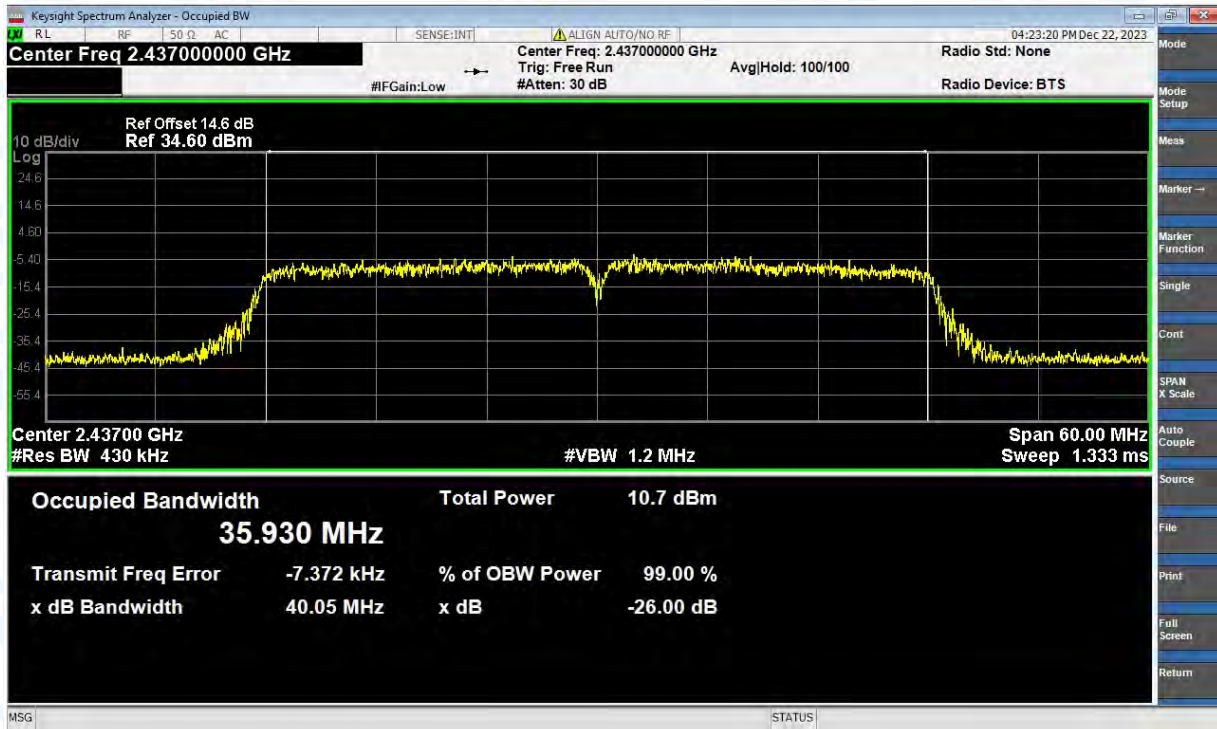


OBW NVNT n(HT40) 2422MHz Ant1

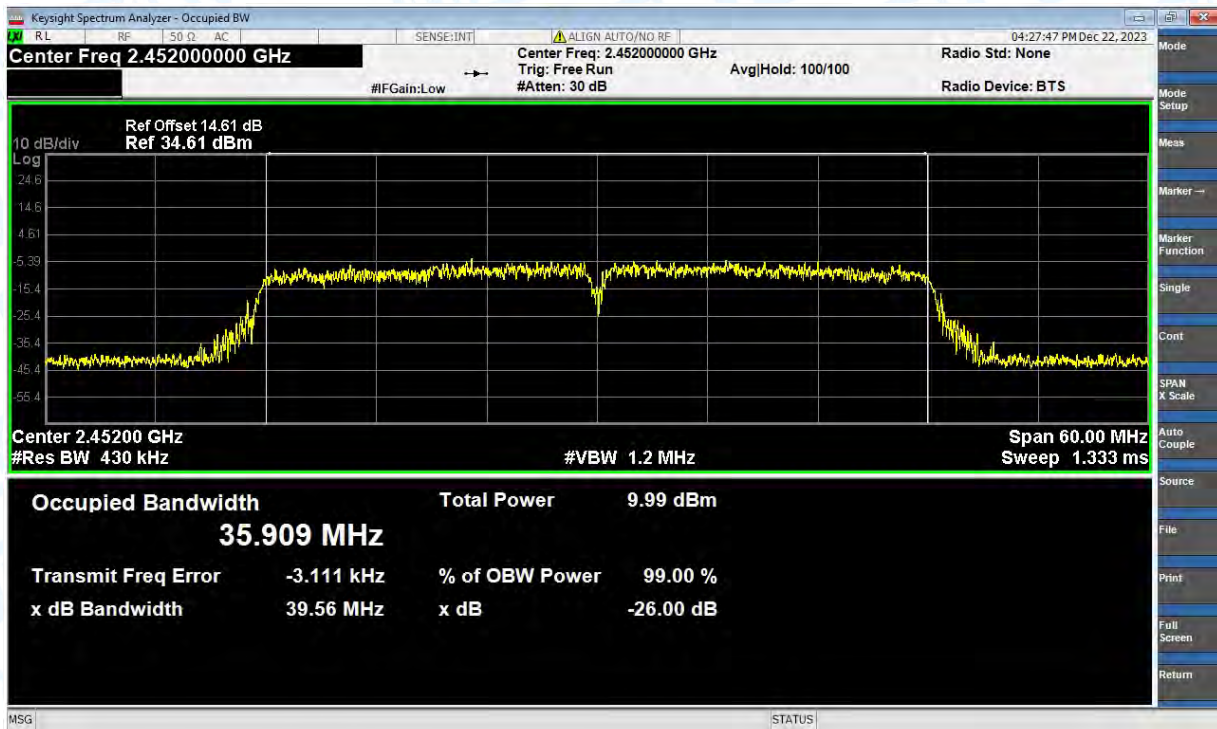




OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1





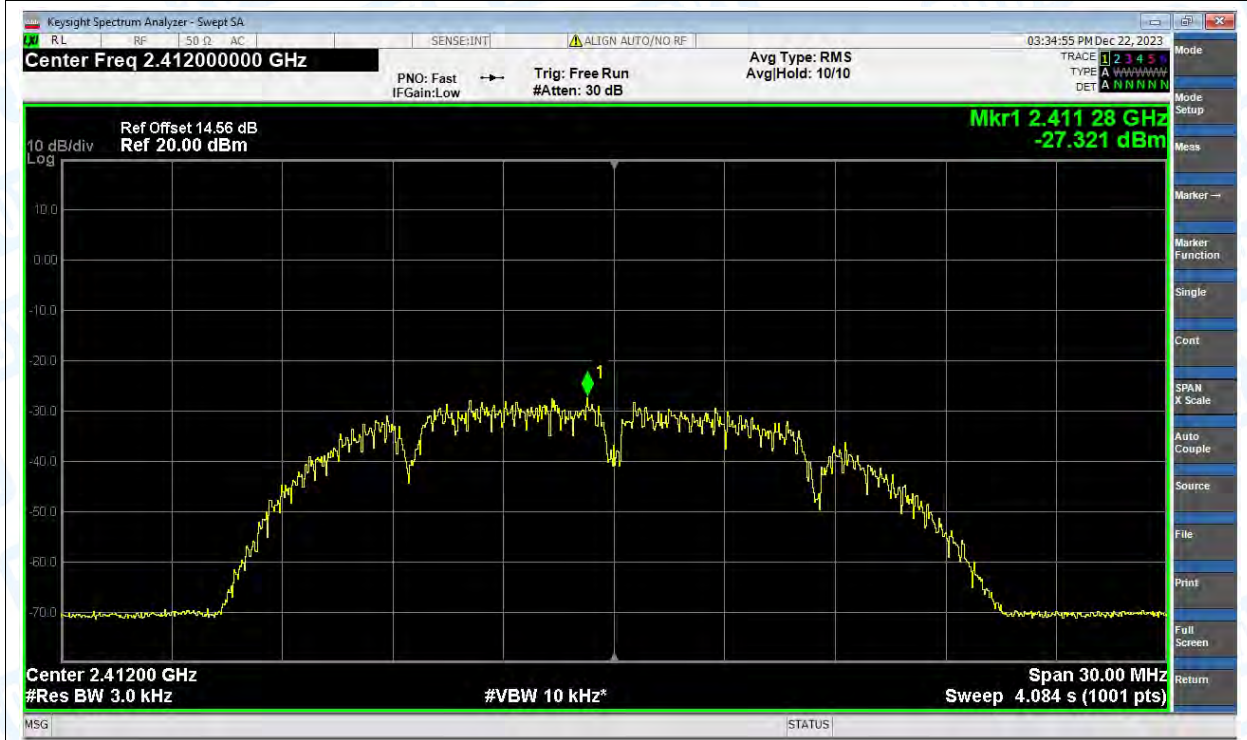
## Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-27.321	8	Pass
NVNT	b	2437	Ant1	-27.071	8	Pass
NVNT	b	2462	Ant1	-28.385	8	Pass
NVNT	g	2412	Ant1	-34.715	8	Pass
NVNT	g	2437	Ant1	-35.615	8	Pass
NVNT	g	2462	Ant1	-36.258	8	Pass
NVNT	n(HT20)	2412	Ant1	-34.067	8	Pass
NVNT	n(HT20)	2437	Ant1	-34.735	8	Pass
NVNT	n(HT20)	2462	Ant1	-35.573	8	Pass
NVNT	n(HT40)	2422	Ant1	-39.374	8	Pass
NVNT	n(HT40)	2437	Ant1	-38.609	8	Pass
NVNT	n(HT40)	2452	Ant1	-38.733	8	Pass



Test Graphs

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1

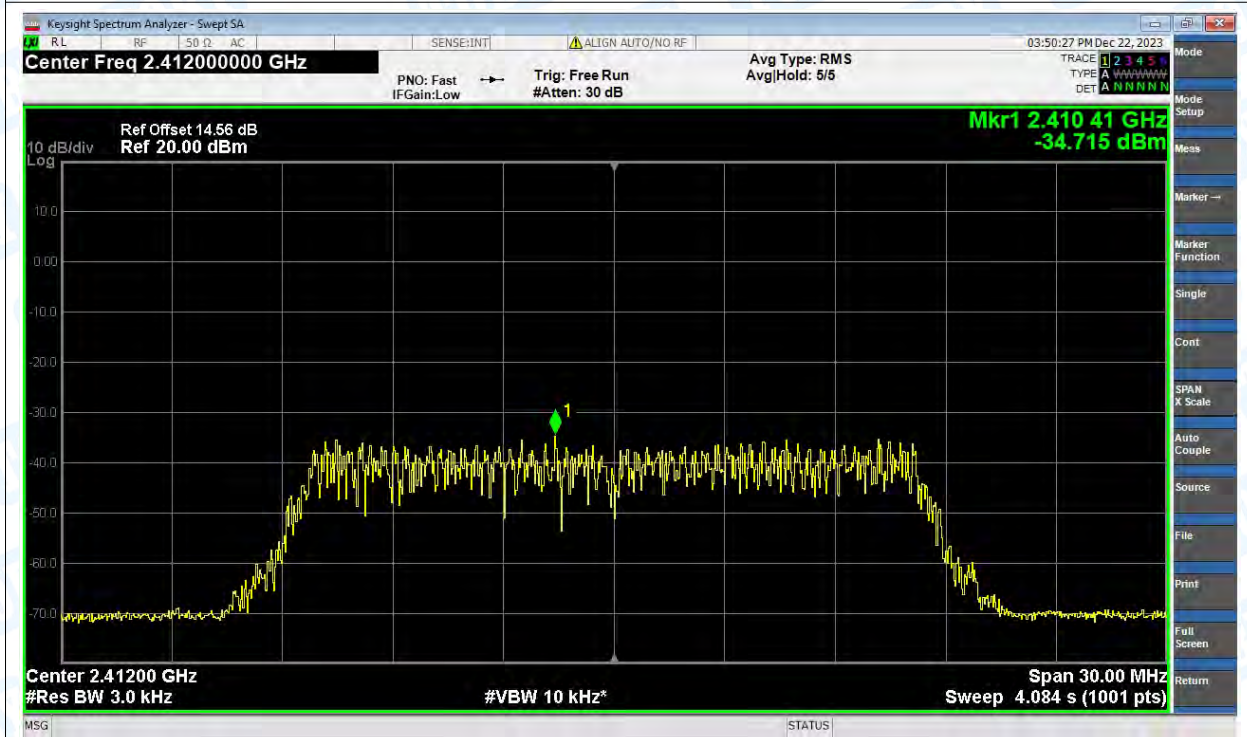




PSD NVNT b 2462MHz Ant1

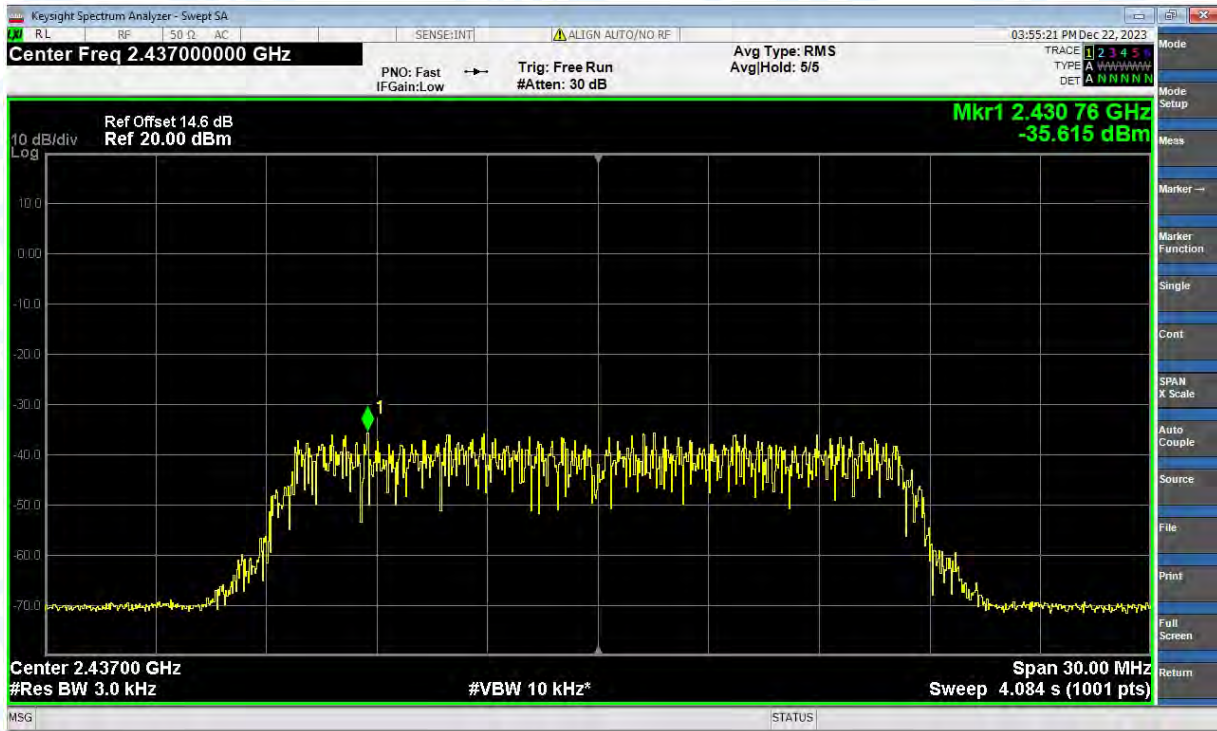


PSD NVNT g 2412MHz Ant1

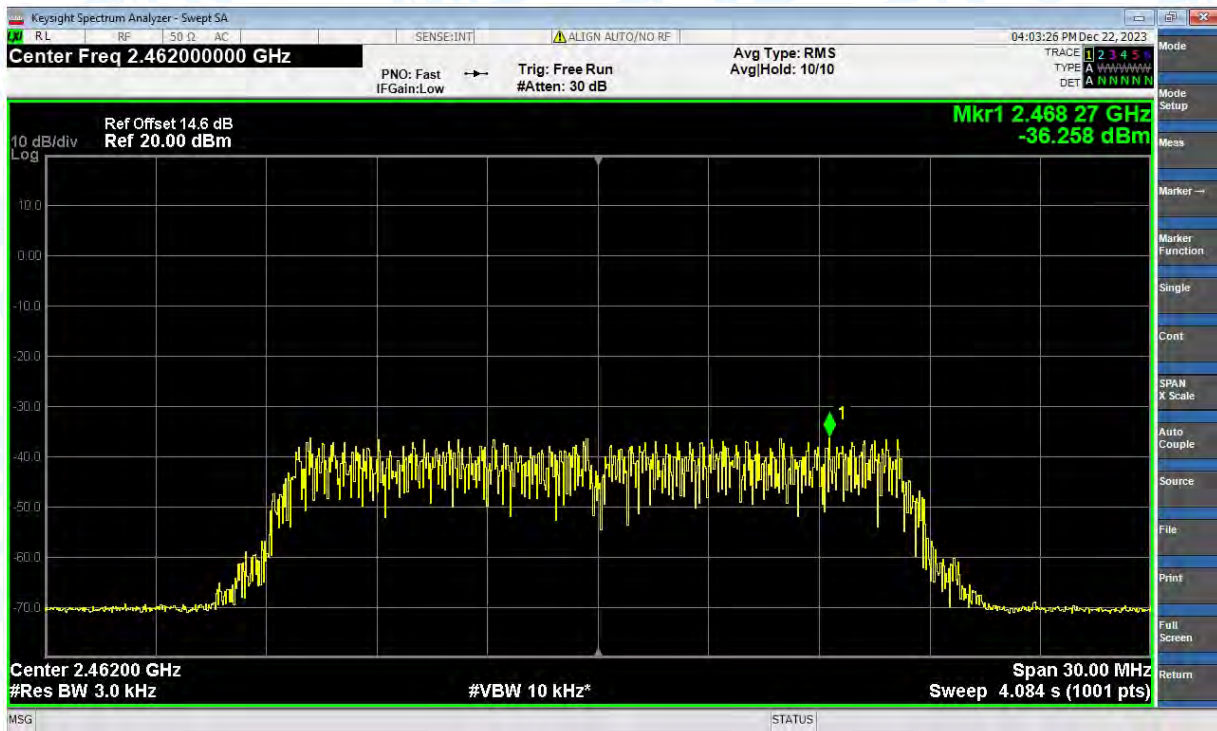




PSD NVNT g 2437MHz Ant1

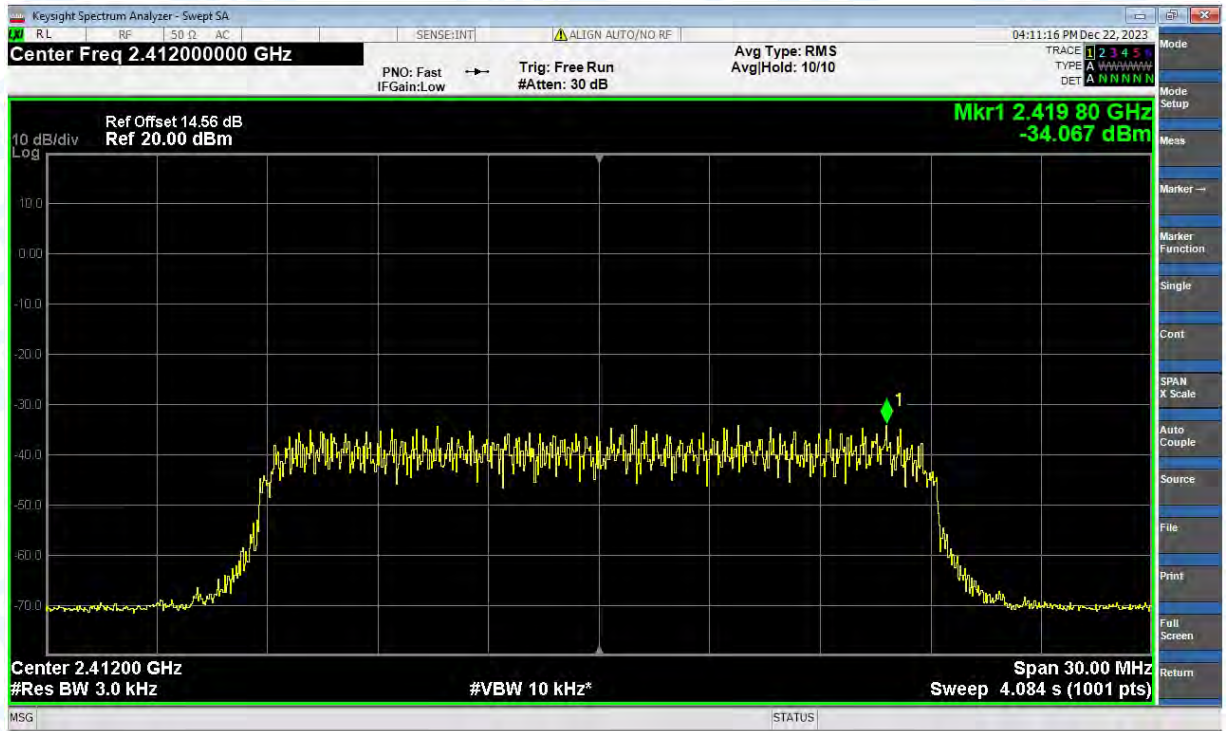


PSD NVNT g 2462MHz Ant1

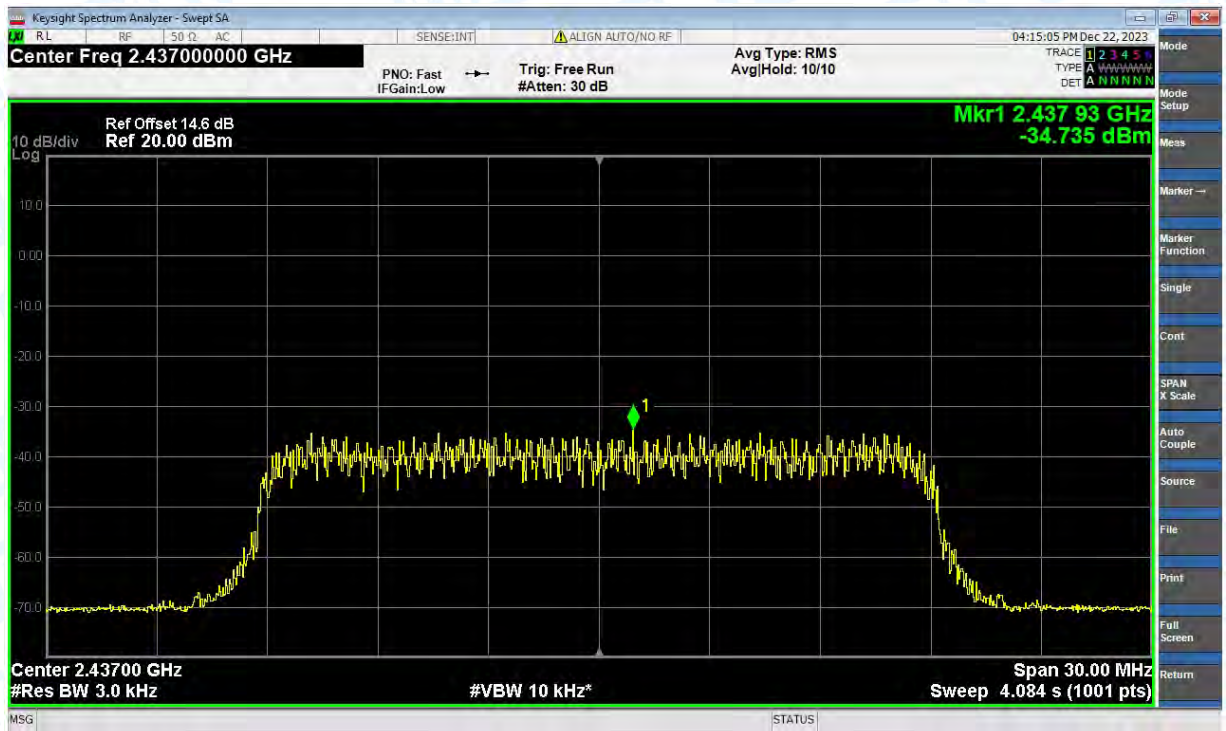




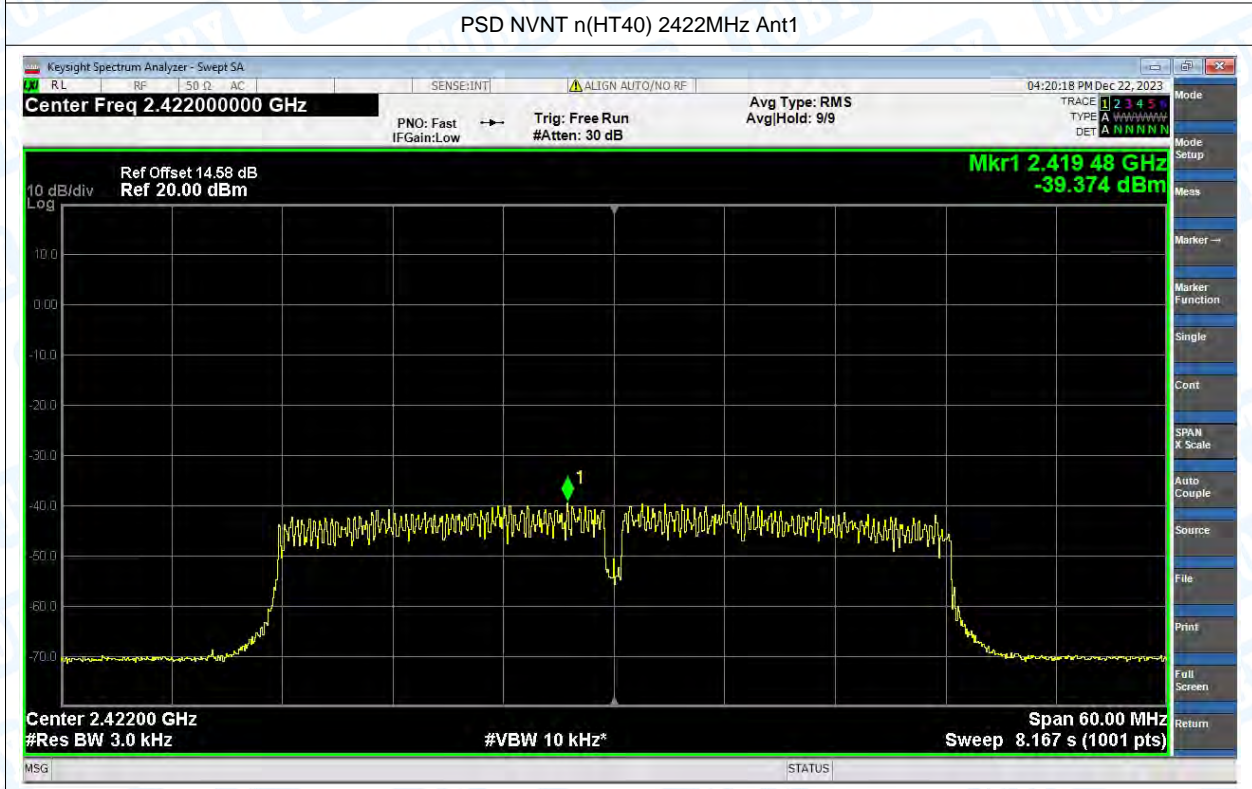
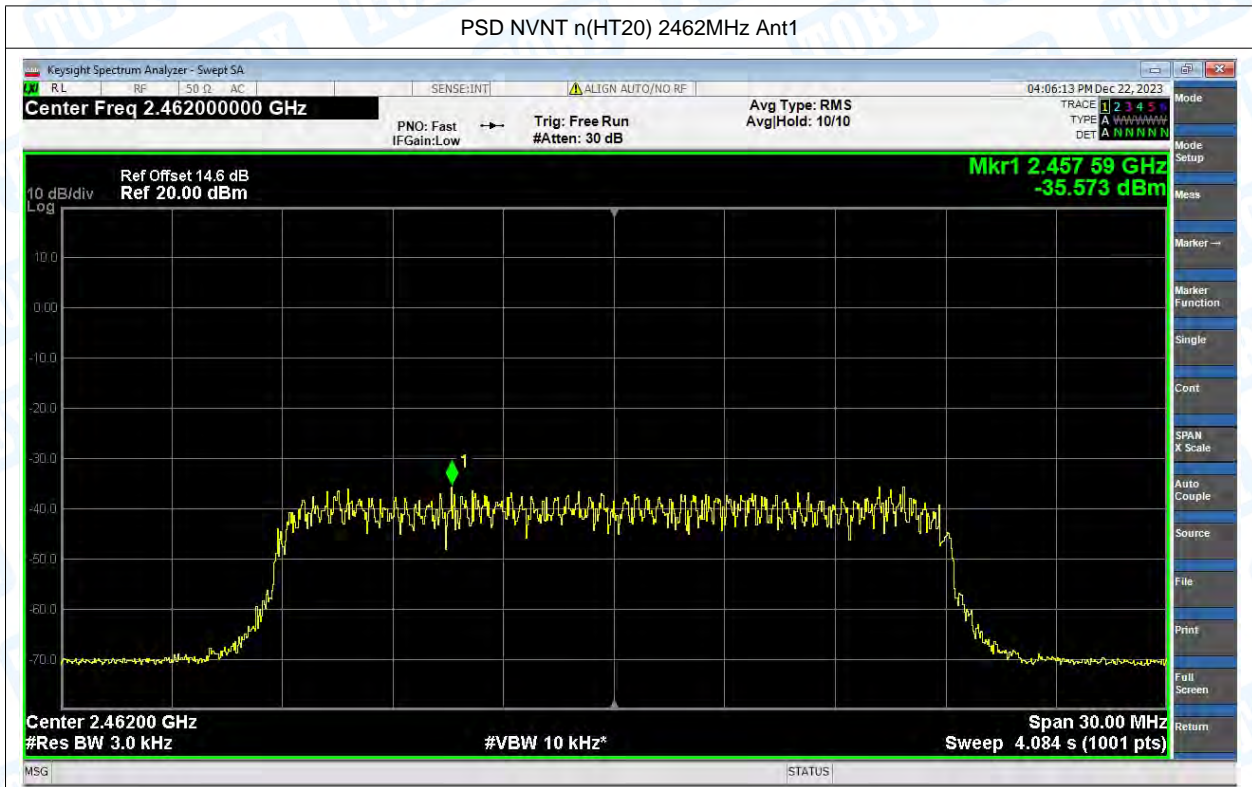
PSD NVNT n(HT20) 2412MHz Ant1



PSD NVNT n(HT20) 2437MHz Ant1

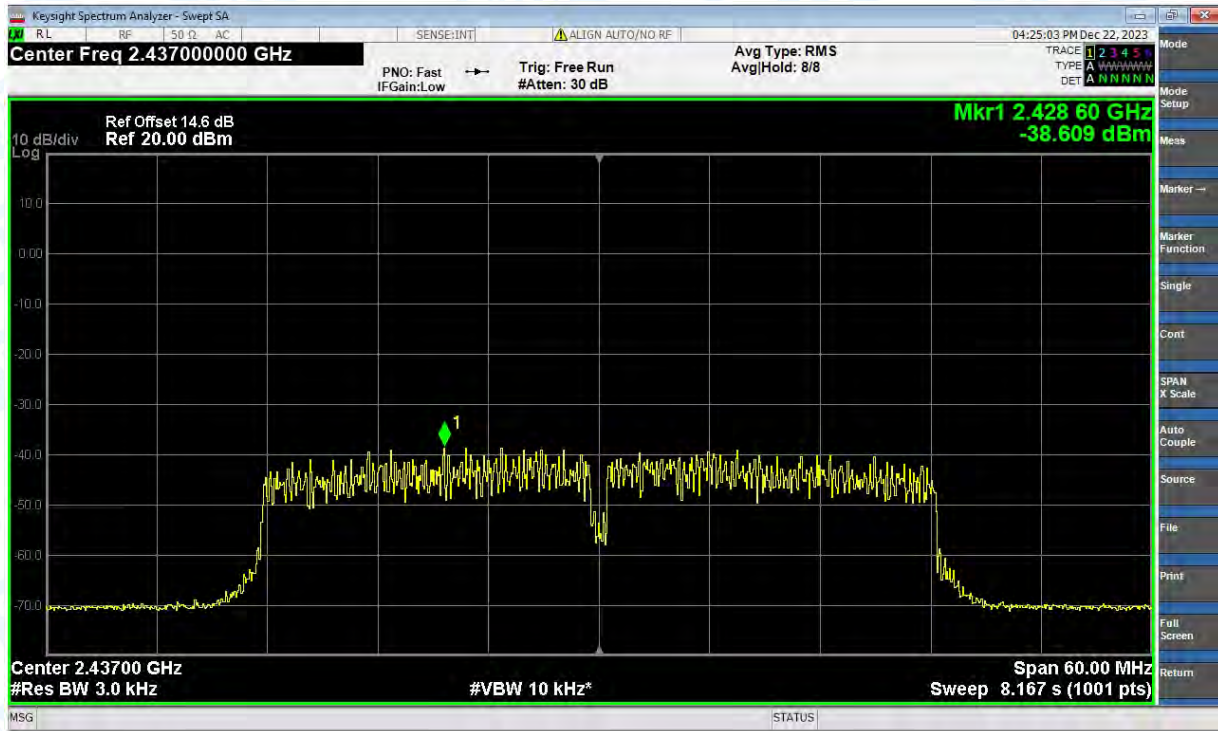




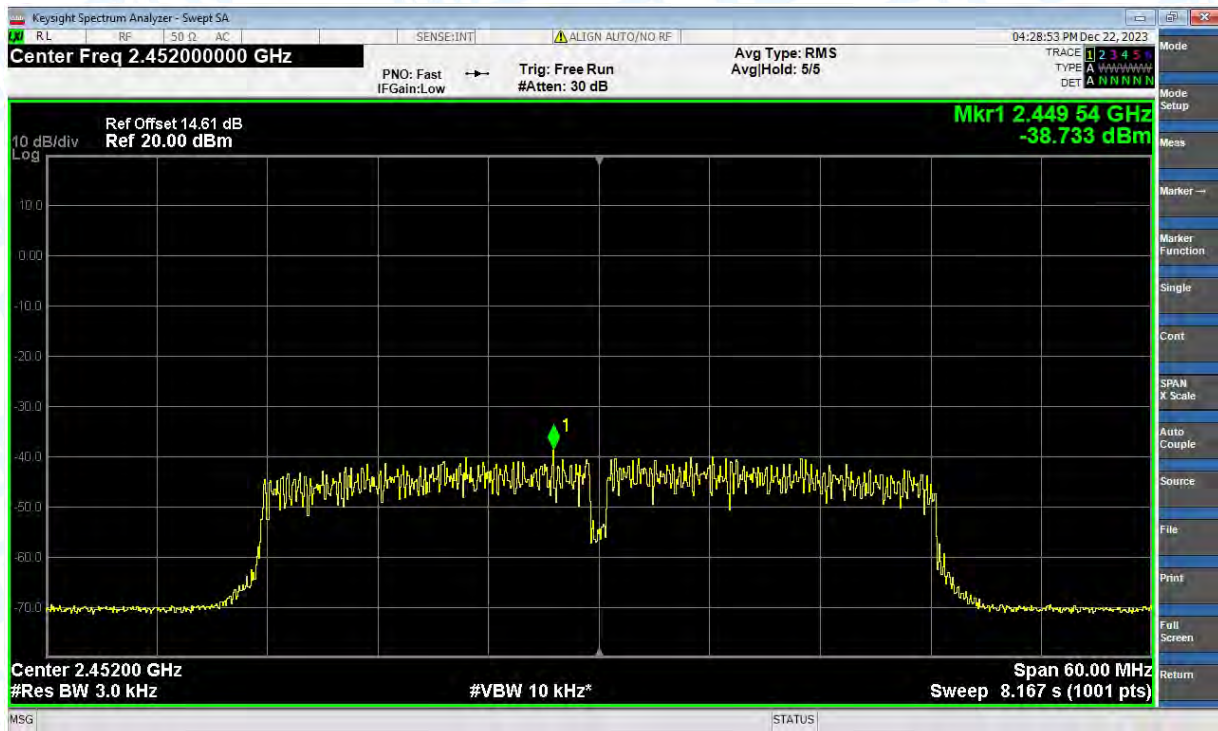




PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1





## Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-54.87	-30	Pass
NVNT	b	2462	Ant1	-53.78	-30	Pass
NVNT	g	2412	Ant1	-47.54	-30	Pass
NVNT	g	2462	Ant1	-37.5	-30	Pass
NVNT	n(HT20)	2412	Ant1	-52.35	-30	Pass
NVNT	n(HT20)	2462	Ant1	-48.58	-30	Pass
NVNT	n(HT40)	2422	Ant1	-44.61	-30	Pass
NVNT	n(HT40)	2452	Ant1	-43.54	-30	Pass

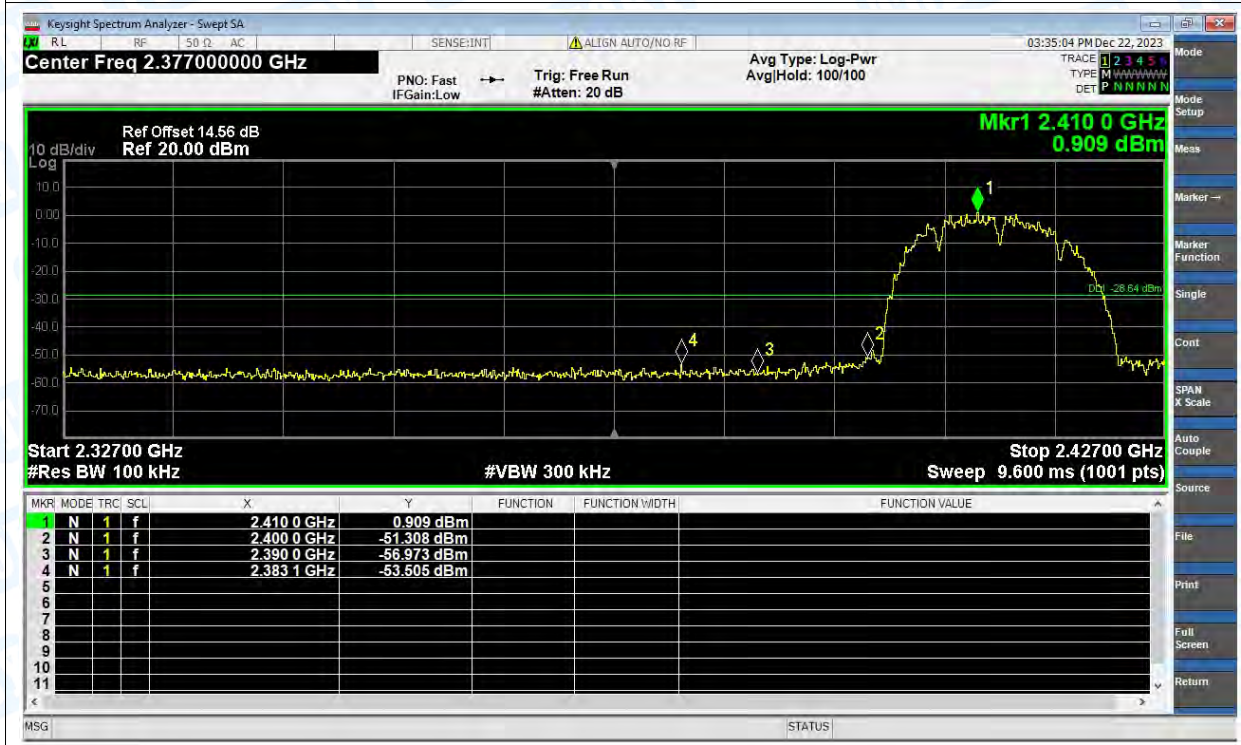


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission

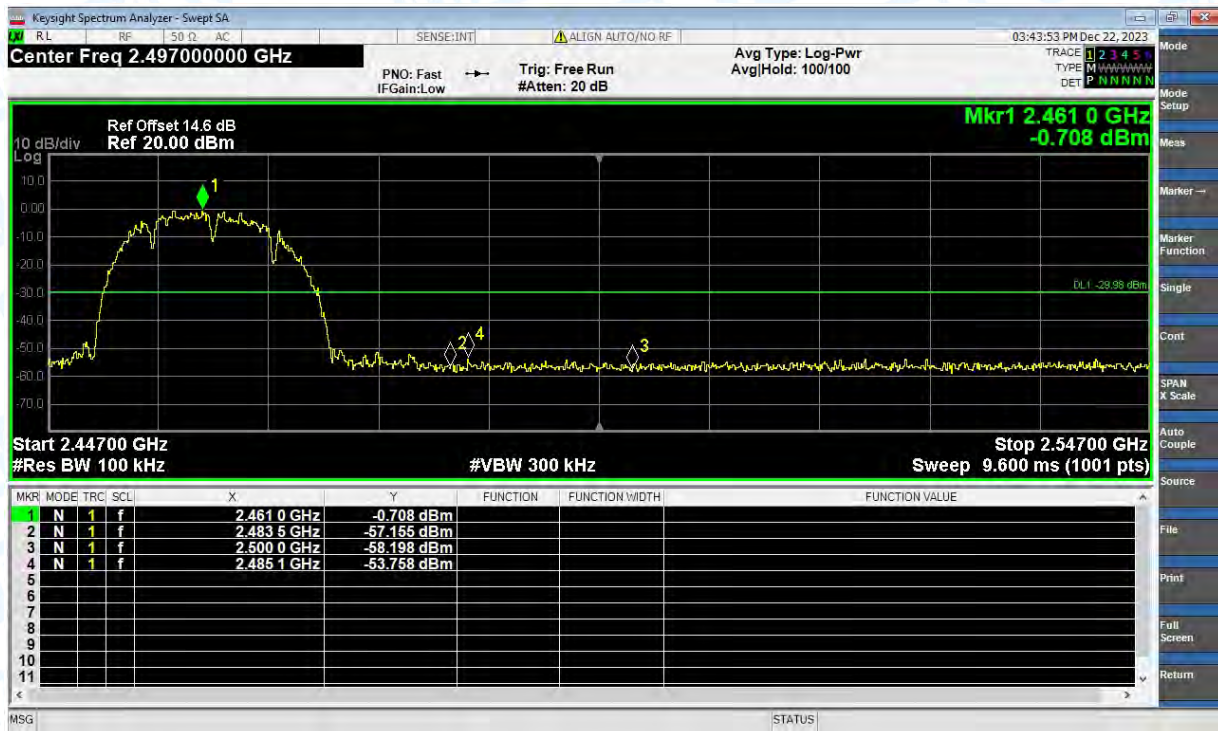




Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission

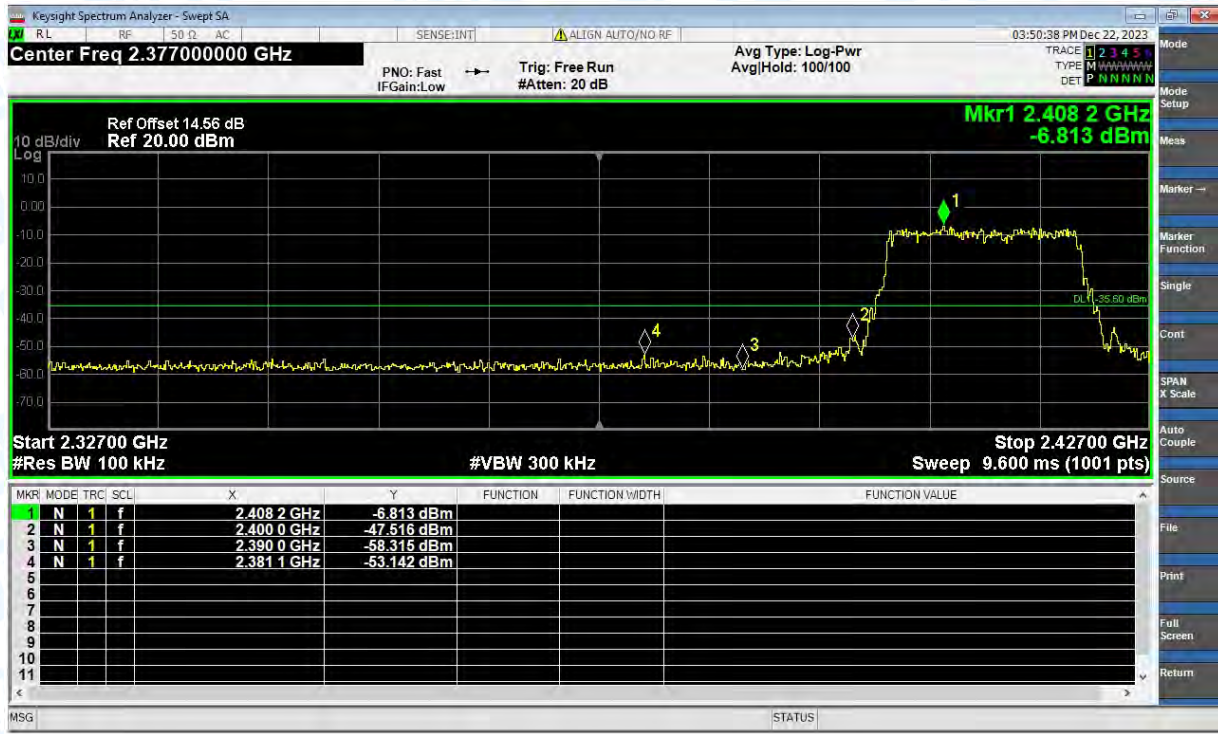




Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission





Band Edge NVNT g 2462MHz Ant1 Ref



Band Edge NVNT g 2462MHz Ant1 Emission

